

Improving Medication Management and Safety through Caregiver Engagement

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Outline

- Caregivers and Medication Management
- Overview of Tools to Assess and Assist with Medication Management
- Bridging the Communication Gap

Burden of Medication Management on Caregivers

Toll of Caregiving on Caregivers

- The more tasks a caregiver performs, the more likely they are to report depression, the need to constantly watch out for something to go wrong, stressed about talking to professionals, and worried about making a mistake.¹
- Caregiving is linked to caregiver health decline.²
- About half of all family caregivers are 50 years old and older, the age at which many people begin receiving care.³
 - 21% of caregivers perform 21-40 hours of care per week, and 30% care for 41 or more hours per week.³
- **Medication management** was the most commonly cited challenge for caregivers.³

1. Reinhard S, Levine C, Samis S. Home Alone: Family Caregivers Providing Complex Chronic Care Washington, DC: AARP Public Policy Institute; 2012. 50 p.
2. Joyce BT, Berman R, Lau DT. Formal and informal support of family caregivers managing medications for patients who receive end-of-life care at home: A cross-sectional survey of caregivers. Palliat Med [Internet]. 2014 Oct;28(9):1146-55.
3. Makowka J, Lau T, Kachnowski S, Puglise L, Woodriff M, Griffin M, Crowley O, Lam V. Caregivers & Technology: What They Want and Need Howard N, editor. Washington, DC: AARP Project Catalyst; 2016. 48 p.

Volume of Medications and the Duties Associated with Them

- In a nationally representative population-based online survey of 1,677 family caregivers:¹
 - 46% were administering *five to nine* prescription medications a day
 - 18% were administering *ten or more* prescription medications a day
 - 69% of care recipients were also taking between one and four over-the-counter medications or supplements
- Managing medications:¹
 - Order, pick up, and/ or pay for the care recipient's medication
 - Help care recipients take oral medications
 - Administer injections, inhalers or nebulizers, eye/ear drops, and use an infusion pump

Reasons Caregivers Consider Medication Management Difficult

- Time and inconvenience.¹
- Fear and anxiety over making a mistake and harming their family member.¹
- Lack of cooperativity from the care recipient.¹
- Feeling underprepared to effectively manage medications.²

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Lack of Assistance

- Despite frequent emergency department visits and overnight hospital stays, few family caregivers reported receiving assistance and training from health care professionals.¹
 - 69% of the care recipients did not have any home visits by health care professionals.
 - 47% of caregivers said they never received medication management training from any source.
- Many family caregivers, especially those 65+, report lacking additional support from their friends/family.²
- About 39% had no additional formal or informal support with managing the patient's medications.²

1. Reinhard S, Levine C, Samis S. Home Alone: Family Caregivers Providing Complex Chronic Care Washington, DC: AARP Public Policy Institute; 2012. 50 p.

2. Joyce BT, Berman R, Lau DT. Formal and informal support of family caregivers managing medications for patients who receive end-of-life care at home: A cross-sectional survey of caregivers. Palliat Med [Internet]. 2014 Oct;28(9):1146-55.

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Barriers to Utilization of Medication Management Support

- Disbelief that more training and preparation would ease their burden.¹
- Dissatisfaction with previous training (hasty and last-minute).¹
- Disagreement with the support received regarding the patient's treatment plan.²
- Racial/ethnic minorities and caregivers of patients with cancer tend to lack formal (paid) and informal (unpaid) support.²

1. Reinhard S, Levine C, Samis S. Home Alone: Family Caregivers Providing Complex Chronic Care Washington, DC: AARP Public Policy Institute; 2012. 50 p.

2. Joyce BT, Berman R, Lau DT. Formal and informal support of family caregivers managing medications for patients who receive end-of-life care at home: A cross-sectional survey of caregivers. Palliat Med [Internet]. 2014 Oct;28(9):1146-55.

Aspects of the Case

- **Medical History:** Alzheimer's disease with behavioral disturbance (late afternoon and evening motor restlessness, resistance to care, intermittent verbal irritability, and insomnia), heart failure, hypertension, osteoarthritis of her right knee, and urinary incontinence. Discharged from a local hospital 2 weeks ago, following treatment for an acute exacerbation of heart failure.
- **Medication History:** Donepezil 10 mg at bedtime, memantine 10 mg twice daily, Citalopram 10mg QDaily (which she takes for agitation related to her dementia rather than depression), Trazodone 75 mg at bedtime, Melatonin 3 mg at bedtime, Lasix 60 mg at bedtime, Lisinopril 10 mg in the morning with baby aspirin 81 mg. Daughter helps her mom set up the medications into a pillbox.
- **Functional History:** Needs significant assistance with dressing, bathing, grooming, and toileting. She can feed herself the meals her daughter prepares, and often eats from a tray in her recliner in the living room or in her bedroom. She is able to ambulate short distances in the home and to the car (there is a ramp from the back door to the alley), but requires a wheelchair when she is away from home. Her MMSE=12 and she is able to communicate and make her needs known.

Opportunities to Engage Caregivers

Caregivers' Perspective....



HealthCare Team's Perspective....



Early Identification of those in Need of Medication Management Support

- Among 120 participating caregivers in the telephone survey.¹
 - Half were aged 60 years or older, and most were female (83%) and non-Hispanic white (68%)
 - Most were caring for a patient who was at least 80 years old, female, and non-Hispanic white.
 - Over one-third cared for a cancer patient and over one-quarter for someone with end-stage dementia.
 - Formal (paid) support may indicate poorer patient/caregiver relationship, requiring special attention

Recognize when Introduction of a Tool would be Useful/Accepted

- When the imperative to make lasting lifestyle changes is front-of-mind immediately after a serious event.
- At the interface between risk evaluation made by a practitioner and the decision to modify lifestyle risks in response to this evaluation.

The Medication Management Instrument for Deficiencies in the Elderly == > **MedMaIDE**

What is the MedMaIDE?

Tool that assess the ability to self-administer medications in older adults by looking at:

- ✓ How much the person knows about their medications (KNOWLEDGE)
- ✓ How to take their medications (ADMINISTRATION)
- ✓ If they know how to get their medications (ACCESS) .
- ✓ comprehensive to cover all aspects of medication-taking behavior
- ✓ done in the home environment
- ✓ by non-medical professionals

What a Person Knows about Their Medications

- Have the individual state:
 - Name all the medications taken (OTC and RX)
 - Time of day for each medication
 - How they are taking
 - Why they are taking
 - Amount of each
 - *Side Effect(s), borrowing meds, other meds not using*

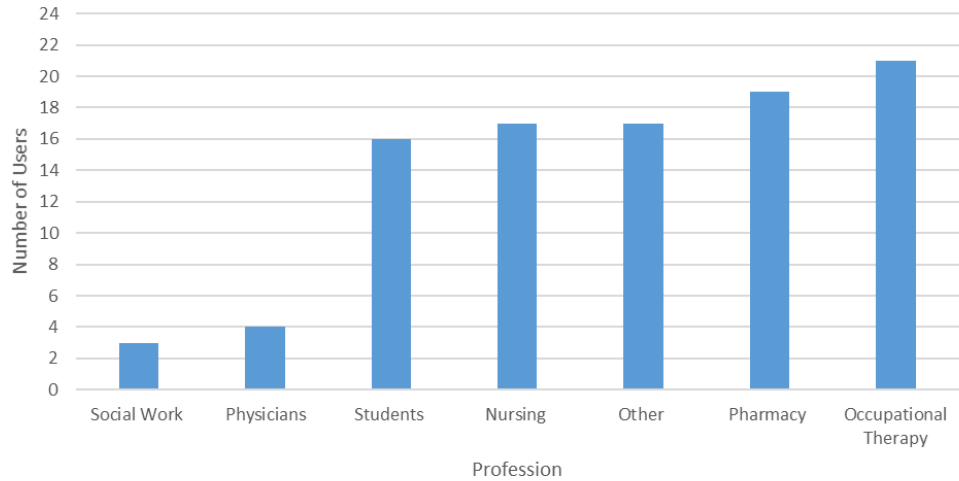
If a Person know HOW to TAKE their Medications..

- Ask the Individual if they can:
 - Demonstrate filling a glass
 - Remove top from container
 - Demonstrate administering med
 - Sip enough water to swallow
 - *Record how medications are stored*

What a Person knows on HOW to GET Their Medications..

- Have an individual:
 - Identify if there are refills on a prescription
 - Who to contact for a prescription
 - Explain resources to get the medication
 - *Ask additional issues surrounding inspecting medication, prescription card or meds that they can not obtain*

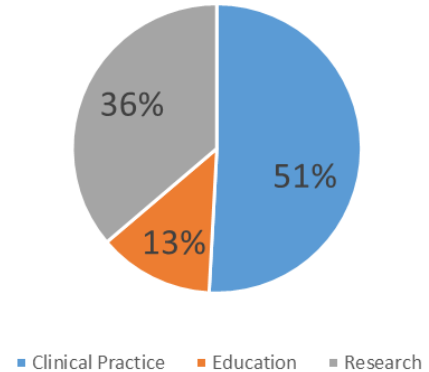
MedMaIDE Users



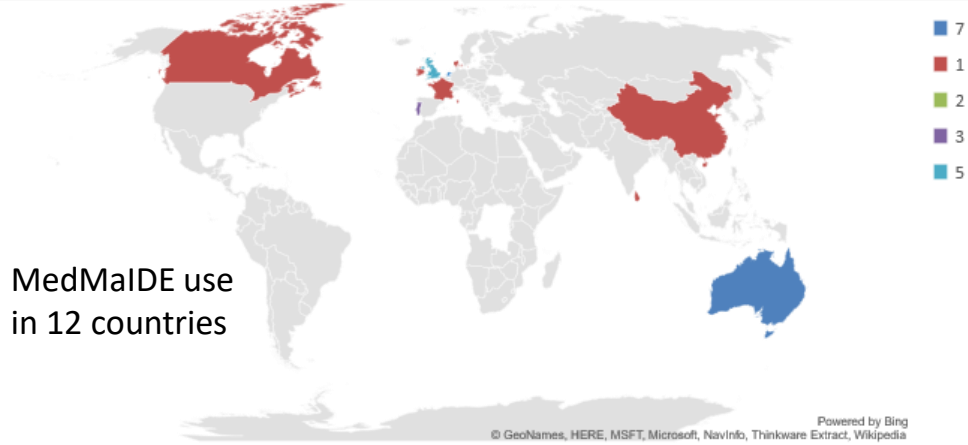
Professions using MedMaIDE

How MedMaIE is being used by professionals in the field

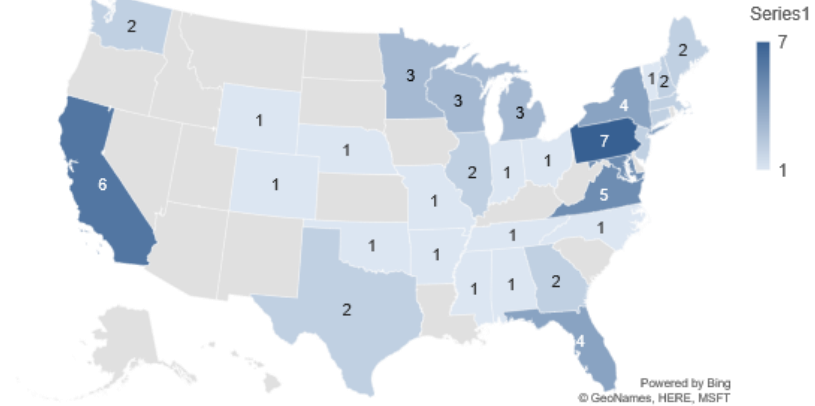
MedMaIDE Use



Where MedMaIDE is Used



MedMaIDE in the US



Be There for Them

- **Actively listen**
 - Many caregivers reported feeling less distressed after the telephone interview.¹
- **Actively assess**
 - Look for potential disagreements between caregivers and the support they receive to effectively intervene when necessary.¹

Obligation of Providers

- Every health care clinician and social service professional must feel personally responsible for ensuring that patients and families in their care understand how to perform the challenging tasks outlined in this report.¹
- Understanding the full spectrum of family caregiver needs is essential for future program development.¹

Implications for Change

- The Joint Commission as criteria for assessing patient and family participation in decision making and other aspects of quality care, but these criteria are not generally given high priority in ratings, and many institutions see them only as ideals.
- There is no standard list of tasks, and often no discussion of the differences between tasks performed in institutional and home settings or between the performance of the task by a nurse or other professional and a family member.
- These performed by caregivers merit a closer look because they can require specialized training, and they have been linked to preventable health care spending, such the costs of inpatient admissions due to medication errors and infections.
- A group of physician organizations issued a transitions of care consensus policy statement that suggested specific elements that include family caregiver.¹

1. Snow, V., Beck, D., Budnitz, T., Miller, D. C., Potter, J., Wears, R. L., ... & Williams, M. V. (2009). Transitions of care consensus policy statement: American college of physicians, society of general internal medicine, society of hospital medicine, american geriatrics society, american college of emergency physicians, and society for academic emergency medicine. *Journal of hospital medicine: an official publication of the Society of Hospital Medicine*, 4(6), 364-370.

Current use of Web-Based Technology by Caregivers and Older Adults

Current Use

- Half of family caregivers in 2014 were under age 50 and a quarter were millennials, and self-report as more likely to use available technology than their 50+ counterparts.¹
- 71% of caregivers are interested in technology, but only 7% are currently using it to assist with their caregiving duties.¹
- 97% of caregivers are comfortable with computers, and 80% are comfortable with tablets and smartphones.¹
- People currently source health-related information via the Internet.²

1. Ong SW, Jassal SV, Miller JA, Porter EC, Cafazzo JA, Seto E, Thorpe KE, Logan AG. Integrating a smartphone-based self-management system into usual care of advanced CKD. *Clin J Am Soc Nephrol* [Internet]. 2016 Jun 6;11(6):1054-62.
2. Neubeck L, Coorey G, Peiris D, Mulley J, Heeley E, Hersch F, Redfern J. Development of an integrated e-health tool for people with, or at high risk of, cardiovascular disease: The consumer navigation of electronic cardiovascular tools (CONNECT) web application. *Int J Med Inform* [Internet]. 2016 Dec;96:24-37.

Current Use (cont'd)

- Technologies regarding medications are used the most¹
 - 11% of caregivers use refill and delivery tools
 - 8% use adherence tools
- Studies are demonstrating the benefits of interactive internet portals for managing specific chronic conditions and lifestyle changes.²
- Focuses of current technology.²
 - Electronic health records
 - Personal health records
 - Health information exchanges

C. Ong SW, Jassal SV, Miller JA, Porter EC, Cafazzo JA, Seto E, Thorpe KE, Logan AG. Integrating a smartphone-based self-management system into usual care of advanced CKD. *Clin J Am Soc Nephrol* [Internet]. 2016 Jun 6;11(6):1054-62.

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Common Barriers to Technology

- Caregivers are unfamiliar with all the benefits available to them through technology that can improve their caregiving activities.
 - Perceived as too expensive and too complex – not worth the investment of time or money.
- Lack of awareness of the best tools to use and seek a high level of assurance first.
- Lack of interoperability with medication management tools.
- Time constraints to finding and setting up the technology.

The Future of Technology in Medication Management

- Use is expected to increase over time
 - 65% of caregivers ages 18-49 years said they are likely to use available technologies, whereas 56% of caregivers ages 50-64 and only 38% of those ages 65 and up said the same.¹
- Caregivers are most interested in technology for
 - Supporting medication refill and pickup
 - Making and supervising medical appointments
 - Assessing health needs and conditions
 - Ensuring home safety
 - Monitoring medication adherence.^C

The Future of Technology in Medication Management (cont'd)

- Caregivers want a tool that provides integration
 - With other members of the care team
 - Individualized and adjustable to changing needs
- Desire for “twin” profiles, one for the patient and one for the caregiver, to preserve autonomy

Age-Friendly Health System 4M Bundle

What Matters:

Know and act on each older adult's specific health outcome goals and care preferences across settings

Know the health outcome goals and care preferences of older adults for current and future care, including but not limited to end of life

Align all care and decisions with the older adult's specific health outcome goals and care preferences

Medications:

If medications are necessary, use Age-Friendly medications that do not interfere with What Matters, Mentation, or Mobility

Engage the older adult and the health care team in determining whether medications are impacting the older adult's Mobility, Mentation, and/or What Matters; if so, create a shared responsibility to de-prescribe or adjust the dosage

Make medication decisions in partnership with the older adult, family, and health care team, and identify options that support What Matters, Mentation, and Mobility

Mentation:

Identify and manage depression, dementia, and delirium across care settings

Know if an older adult has dementia and/or delirium

Manage the factors that contribute to delirium

Treat and manage dementia by understanding the underlying needs of older adults with dementia to keep them safe

Know if an older adult is depressed, and treat and manage depression

Mobility:

Ensure that older adults at home and in every setting of care move safely every day in order to maintain function and do what matters

Create an environment and culture that enables, supports, and encourages mobility

Identify and treat underlying contributors to immobility and fall injuries

Take Home Points

- Medication Safety in Older Adults continues to be an area of concern.
- More awareness and work needs to be done to educate patients, families as well as healthcare practitioners.
- Ongoing Collaboration is key.

Questions???



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