

Assistive Technology (A.T.) for Medication Management

Maine CITE – mainecite.org

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Objectives

- Identify common challenges with medication management that may impact independent living
- Identify at least 3 low tech and 3 high tech solution for medication management challenges
- Identify available funding sources for AT devices

Medication Management

Why does it matter?!

- Keep people at home!
- Reduce hospitalizations
- Reduce caregiver burden

Medication Management

- Managing medication is a multi-step and complex activity!
- Requires combination of cognitive and physical skills to be successful

Common Challenges

- Physical challenges
- Cognitive challenges
- Visual challenges
- Diagnoses that may impact these skills...
 - Dementia
 - Brain Injury (acquired or traumatic)
 - Arthritis
 - Parkinson's
 - Multiple Sclerosis
 - SCI
 - Diabetes
 - Cataracts
 - Glaucoma

Low Tech vs. High Tech

- Low Tech A.T. Devices=
 - No to low cost
 - Generally easily accessible

- Generally easy to implement
- High Test A.T. Devices=
 - More expensive
 - More features, usually more complex
 - More training and follow up required

Low Tech A.T. Devices

- Pill box/ med cassette
- Medication List
- Alarms
- Taking meds with other routines such as teeth brushing
- Alternative medication container caps
- Magnifying glass
- Large print

Low Tech A.T. Devices

- Colored placemat/ “cookie” sheet
- Contrast on pill containers
- Dycem/ Rug grip/ cabinet liner
- Pill crusher (*MD/ Pharmacist approval)
- Conversion chart (blood sugar- insulin)
- Eye drop guide

Low Tech A.T. Devices

For this section of the presentation, please see the associated Medication Management handout which includes images and links for more information and purchase.

Pros & Cons of Low Tech A.T.

- **Pros**
 - Easily accessible
 - Most of these no cost or less than \$20.00
 - Simple to set up
 - Limited training required
- **Cons**
 - Very simple, only do 1 thing
 - May have shorter “shelf life” need frequent replacement
 - Dependent on the client to use it properly

High Tech A.T. Devices

- Medication Dispensers
- Dispensers with remote monitoring
- Vibrating/ alarmed pillboxes
- Smartphone
- Medication reminder watch
- Automated pill crusher

- Cameras/ Remote Monitoring Services

High Tech A.T. Devices

For this section of the presentation, please see the associated Medication Management handout which includes images and links for more information and purchase.

High Tech A.T. Devices

- Remote Monitoring Services
 - Rest Assured® Telecare
 - Telecams
 - Sensors
 - Two-way audio
 - Live Interactive Network Companion (LINC)
 - Automated Medication Dispensers
 - Smarthome Home Automation software
 - Time Warner Cable Intelligent Home

Pros & Cons of High Tech A.T.

- **Pros**
 - Several features;
 - More intuitive and automatic
 - Smaller/ wearable
 - Involve the caregiver without direct support
 - Reduce caregiver burden
- **Cons**
 - More expensive
 - More training needs

A.T. for Managing Medications

- Strength Limitations
 - Dycem/ rug grip/ cabinet liner to open containers
 - “Easy Open” medication tops
 - Pill foil packs
 - Automated pill crusher

A.T. for Managing Medications

- Coordination/ dexterity difficulties
 - Foil pill packs
 - Container openers
 - Medication cups
 - Non - skid mat/ surface
 - Medication Dispensers
 - Automated pill crusher

A.T. for Managing Medications

- Swallowing difficulties

- ** Consult SLP and/ or a physician prior to making any adjustment on pill texture or method of ingestion of medications**
- Liquid medications if/when available
- Pill crusher (manual & automatic)

A.T. for Managing Medications

- Numbness / tingling in hands
 - Medication dispenser
 - Medication top openers
 - Medication cups
 - Automated pill crusher

A.T. for Managing Medications

- Cognitive Challenges:
 - Color coding (i.e. - yellow AM, blue PM)
 - Pill boxes
 - Conversion charts for insulin
 - Auto refill set up @ pharmacy
 - Smartphone apps
 - Smartwatch/ Medication reminder watch
 - Remote monitoring

A.T. for Managing Medications

- Vision:
 - Magnifying glass
 - KNFB reader app/ E-Reader
 - Color coding (contrast)
 - Medication dispenser
 - Enlarged print

Diabetes Management

Insulin- dependent diabetes adds additional challenges due to the complex nature of monitoring blood sugars and adjusting insulin accordingly

Type 1 vs. Type 2 Diabetes

A.T. for Diabetes Management

- OneTouch Verio® Sync system -- blood glucose monitoring that automatically syncs to iPhones
- Talking blood glucose monitors
 - The Prodigy Voice®
 - The Accu-Chek® Voicemate
 - Prodigy AutoCode®

A.T. for Diabetes Management

- Insulin pump
- Prodigy Count-A-Dose

- Syringe Support
- Insulin/ blood sugar conversion chart

Apps for Medication Management

For this section of the presentation, please see the associated Medication Management handout which includes images and links for more information and purchase.

- Health ID
- BlueLoop
- Diabetes in Check
- Pillboxie
- Drugs.com Medication Guide
- My MedSchedule
- MedHelper Pill Reminder
- MediSafe Medication Management

Funding

- This is the key issue for the consumer & family!!
- Professionals need to know about purchasing / funding options for AT
- Funding decisions are based on need & eligibility
- Learn about the eligibility & documentation requirements of funders
- Do your homework...

Funding

- mPower Loan/Financing Program - mpowerloans.org
- Alpha One - IL grants & mPower Loans - alphaonenow.org
- Robbie Foundation - robbiefoundation.com

Funding

Funding ---- MaineCare supports people living in the community: shifts funding to community based services away from more costly institutional care

- Waivers fund A.T. used in the community to increase safety & independence
- Funding for home based remote monitoring
- Support training on how to use AT
- *Homeward Bound Program* -- people leave NFs to go back home

Maine Home and Community Based Waivers, AT Comparison Chart

Please see this additional resource from Kelley McTague, COTA/L, ATP located on the Maine CITE website - mainecite.org/wp-content/uploads/2016/02/ATWaiverChart-Feb2016.pdf

Access to A.T.

- Start with an A.T. assessment!
- Device demonstrations and loans
- Device loans- “try before you buy”
- Explore available funding options

AT Providers

- C.A.R.E.S. - AT demo & loan
- mPower Loan Program - \$ to buy AT
- Maine Center for Integrated Rehab - AT Services
- Goodwill NNE - AT Services
- Gallant Therapy Services - OT services
- AT Practitioners (ATPs) RESNA certified
- Occupational Therapists
- Speech Therapists
- Physical Therapists
- Manufacturers/vendors

AT Resources

- Maine's AT program - mainecite.org
- GetATstuff - getatstuff.com/
- Spurwink ALLTECH - alltech-tsi.org (Demo & Loan program)
- CARES, Inc - caresinc.org (Demo & Loan program)
- American Foundation for the Blind - afb.org
- Pass It On Center - passitoncenter.org (Lists AT Reuse programs)
- Rest Assured - restassuredsystem.com - Remote monitoring
- Smart Home - smarthome.com - Monitoring equipment
- MediSafe - medisafe.com - Medication systems and Apps
- ALZ Store - alzstore.com
- E-Pill - epill.com - Medication dispensing systems

Thank you!!

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