

# SOLUTIONS: Assistive Technology for People with Brain Injury



## Contents

Considerations .....	1
Introduction: How to use this booklet.....	2
Where to find Assistive Technology.....	3
Memory Aids.....	4
Focus and Redirection.....	10
Organization Supports .....	12
Sensory Assistance.....	14
Communication Tools .....	16
Safety Tips.....	18
Health Help .....	22
Emotions and Mood.....	23
Supporting Socialization.....	25
Inclusive Recreation.....	26
Computer Access .....	28
“There’s an app for that” .....	30
Where to go from here .....	33

Publication Date: January 29, 2016

This booklet is available online at <https://idph.iowa.gov/brain-injuries/TBI-Implementation-Grant>

## Considerations

- A project of the Iowa Department of Public Health and the Iowa Advisory Council on Brain Injuries, produced with assistance from the Iowa Program for Assistive Technology University of Iowa Center for Disabilities and Development and Easter Seals Iowa.
- This booklet was supported in part by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number H21MC26929 titled: Traumatic Brain Injury Implementation.
- This information or content and conclusions are those of the authors/s and should not be construed as the official position or policy of, nor should any endorsements be inferred by, HRSA, HHS, or the U.S. Government.

## Introduction: How to use this booklet

- This is not an ‘all inclusive’ manual for assistive technology. It is a starting point to introduce what assistive technology is and how it can help. Each section of the booklet will give examples of devices for specific tasks or activities. For additional details and resources please see the “Where to go from here” section in the back of this booklet.
- A Traumatic Brain Injury (TBI) may cause many different problems: physical, sensory (sight, hearing or touch), cognitive (thinking), communication, swallowing, and behavioral. These problems can greatly impair the person’s ability to live independently. When choosing AT devices, the task to be completed, the individual’s strengths and preferences, and setting where the task will be done need to be considered. Therefore, the selection of AT is done on an individual basis. Not everything in this manual will work for every individual.
- In some cases selection of AT devices can be done without help, like selecting a medicine reminder or a one-handed can opener. But for some devices a professional may need to be consulted, for example:
  - Physical Therapists help select the correct wheelchair.
  - Speech Language Pathologists help identify the tools needed to effectively communicate.
  - Occupational Therapists give options about what AT devices may help at home or other settings with activities such as dressing, eating, or day-to-day tasks.
  - School Counselors assist with setting-up classroom and transitional accommodations.
  - Area Education Agency staff help identify aids and software for use in the classroom and when doing homework.
  - Vocational Rehabilitation counselors assist with obtaining AT for use in a work or college setting.
  - Recreational Therapists assist in adapting a favorite recreational activity.
- AT should be used according to the direction from the manufacturer or training received from a professional. Serious injury can occur if it’s used incorrectly.
- **While specific name brand devices are shown in this booklet, it does not imply endorsement or recommendations. It is for illustrative purposes only.** All items pictured in this booklet are available for demonstration and loan through the Easter Seals Iowa Assistive Technology Center.

## Where to find Assistive Technology

- What is assistive technology (AT)? The Americans with Disabilities Act defines assistive technology as “any device that supports an individual with a disability in independently performing a specific task.” This can be a device, approach, or adaptation to the performance of the task. Any device or strategy that helps at home, school, or in the community can be considered assistive technology.
- AT can be purchased in a store or online or AT can be homemade.
- AT ranges from simple devices, “low tech” or “no tech” devices (for example, a spoon with built-up handle or drinking glass with rubber bands for gripping) to more specialized or “high tech” devices (for example, a power wheelchair or home monitoring system).
- The more specialized an item, the more likely a professional such as a physical therapist or occupational therapist will be involved in assisting to identify an appropriate device, ordering the item, and training how to use it safely and effectively.
- Durable equipment (DME) is a term used to describe items such as canes, wheelchairs, and shower chairs. A doctor or other medical professional may recommend their use. These items are often ordered through a specialty company. If insurance is unable to pay for the item, used equipment may be available through local loan closets or the Easter Seals Iowa Durable Medical Equipment Loan Program.

*Personal Notes:*

---

---

---

---

---

---

---

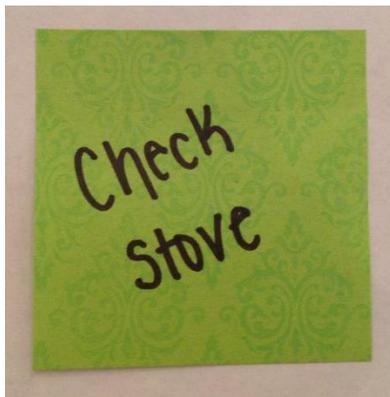
---

## Memory Aids

Memory difficulty is a common symptom after a brain injury. Memory aids are strategies or tools used to prompt or remind an individual when, where, or how a task should be completed.

**These aids can also help reduce some confusion an individual may experience as well.**

For some individuals, this might be as simple as using a hand written note and for others it may be utilizing a feature, such as calendar alerts, in a smart phone. Visual cues or changes to the environment can also be used as memory aids.



### Post-it Notes

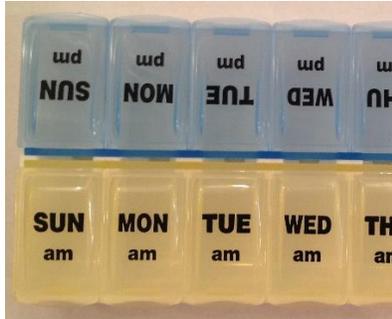
An example of a no-tech memory support is using a post-it note as a reminder. Post-it notes come in many shapes, sizes, and colors. (Image to left)

**No-tech memory supports** can range from a post-it note to a dry-erase board. These supports can be put in specific places to remind a person to do a specific task. For example, putting a reminder to “check stove before leaving” on the front door or printing the day’s schedule to put on a student’s desk.

Tips and Notes:

*The use of these tips and tricks to aid in memory should be implemented in moderation. If all suggestions are used at one time it may become overwhelming and not effective. Consider starting small with just one type of support, like the Post-it notes, and use only a couple the first time.*

*Many people use memory aids in daily life and those experiences may help determine what will work best for the individual after a brain injury. For example, if the individual preferred to have a written calendar or lists before their injury, they may be more successful with using those methods after their brain injury.*



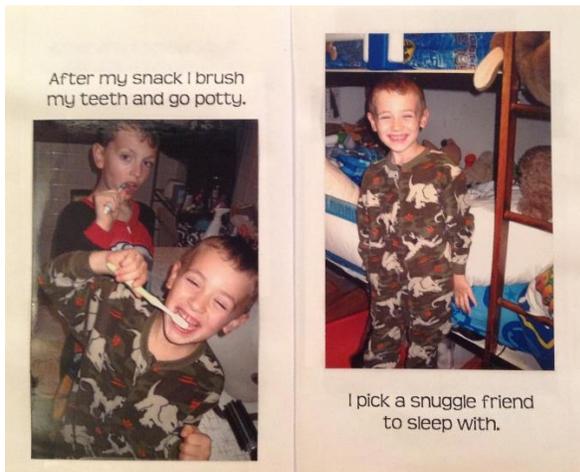
### Twice-a-day Weekly Pill Organizer (low tech)

This weekly organizer has compartments for each day with divisions for morning and evening pills. The compartments are large and have large tabs that are easy to open.

**Medication Managers** come in many shapes and sizes from a pocket size to one for a week or month of medications. Medication can be sorted and placed inside and used at the correct time (specific day or specific time of day). There are versions that have timers. There are electronic versions that dispense only one dose at a time.

Tips and Notes:

*Check with a local pharmacy to see what services they provide that might make organizing medications easier. Some pharmacies can set up medications in packets for the specific date and time they are to be taken. There are also services to have medications loaded into a dispenser that reminds the individual when it is time to take their medication and can alert a family member if the dose is missed.*



### Social Stories

A “social story” is a story written to show actions that may be taken for a specific task.

The example shown here is an excerpt of a “Bedtime” social story which shows the actions two young boys should take in order to do their bedtime tasks. (Image to left)

**Social stories** help by showing a real-life example of a task or place. These stories may be written for a specific person and task. For example, a social story can demonstrate a morning routine and how to get up and ready for the day.



### Talking Rx

Talking Rx is base for a medicine bottle. There is a button on the inside of the base that can be pressed. While pressing the button a recording will be played. The recording can be done by a caregiver, pharmacist, or individual to remind themselves of the appropriate medication instructions. (Image to left)

**Talking items**, like a talking photo frame or medicine container may help reduce confusion. Some individuals are auditory learners and do best by hearing an instruction or reminder. Video can be taken on a smart phone or tablet of verbal instructions, directions, or reminders that can be used at another time.



### Door Sign with Image

Door signs may be helpful to assist with confusion. Images or braille can be used to identify a room. A sign that says "Restroom" with an image of a toilet may be helpful to avoid confusion. (Image to left)

**Signs can be placed on doors or objects** to identify their purpose, to help with confusion due to orientation in a home or building. For example, if confusing the basement door and the bathroom door is a problem, place a photo of stairs on the basement door and a photo of a toilet or sink on the bathroom door.

## Solutions: Assistive Technology



### Z Band

The Z Band is a wearable, silent alarm that syncs or connects with a desktop or laptop Bluetooth to set silent alarms that notify the wearer through a gentle vibration. (Image to left)

**Alarms and Clocks** can be used as memory aids. Alarms can vary a large alarm clock with sonic boom and flashing lights to a small vibrating band worn on the wrist. Alarms can be used to remind an individual of a certain task in conjunction with a written calendar or recorded message.



### Reminder Rosie Clock

This clock can record a personalized message to be used as a reminder for medication, appointments, or other tasks.

**Reminders** may be helpful aids to memory. Choosing the appropriate clock is important to meet specific needs. Consider the size of the numbers and display, the language (if clock has verbalization settings) and alarm sound function (consider vibration or sonic boom if hearing is difficult).



**Smart Phone**

Smart phones will vary by type and availability depending on the cell phone provider. In addition to making calls, these phones typically include a programmable calendar, contact list, and alarm clock. Other features may include a camera and ability to download apps. (Image of phone to left)

**Smart devices** are electronic devices, such as smart phones and tablets, which connect to other devices or networks through internet (Wi-Fi or data) or Bluetooth connectivity. smart devices can be utilized to share and update calendars, contacts, and applications with other devices. Some examples of applications are provided below; this is meant as a starting point for what’s available. Please view the “There’s an App for that” section for instructions on how to search for apps.

Cost: Task	Android	IPhone
Free: Organization	Evernote	Evernote
Free: Sharing Location	Where Am I?	
Free: Create voice flashcards		Voice Cards are Not Flashcards
Free: Family Life Organizer	Cozi	Cozi
\$1.99: Emergency Organizer	ICE (In Case of Emergency)	ICE (In Case of Emergency)
\$9.99: Photo and Name Organizer/Reminder		Unus Tactus

**Tips and Tricks:**

*The camera function can also be used to take a picture of a location or written instruction to use at a later time, such as where the care is parked. Smart devices can also be used to video record directions or instructions so the user can review it at a later time. There are apps that can be used on a smart device that show location, similar to a GPS device.*



**I-Guard Stove**  
An example of an automation used in the home is the I-Guard Stove. This device has a programmable automatic shut off timer for the stove and oven. (Image to left)

**Automation in the home** can be used to support memory. Automatic lights can turn on when a person walks into a room, and turn off automatically when there is no longer movement in the room. Automatic stove shut off, such as the I-Guard Stove, can be used to improve safety in the kitchen. Programmable thermostats can be used to control the temperature.

Tips and Tricks:

*If safely using the oven or stove top due to a tendency to walk away and forgetting food that is cooking is a problem, consider setting a timer and carrying it in a pocket. Timers can come in many shapes and sizes, most smart phones even have a timer as a part of their alarm functions. The timer could be set to vibrate in a pocket if the surroundings are noisy.*

*A Cap-Tel phone helps a variety of people by allowing individuals to read what is being said (similar to close captioning on a television) and can be printed after the call is completed. This may be helpful for calls with a doctor or pharmacist or any call that will have detailed information.*

*Additional Notes on Memory Aids:*

---

---

---

---

---

---

## Focus and Redirection

Maintaining focus on a specific task may become difficult after a brain injury. Finding appropriate devices to assist with maintaining focus or redirecting attention to another task may be important for use at home or in the community.



### Pencil-top Fidget

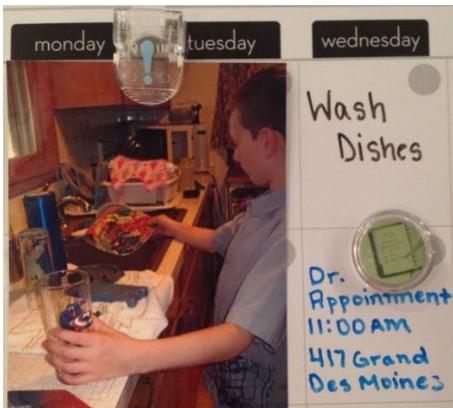
A small, pencil-top fidget attaches to the eraser end of a pencil and can be used as a silent energy outlet or a redirection that may assist in focusing on a task.

(Image to left)

**Environmental changes** may help focus attention. Consider moving an activity to a quieter location or away from windows to reduce distractions from movement and other activity. There are several devices that are designed to be manipulated or “fidgeted” with as an energy release rather than no longer performing another task.

Tips and Notes:

*The Safco Runtz Fidget chair is a type of larger device that allows for full body movement. Other ‘fidgets’ can include a foot rest that bounces, a swivel seat, and much more. Be sure these full body fidgets are used safely and do not become tripping or falling hazards.*



### Calendar with Images

The calendar shown here has a picture of the action that is on the daily tasking list. The action is “wash dishes” and the picture shows an individual placing a plate and a cup into the kitchen sink.

(Image to left)

**Schedules or tasking lists** can be used to support redirection back to specific tasks. List the steps or information that needs to be done, then cross them off after the task is completed. Using real-life pictures of the task may be more helpful if reading is difficult.



**Noise-cancelling headphones**

Noise-cancelling headphones are available in many sizes, shapes, and colors. The ones shown here are placed around the top of the head and have pads that cover the ear. (Image to left)

**Noise cancelling headphones** or calming sounds may support attention or focus and reduce distracting sounds. White noise (such as the sound of waterfalls, crickets, or rain) can be played to help drown out any distracting background sounds to aid in concentration or relaxation. White noise can also be used to help someone fall asleep at night.

Tips and Notes:

*When choosing a noise cancelling headphone, consider the user's preference in regards to size, tightness, and volume. Some individuals prefer 'earbuds' to the headphone design and others prefer the feeling of the headphones.*

*Additional Notes and Questions Regarding Focus and Redirection:*

---

---

---

---

## Organization Supports

Organization is also a good idea to keep floor space clear to reduce falls or for developing a routine of where items are kept to make finding them easier.



### Labeled Totes

Totes are stackable plastic containers that may be purchased with a fitting lid. These can be stacked on top of one another or placed on shelves.

Using labels or images of what is inside the container will help the user. (Image to left)

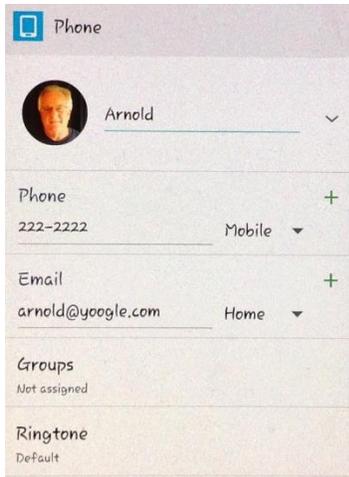
**Creating an organized space** may support memory or attention. Other options for storage include using baskets on countertops, and shelving or hooks by the door for frequently used items.

### Tips and Notes:

*There are many publications available that provide suggestions and tips for staying organized as well as other tasks of daily living. One example is Brain on a String by PJ Long (Brain on a String and other strategies for staying organized when gray matter isn't working like it used to, 2005). Long provides suggestions such as, "Grand Central Station: Set up ONE center for household information processing, and handle all paperwork here; sort, sent, and record info in the same spot".*

*Another idea is to use color to help identify the difference between one tub or folder and another. This could be used with bills or appointments. Consider using a different container or folder for bills to be paid and bills already paid.*

## Solutions: Assistive Technology

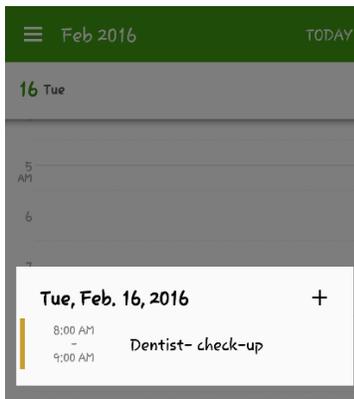


### Smartphone Contact with Image

Contacts can be saved with their picture, phone number, and email. On some devices (such as an Android device) the contacts can be grouped, so all work contacts are together and all family contacts are together.

A distinctive ringtone can also be set for each group or each individual contact. (Image to left)

**Contacts can be saved with their image** on a smart phone to aid in memory and organization. All information, including email address, home address, and other information for knowing who the contact is or with can be saved with the contact.



### Electronic Calendar

An electronic calendar on a smart device can be edited by typing or using voice-to-text. Events can be shared between contacts. Directions and maps can also be saved with the event.

Calendar events can be set to send an alert in advance of an event. These can be used with alarms to notify a day or an hour before the event. (Image to left)

**Email and other electronic calendars** may help with staying organized. These calendars can be shared or synced with other devices, like an iPad. Some applications allow multiple people to view a specific calendar or calendar entry. This may be helpful when planning transportation or setting up reminders.

## Sensory Assistance

People may get over-stimulated (frustrated and angry or excited and wiggly) or under-stimulated (low energy or tired) in response to different things and places. If the situation is one that can be **avoided**, an individual should be encouraged to move away from the situation.

### Tips and Notes:

*Be mindful of sensory stimulus. When possible, anticipate sensory experience that may cause discomfort such as loud noises, flickering lights, or a variety of scents or perfumes. Because fatigue is a common experience after brain injury, it may be important to limit activities and plan for breaks.*



### **B-Calm Audio-Sedation System**

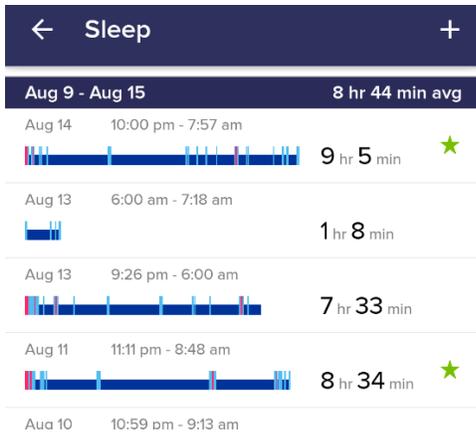
The B-Calm Audio-Sedation System contains noise cancelling headphones, earbuds, and an MP3 player. Pre-recorded noises are on the MP3 player like the sounds of waves, heartbeat, and music. (Image to left)

**Sensory and relaxing music** may be used to redirect and help calm someone in an overwhelming place. Devices to reduce the stimulation can be utilized to reduce the noise, visual stimulus, or physical stimulus.

### Tips and Notes:

*A home-made version of the B-Calm System can be created by using noise canceling headphones or earbuds, devices to play music (such as an iPod, iPad, phone, or MP3 player), and recording of sounds or music.*

*Choose music that is calming and slow paced; for example, music used on the B-Calm System includes a heartbeat, flowing water, crickets chirping, or gentle wind sounds.*



### Fit Bit Sleep Tracking

Devices, such as the Fit Bit and Garmin Vivo-Fit track sleep, as well as daily activity. The movement during the period of time that the device is in 'sleep mode' is tracked. Record of sleep movement is then summarized through an application on a smart phone or tablet, in the form of a graph, showing activity. (Image to left)

**Sleep** is important for overall health and wellness throughout the day. A sleep schedule can impact how someone functions during the day. There are a variety of methods that can be used to track sleep and to set healthy sleeping goals. A notebook can be used as a sleep journal or a device, like the Fit Bit, can be used.

*Additional Notes on Organization and Sensory Supports:*

---

---

---

---

---

---

---

---

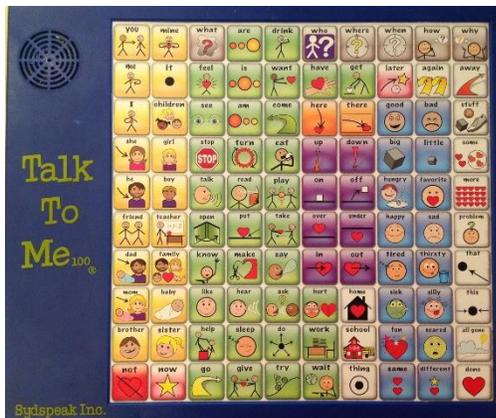
## Communication Tools



### Communication Purse

The communication purse is a thin, pink purse that has slots on the inside for pictures, stickers, or other paper based communication techniques. These can be removed from the purse to make a request. (Image to left)

**Low-tech devices** may be utilized for individuals who have difficulty speaking. The use of a communication purse or wallet with photos and words to describe needs, desires, or instructions may be used to aid in communication. A dry erase board can be used to write or draw images to express ideas and questions.



### Talk To Me

Talk to Me is a communication board that electronically speaks the word that is represented by a picture or text on each button. (Image to left)

**Picture boards** are used for general communication. A person can use an electronic communication board by pressing on a specific image to have it spoken. For example, if an individual wants an apple but is unable to communicate this, they can press the button with a picture of an apple and the electronic voice will speak “apple”. There are similar non-electronic versions of communication boards. When using non-electronic versions, the “listener” must look at the board to see which symbols the “speaker” is pointing at.



### IPad

An iPad can be used as a speech communication device, as well as an aid for many other tasks. Apps can be downloaded such as TapToTalk, Voice4U (pictured), Verbally, and many more. (Image to left)

**High-tech augmentative and alternative communication (AAC) devices** are utilized for individuals who desire to have specific individualized options for communicating their thoughts and are able to manipulate the device. A Speech Language Pathologist (SLP) can be helpful in identifying an appropriate device, programming words and phrases onto the device, and teaching usage of the device. For more information and instruction on how to search for apps, see the “There’s an App for that” section of this booklet. The iPad pictured above, is enclosed in the “Easy Grip iPad Case”.

### Tips and Notes:

*There are many versions of High-tech augmentative and alternative communication devices such as Dynavox, and Nova Chat. An SLP can help identify which device might work best.*

*Hearing aids can also be a communication support to hear what is being said by another person. An audiologist can help test and fit the device. Earbuds and amplifiers can be used to make the sounds a little louder.*

*A voice amplifier help make spoken words louder if there is limited air or diaphragm support to produce a loud sound.*

## Safety Tips

There are a variety of items to support safety, these items can range from tools to help reduce falls to tricks to help reduce fatigue such as sitting on a stool while doing the dishes to preserve energy.



### Pipe Covers

Pipe covers can be purchased and placed around pipes or installed during pipe installation. These covers reduce the external temperature of the pipes. It is especially important to cover exposed pipes under bathroom or kitchen sinks. (Image to left)

**Pipe covers, devices that limit extreme water temperature, and temperature gauges** may benefit individuals that are unable to feel when water is too hot or too cold. Consider covering exposed pipes, to limit contact burns.



### Talking Smoke and Carbon Monoxide Alarm

Talking smoke and carbon monoxide alarms may benefit people that prefer a spoken warning or directions to the sound of an alarm. When smoke or carbon monoxide is detected, this alarm speaks the warning in a calm voice. (Image to left)

**Talking smoke and carbon monoxide alarms** benefit people that become overwhelmed by loud noises or have negative responses to flashing lights, like seizures.

CHECK ALL THAT APPLY			
	No	Yes	Independently
Can you transport yourself somewhere else, such as a shelter?			
If needed, do you have a specially equipped vehicle or accessible transportation?			
Do you have a family plan to meet or communicate after a disaster: in your neighborhood, out of the neighborhood, and out of town?			

### Emergency Plan

An emergency plan is a plan that outlines the actions that should be taken during an emergency situation. All emergencies should be discussed from fire to tornado or breaking and entry. (Image to left)

**Knowing what to do in an emergency** is extremely important. It is also important to have emergency contact information, medication needs, and personal identification available for emergency response teams. Having this information available in a notebook or saved onto a jump drive that an individual carries, will help in the event of an emergency. Preplowans is a resource to help develop an emergency plan. More information available at:

<https://www.uihealthcare.org/ucedd/self-advocacy/emergency-preparedness/>



### Energizer Weather Alert Radio

The Energizer weather alert radio is battery powered with an LED light that can be utilized in dim conditions. The radio allows for the user to hear reports on weather conditions. (Image to left)

**Weather radios and other safety precautions** are useful tools when enjoying the outdoors. Outdoor recreation may take many forms, from walking or biking to playing or enjoying sports. Knowing what the weather will be is important to ensuring safety. Many avenues can be used to recognize and know weather conditions. For example, watching the news in the morning or having a weather radio with alert programed for a specific area.

**Fall prevention** is very important when talking about safety in the home. The use of area or throw rugs may create additional tripping hazards and their removal entirely should be considered.

The appropriate durable medical equipment such as canes, walkers, or wheelchairs and having ample floor space to move around, may reduce the risk of falling. Consider the use of handheld shower heads, grab bars, and shower benches to reduce the risk of falls in the bathroom.



**Smart Alarm Mat**

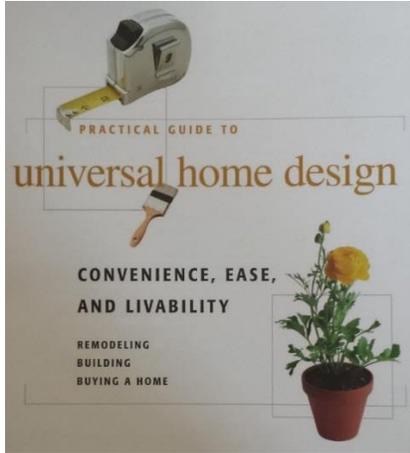
The Smart alarm mat is used in conjunction with an alarm device. This mat can be placed next to a bed and when the individual steps or moves onto the mat, an alarm will sound to alert a caregiver.

(Image to left)

**Alarm mats** may be used to notify a care provider or family member of movement. These mats can be placed in doorways or next to a bed and will sound an alarm when pressure is placed on the mat by an individual standing or moving their body onto the mat.

Tips and Notes:

*Lifeline, or similar products, send alarm messages if help is needed. Some newer versions have motion sensors which provide the family or a caregiver more information, for example: the caregiver will know if a person has remained in bed all morning.*



**Practical Guide to Universal Home Design**

The Practical Guide to Universal Home Design (a booklet provided by the Iowa Program for Assistive Technology, a program of the University Iowa Children’s Hospital, Center for Disabilities and Development, Iowa’s University Center for Excellence on Disabilities) provides tips for making your home more accessible. (Image to left)

**Universal Design** is the way in which a home or other environment is modified to make it more accessible. Consider contacting the Iowa Program for Assistive Technology or Easter Seals Iowa Assistive Technology Center to obtain a copy of the booklet, or visit <http://iowaat.org/udbooklet>.

Tips and Notes:

*There are many pieces of durable medical equipment that may increase the safety and independence of a person. These can include walkers, wheelchairs, and grabbers, to name a few.*

*An Occupational Therapist or Physical Therapist can assist in identifying an appropriate device. Easter Seals Iowa Assistive Technology Center has a Durable Medical Equipment Loan Program that is able to loan equipment for a nominal fee.*

*Additional Notes on Safety:*

---

---

---

---

## Health Help



### My Plate

My plate is a plate that visually shows the size and portion of each food group including fruits, grains, vegetables, and protein. (Image to left)

**Healthy diet** is important to overall health and wellness. Using the My-Plate approach, an individual may eat appropriately portioned meals for each food group. Allowing an individual to eat independently by finding appropriate eating utensils, such as built-up grip forks, spoons, and knives, is an important step in independence and may encourage a healthy diet.



### Talking Pedometer

The Talking Pedometer will measure the number of steps taken and will speak the number aloud at the press of a button. The Talking Pedometer also has a panic alarm that sounds when a peg is removed from the bottom. (Image to left)

Pedometers and talking pedometers can be used to measure the number of steps taken. The Fitbit flex and Garmin Vivofit devices will track steps taken and distance moved, these devices will track distance moved from wrist movement so they will work for individuals that utilize manual wheelchairs. Apps can also be used to track distance moved to promote activities outdoors, some use a GPS system on a smart phone and can track distance moved in a power wheelchair.

## Emotions and Mood



### **Webber Emotion Cards**

Emotion cards may help an individual identify their feelings by comparing their reflection to an illustration or photo card. (Image to left)

**Breathing and other relaxation techniques** may be used as self-calming in response to a certain mood or emotion. “Memoves” is an app that will help users self-calm by mirroring the movements of another person demonstrated on a video clip that is watched on a cell phone, iPad, or computer. Other self-calming techniques:

- Breathing deeply is a way to help relax the body and the mind. Attempt to breath from the abdomen, making the stomach move out with a breath in.
- Muscle relaxation can be combined with deep breathing to reduce stress or to help someone fall asleep.
- Meditation is used to quiet the mind and redirect emotions. There are many variations of meditation.
- Journaling involves writing down or recording daily activities, experiences, emotions, or thoughts. It may help with memory or help emotions and mood.

Tips and Notes:

*Apps on smart phone or tablets can run in the background of the device and use up data allowance or battery charge. Make sure to turn off background use unless it is necessary to keep it on.*

**Smart phone or tablet apps** may help an individual access breathing techniques and learn when to use them. The chart below is meant as a starting point for what’s available. Please view the “There’s an App for that” section for instruction on how to search for apps.

Technique	Android	IPhone
Breathing	Breathe2Relax (Free)	Breathe2Relax (Free)
	BreathingWell (Free)	Deep Breathing (\$0.99)
	Health Through Breath (\$4.99)	Rage Eraser (\$6.99)
Muscle Relaxation	Virtual Hope box (Free)	Zen Mixer: Guided (Free)
	Autogenic Training (\$2.33)	Autogenic Training (\$1.99)
	At Ease: Guided Imagery (\$4.99)	Deep Muscle Relaxation Hypnosis (\$5.99)
Meditation	Meditation Music (Free)	Calm (Free)
	The Mindfulness App (\$1.99)	Relax Melodies (Free)
	Guided Insight Meditation (\$2.00)	Insight Timer (\$2.99)
Journaling	Emotion Journal (Free)	Narrato Journal (Free)
	iMood Journal (\$1.00)	Days- Photo Diary (Free)
	Daily Story- Photo Diary (\$1.99)	Grid Diary (\$2.99)
Other	Mood Log (Free)	LifeCoach (\$0.99)
	MoodTools- Depression Aid (Free)	iMood Journal (\$1.99)
	T2 Mood Tracker (Free)	Optimism (Free)

*Additional Notes:*

---



---



---



---

## Supporting Socialization



### Conversation Cubes

Conversation cubes are dice shaped foam blocks, approximately 2 inches by 2 inches on each side. These blocks can be rolled and then the question on the side that is up can be read. These questions can aid discussion about appropriate conversations. (Image to left)

**Emotion cards or conversation cubes** may be used to support appropriate demeanor and conversation. In situations where identification of emotions displayed by others is difficult, there are educational devices for support.



### Logitech Web Camera

Logitech web camera connects to a computer with a USB port if a computer does not have a built in camera. This camera can be used in conjunction with many applications such as Zoom or Skype, to communicate. (Image to left)

**Visually seeing** an individual is a comfort that distance can often prevent. If phone conversations are difficult, “Facetime” or Skype using web cameras may be used so that individuals can see one another. It may be beneficial to see an individual’s face to recognize them or make the conversation easier to follow.

## Inclusive Recreation



### **Radius Ergo-Garden Trowel**

The Radius ergo-garden tools have curved handles that may reduce wrist injury when gardening or performing yardwork. (Image to left)

**Adaptive gardening tools**, that have ergonomic or long reach handles, may be utilized to allow individuals to comfortably garden or perform yardwork. Garden scooters may also be used to limit the impact of bending over.



### **EZ View Playing Card and Playing Card Holder**

Large print playing cards can be used in conjunction with a playing card holder and may allow the user freedom from holding the cards and the ability to see the number, color, and suite. (Image to left)

There are many ways to change an activity or game enjoyed at one time, to make it possible to enjoy again post injury. Many video games can be controlled by voice, ramps can be used for bowling or bocce ball, there are adapted golf carts for golfing without leaving the cart, beeper balls to allow a person to hear a ball without visually seeing it, automatic card shufflers, and board games come in various styles to enjoy with friends and family.

Tips and Notes:

*Iowa has many resources for individuals with disabilities to access recreational activities. The following resources are not intended to be all inclusive. This is only meant to be a starting point for research on activities that are desired. Consult with a doctor to ensure it is safe to participate in specific physical activities.*



**All Ability Cycles, LLC.**  
[www.allabilitycycles.com](http://www.allabilitycycles.com)  
(515) 386-8900



**Adaptive Sports Iowa**  
[www.adaptivesportsiowa.org](http://www.adaptivesportsiowa.org)  
888-777-8881 ext. 115



**SportAbility of Iowa**  
[www.sportabilityofiowa.org](http://www.sportabilityofiowa.org)  
1-319-396-3081

*Additional Notes and Conversations about Recreation:*

---

---

---

---

---

---

---

---

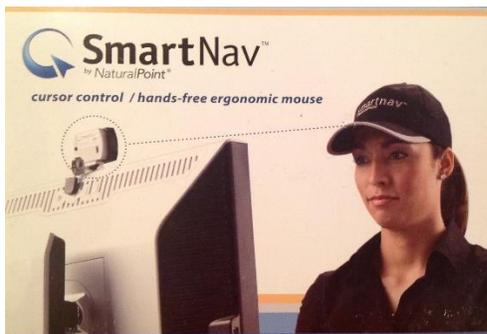
## Computer Access



### Track Ball Mouse

A trackball mouse reduces strain on the wrist by allowing the cursor to be manipulated by the movement of the thumb. (Image to left)

**Ergonomic devices** may be used with a computer to ensure appropriate positioning and avoid injury. Ergonomic devices can include split keyboards, glare reduction screen covers, wrist rests, and alternate navigation systems.

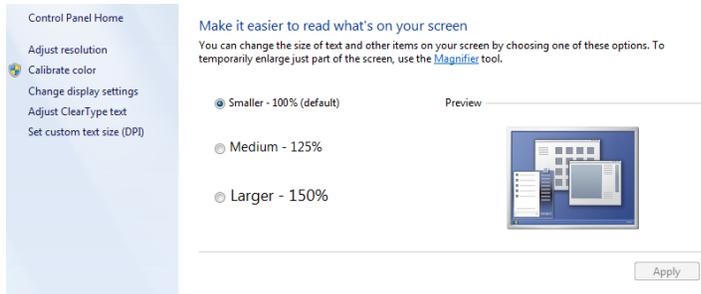


### SmartNav

SmartNav navigation system recognizes and responds to the movement of a reflective dot placed on glasses or a hat, the movement of the dot will move the cursor on the computer. (Image to left)

**Adaptive devices** may be used with a computer to make the actions easier. One-handed keyboards allow the user to type with the use of only one hand, voice-to-text software allows the user to type with voice commands, and hands free navigations, such as SmartNav navigation system, allow the use to move the cursor through movement of the head.

## Solutions: Assistive Technology



### Visual Settings on Computer

The HP Pro Desk-top computer allows users to adjust the visual display from smaller, medium, to larger. (Image to left)

**Accessibility settings** such as larger text or cursor arrows, text-to-speech and speech-to-text or color adjustments, are available on many newer computers. These setting options allow the user to set preferences for increased accessibility of the computer. When shopping for a computer, it is a good idea to ask the vendor about the type of accessibility settings available on the various models of computers.

#### Tips and Notes:

*Mac computers and IOS devices have built in speech-to-text and text-to-speech functions. Some computer models and programs may have features that better meet a specific needs than another model or program. This technology is continually changing and upgrading. Many stores can demonstrate the various models and features their staff can provide suggestions on the specific model and programs that may support the computer access specific to the end user.*

#### Additional Notes on Computer Access and Technology:

---

---

---

---

---

---

---

## “There’s an app for that”

Apps on smartphones, tablets, and televisions have grown in popularity over the past several years. These apps may make the use of many devices and daily activities easier. Apps are **continuously changing** in features and price, therefore this section will instruct the user how to search for apps to meet their individual needs.

### What is the app store?

The app store is a location on a smart device that will lead to a database of applications available for download. Android may use a different name such as the “play store”.

The diagram illustrates the process of finding an app store on two different mobile devices. On the left, an Android phone screen shows a 'Tools' folder containing icons for Calculator, Play Store, Maps, Clock, Gallery, and Dropbox. A blue arrow points from the 'Play Store' icon to a text box labeled 'Android Example'. On the right, an iPhone screen shows various app icons, with a blue arrow pointing from the 'App Store' icon to a text box labeled 'iPhone Example'. Below these examples, a central text box provides instructions on how to search for apps.

**Android Example**

**iPhone Example**

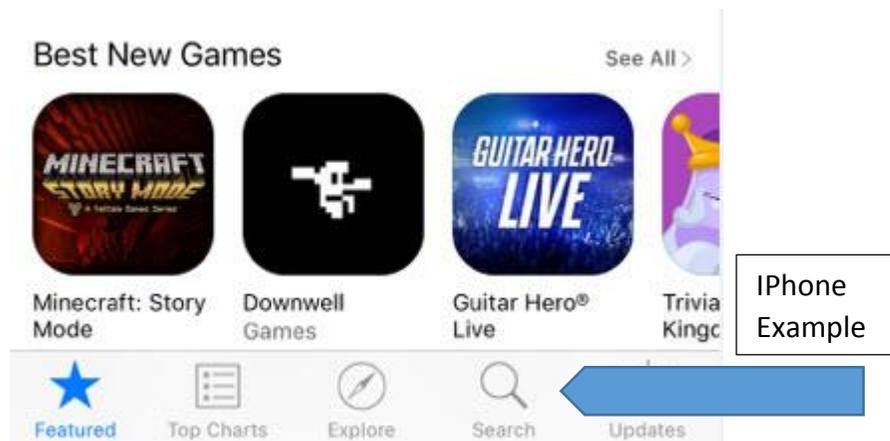
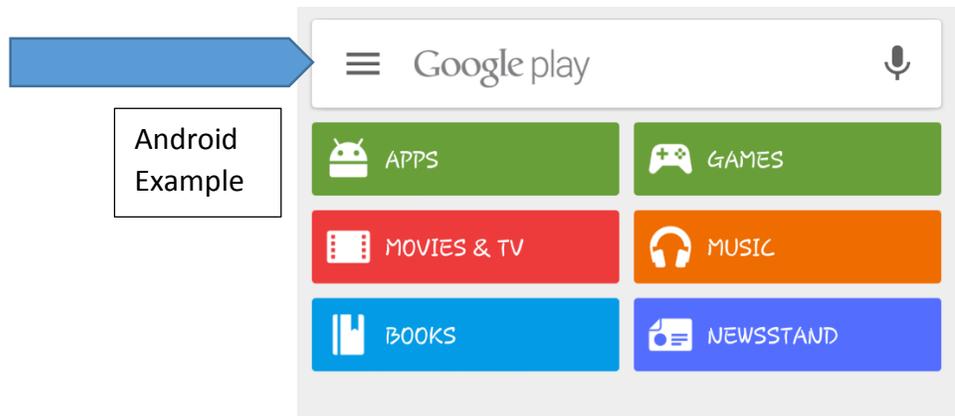
**How to “search” in the app store.**

Once the “store” is found on the device, search for applications to meet a specific need.

### Search Box

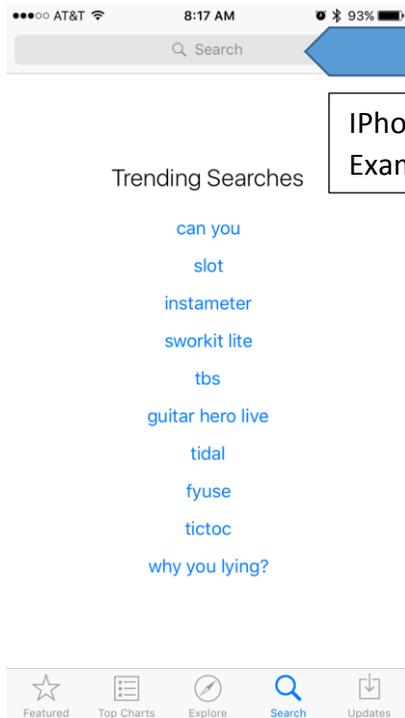
Use the “search” box to type a keyword.

The blue arrow is used below to show what the search box might look like on an Android or Apple device.

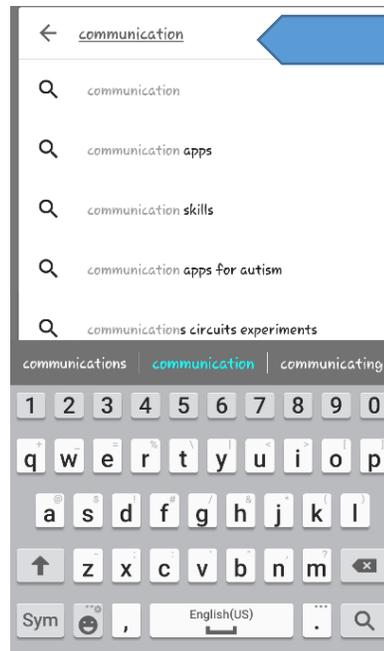


### Keyword

Pick a **keyword** based on the function or task that is needed from the app. Some examples might include: communication, medication management, health monitoring, or reminders.



iPhone Example



Android Example



Once the search is activated by clicking the  various results or options will pop up and allow the user review the price and rating of specific apps. There may be a list of reviews from other users that rate and comment on the app to say that it worked or didn't work. Remember to read some of these reviews before paying for and downloading an app to make sure it will meet the needs of the user or for deciding between similar apps.

## Where to go from here

It may seem difficult to get ideas from paper into action but there are people around the state who can help.

**Schools:** Talk to teachers, school counselor, or a consultant from the Area Education Agency about the creation of an IEP (Individualized Education Program) or 504 Plan that includes the use of AT in the classroom. For support during post-secondary schooling, contact the Student Disability Coordinator. This contact information should be available by contacting the main phone number or website for the school.

**Work:** Iowa Vocational Rehabilitation helps people with disabilities get and keep jobs. They may be able to help advocate for the accommodations needed to do a job more effectively. Similarly, many organizations have a human resources staff who can assist with ensuring that needed accommodations are made when requested. Iowa Vocational Rehabilitation can be contacted at 1-800-532-1486 (Toll Free) or 515-281-4211 (V/TTY).

**Peers:** There are online and in person support groups that will provide the chance to talk to someone who has been in a similar situation and discuss things that were helpful for them.

**Organizations:** IowaCompass, the Brain Injury Alliance of Iowa, and the Easter Seals Iowa Assistive Technology Center have staff and supports available to help brainstorm ideas, connect with resources, or try out AT. Depending on an individual's limitations, other agencies may be applicable to the situation such as the Iowa School for the Deaf, or the Iowa Department for the Blind.

### Iowa Advisory Council on Brain Injuries



The Advisory Council on Brain Injuries' mission is to represent individual with brain injury, their families, and all Iowans through advocacy, education, training, rehabilitation, research and prevention.

[www.idph.iowa.gov/brain-injuries](http://www.idph.iowa.gov/brain-injuries)

[BrainInjury@idph.iowa.gov](mailto:BrainInjury@idph.iowa.gov) (Email)

515-281-8465 (Phone)

### Brain Injury Alliance of Iowa



The Brain Injury Alliance has a staff of certified brain injury specialists who are available to all Iowans impacted by brain injury.

[www.biaia.org](http://www.biaia.org)

[info@biaia.org](mailto:info@biaia.org)

1-855-444-6443

### Easter Seals Iowa Assistive Technology Center



Easter Seals Iowa Assistive Technology Center has a variety of items, including many of the examples provided throughout the booklet, available for a 30 day trial loan or for demonstration.

Easter Seals Assistive Technology Center supports Iowans with disabilities by providing a Demonstration Center located at Camp Sunnyside, a Durable Medical Equipment Loan Program, and a Lending Library of devices.

[www.eastersealsia.org/at](http://www.eastersealsia.org/at), [info@eastersealsia.org](mailto:info@eastersealsia.org), 515-309-2394 (Phone), 515-289-4069 (TTY)