



# ACT on Alzheimer's Disease Curriculum

Module IX: Dementia as an  
Organizing Principle of Care

# Dementia as an Organizing Principle of Care

- These slides are based on the Module IX: Dementia as an Organizing Principle of Care text
- Please refer to the text for all citations, references and acknowledgments

# Module IX: Learning Objectives

## **Upon completion of this module the student should:**

- Gain an understanding of the unique care needs of individuals with dementia when co-morbid conditions are present.
- Demonstrate an understanding of dementia as the organizing framework for care including: how it affects assessment, treatment planning, care management and overall quality of life for individuals with dementia.
- List evidence-based transitional care models, which can be critical in supporting individuals with dementia through transitions across care settings and can help prevent/reduce unnecessary hospitalizations.

# Complex Care Needs of Individuals with Dementia

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- People with dementia have complex health conditions that are difficult to manage
- Common health problems for people with dementia include:
  - Cardiovascular disease
  - Hypertension
  - Diabetes
- Dementia influences the care of comorbid health conditions

# Complex Care Needs of Individuals with Dementia

- There are a variety of complications that result from poorly managed comorbidities for people with dementia
  - Medication related issues
  - Increased rates of hospitalization
  - Reduced capacity for self-management and care

# Supporting People with Dementia in Their Care

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- Providers can play a central role in management of dementia which can improve care and quality of life outcomes
- Principal goal of a provider's role is to ensure that people with dementia have full access to the broad range of pharmacological and non-pharmacological interventions that are available, as well as treating complications from dementia
- Secondary role is to connect caregivers with resources that provide help and support

# Supporting People with Dementia in Their Care

- In order to coordinate and manage care for people with dementia, providers can use the following tools
  - Early assessment – allows for earlier treatment of comorbid conditions
  - Using dementia as the organizing framework for care; developing a care plan under a dementia diagnosis
  - Effective care management can 1) delay institutionalization, 2) reduce neuropsychiatric conditions, and 3) be cost effective

# Supporting People with Dementia in Their Care

- Elements of effective care models include:
  - Care coordination through a collaborative team approach including physicians, nurse managers and community resources

# Supporting People with Dementia in Their Care

- Elements of effective care models include:
  - Focusing on care transitions; elements of effective care transitions include:
    - Comprehensive logistical support for a move
    - Coordinated primary care follow-up after transition
    - Ongoing contact with a care manager
    - Patient/caregiver education
    - Medication reconciliation
    - Facilitated access to community resources
    - Interdisciplinary provider-to-provider care communications
    - Attention to red flags of deteriorating health

**ACT on Alzheimer's**  
**Alzheimer's Disease Curriculum**  
**Module IX – Dementia as an Organizing Principle of Care**

**GUIDELINES FOR AND RESTRICTIONS ON USE OF CURRICULUM MODULES**

*This curriculum was created for faculty across multiple disciplines to use in existing coursework and/or to develop a stand-alone course in dementia. Due to the fact that not all modules will be used for all disciplines, topics have been divided into ten modules that can be used alone or in combination with other modules. Users may reproduce, combine, and/or customize any module text and accompanying teaching slides to meet course needs. Our only restriction on re-use is that the modules not be sold in their current or modified form.*

*NOTE: Recognizing that not all modules will be used with all potential audiences, there is some duplication across the modules to ensure that key information is contained in each module (e.g., screening module is completely duplicated in the diagnosis module because the diagnosis module is not appropriate for all audiences).*



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### Acknowledgement

We gratefully acknowledge our funding organizations, which made development of this curriculum possible: The Alzheimer's Association MN/ND Chapter and The Minnesota Area Geriatric Education Center (MAGEC), which is housed in the University of MN School of Public Health, and is funded by the Health Resources and Services Administration (HRSA).

We also specially acknowledge the principal drafters of one or more curriculum modules, including Mike Rosenbloom, MD; Olivia Mastry, MPH, JD; Gregg Colburn, MBA; and The Alzheimer's Association.

In addition, we would like to thank the following contributors and the peer review team:

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**This project is/was supported by funds from the Bureau of Health Professions (BHPr), Health Resources and Services Administration (HRSA), Department of Health and Human Services (DHHS) under Grant Number UB4HP19196 to the Minnesota Area Geriatric Education Center (MAGEC) for \$2,192,192 (7/1/2010—6/30/2015). This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by the BHPr, HRSA, DHHS or the U.S. Government.**

**Minnesota Area Geriatric Education Center (MAGEC)  
Grant #UB4HP19196**

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### **Overview of Alzheimer's Disease Curriculum**

This module is part of the Alzheimer's Disease Curriculum developed by ACT on Alzheimer's. ACT on Alzheimer's is a statewide, voluntary collaboration that includes over 50 organizations and 150 individuals seeking to prepare for the budgetary, social, and personal impacts of Alzheimer's disease. All of the modules can be found online at [www.ACTonALZ.org](http://www.ACTonALZ.org)

Module I: Disease Description

Module II: Demographics

Module III: Societal Impact

Module IV: Effective Interactions

Module V: Cognitive Assessment and the Value of Early Detection

Module VI: Screening

Module VII: Disease Diagnosis

Module VIII: Quality Interventions

**Module IX: Dementia as an Organizing Principle of Care**

Module X: Caregiver Support

Module XI: Alzheimer's Disease Research

Module XII: Glossary

ACT on Alzheimer's has developed a number of practice tools and resources to assist providers in their work with patients and clients who have memory concerns and to support their care partners. Among these tools are a protocol practice tool for cognitive impairment, a decision support tool for dementia care, a protocol practice tool for mid- to late-stage dementia, care coordination practice tools, and tips and action steps to share with a person diagnosed with Alzheimer's. These best practice tools incorporate the expertise of multiple community stakeholders, including clinical and community-based service providers:

- Clinical Provider Practice Tool
- Electronic Medical Record (EMR) Decision Support Tool
- Managing Dementia Across the Continuum
- Care Coordination Practice Tool
- Community Based Service Provider Practice Tool
- After A Diagnosis

While the recommended practices in these tools are not state-specific, many of the resources referenced are specific to Minnesota. The resource sections of these tools can be adapted to reflect resources specific to your geographic area.

To access ACT tools visit: <http://actonalz.org/provider-practice-tools>

**Module IX: Learning Objectives****Upon completion of this module the student should:**

- Gain an understanding of the unique care needs of individuals with dementia when comorbid conditions are present.
- Demonstrate an understanding of dementia as the organizing framework for care including: how it affects assessment, treatment planning, care management, and overall quality of life for individuals with dementia.
- List evidence-based transitional care models, which can be critical in supporting individuals with dementia through transitions across care settings and can help prevent/reduce unnecessary hospitalizations.

## Module IX

### Dementia as an Organizing Principle of Care

#### Case Study:

*Mr. Johnson, a 71 year-old man with a history of diabetes who currently lives alone, is brought into the clinic by his son, Dave. Mr. Johnson does not believe he has any significant memory problems, yet Dave describes 2.5 years of progressive memory deficits characterized by increasing late fees while paying bills and difficulty maintaining the household. Over the past three months, Dave has received repeated phone calls from his father in which he complains repeatedly about losing items around the household. At one point, he wondered whether somebody was stealing his keys and reading glasses. Originally, Dave suspected that his father was fixated on this topic but, over time, it became clear that he had forgotten about the original conversations. His cognitive review of systems is remarkable for forgetting appointments and becoming lost while driving in familiar neighborhoods. Dave mentions that he is worried about his dad's driving as well. He denied any specific symptoms for depression.*

*The past medical history includes diabetes and hypertension. He was previously on a more complicated medication regimen aiming for "tighter" blood sugar control. He is now taking metformin, which is taken two times a day, lisinopril, and a baby aspirin, which can be taken once a day. He will occasionally take Tylenol PM (with diphenhydramine) at night for sleep. The primary provider is hoping that simplifying the medication regimen will make it easier for Mr. Johnson to follow instructions accurately.*

*Mr. Johnson is a retired janitor with a high school education. No active smoking or drinking. There is a family history of Alzheimer's disease in his father who developed symptoms at age 81.*

*Neurological exam was non focal. Neuropsychological screening showed a MoCA=21 (losing points for cube copy, 1/5 words after 5 minutes [could not recognize when given a list], orientation to date, clock draw).*

*Laboratory studies showed normal complete blood count, electrolytes, LFTs, glucose, thyroid stimulating hormone, and B12 levels. A referral was made for neuropsychological testing: Mr. Johnson showed severe deficits in learning and memory, moderate deficits in visuospatial function, and mild executive impairments. The Geriatric Depression Scale score was 2 and within normal limits. Brain MRI was positive for bilateral hippocampal and parietal atrophy, but no evidence for stroke or focal lesions.*

*Mr. Johnson was diagnosed by his primary provider with probable Alzheimer's disease. Dave inquired about any interventions that can possibly slow or treat the disease process. It is clear that Dave is distressed about his father's new diagnosis. He has many questions about his father's safety and how he can proactively take steps to ensure his dad's well-being.*

A memory loss diagnosis with dementia should be considered the primary diagnosis because it will affect all aspects of care, treatment planning, and long-term outcomes for any comorbid diagnosis. As the disease progresses, individuals with dementia are less able to fully participate in their own care including monitoring their own condition, following medication protocols, and making medical decisions that will affect their quality of life. Due to the unique progression of dementia, the caregiver ultimately needs to become the chief decision-maker and be responsible for all aspects of the care.

### **Complex Care Needs of Individuals with Dementia**

#### **Comorbidities**

Older adults in general, and individuals with Alzheimer's disease and related dementias specifically, have complex health conditions, which makes it challenging to provide them with quality care and support. Individuals with dementia who receive primary care have on average 2.4 chronic conditions and receive 5.1 medications (Schubert, et al., 2006). Individuals who are diagnosed with dementia often have cardiovascular diseases such as coronary heart disease, stroke, diabetes mellitus, and hypertension (Anderson, et al., 2011). Two of the most frequent comorbidities seen in individuals with dementia are hypertension and diabetes (Paulo, et al., 2007). Individuals with Alzheimer's disease also commonly experience psychiatric disorders like depression, anxiety, and sleeping disturbances (Deschenes, et al., 2009). Dementia influences the management, potential outcomes of care, and adherence to a comorbid medical condition treatment plan.

### **Complications Resulting from Poorly Managed Comorbidities**

#### **Medication Related Issues**

One common result of complications arising with comorbidities in people with dementia is medication-related problems, which are costly, often preventable in older adults, and lead to poor outcomes (The American Geriatrics Society, 2012), (Beers Criteria Update Expert Panel, 2012). Comorbidities can result in heavy drug loads for patients, which are often inappropriate and expose individuals with AD to adverse reactions and harmful interactions between drugs (Anderson, 2011). Studies in ambulatory and long-term care settings estimate that 27% of adverse drug events in primary care and 42% in long-term care settings were preventable, with most problems occurring at the ordering and monitoring stages of care (Gurwitz, et al., 2005). Use of potentially inappropriate medications results in spiraling healthcare costs, estimated at \$7.2 billion in the early 2000s (Fu, et al., 2007).

#### **Increased Rates of Hospitalization**

Hospitalization (and re-hospitalization) is a significant risk facing individuals with dementia. Individuals with dementia are more likely than individuals without dementia to be admitted and readmitted to hospitals for a variety of conditions, including dehydration, urinary tract infection, pneumonia, and delirium from medication adverse effects (Lyketsos, 2000, 2005). Once hospitalized, individuals with dementia generally experience additional cognitive decline, and frail elders, including those with dementia, are at increased risk of delirium, functional decline, and iatrogenic complications during an in-

patient stay (Phelan, 2012). Such complications could potentially be prevented, recognized earlier, or managed in other settings, which would reduce the need for acute hospitalization and avoid related consequences for persons with dementia (Phalen, et al., 2012), (Lyketsos, et al., 2000).

### **Reduced Capacity for Self-Management and Care**

Accomplishing adequate chronic disease management and care management across comorbid conditions is more difficult in persons with dementia due to cognitive impairment. Depending on the progression of the disease, impairment prevents initial understanding and subsequent follow-through on following care instructions, adhering to drug therapy, assuring a safe home environment, making or attending follow up appointments, and maintaining other needed activities and support such as diet, therapies, and exercise (Lyketsos, et al., 2012). This raises the potential for increased hospitalizations and can also result in increased negative behaviors and functional loss (Paulo, et al., 2007). A central component of dementia care is the effective management of common general medical comorbidities (Lyketos, et al., 2005). In light of reduced capacity to self-manage care in individuals with dementia and the resulting costs and health outcomes, more aggressive involvement of providers working together with families and caregivers is necessary to effectively manage comorbidities and support individuals with dementia. Refer to the following video for more information relating to dementia and care management:

<http://www.youtube.com/watch?v=wwE86Y3SAV0>

## **Supporting Individuals with Dementia in Their Care**

### **Unique Role of Providers to Organize Care with Dementia**

Primary care providers have the potential to play a central role in management of dementia, which can significantly improve the quality of care and life as well as the health of individuals with the disease (Callahan, et al., 2006), (Vickery, et al., 2006). The principal goals of serving in such a role are to ensure that individuals with dementia benefit from a comprehensive approach to pharmacological and non-pharmacological interventions as well as detect, prevent, and treat, when possible, the complications of the dementia, including complications such as falls, malnutrition, and behavioral and psychological symptoms of dementia (Villars, et al., 2012).

To accomplish this unique role, providers must be willing to organize care, interdisciplinary professional teams and tools, and community resource referrals around the dementia disorder. This approach, as outlined below, will allow providers to better manage comorbidities and better support individuals with dementia through enhanced care.

### **Early Assessment**

Early detection of dementia means that effective supports can be put in place to help manage comorbidities before they lead to acute hospitalizations (Gestios, et al., 2012). Ambulatory care is the optimal setting to both detect dementia and manage comorbid conditions. While individuals with dementia should direct care decisions to the greatest extent possible, involvement by family physicians and caregivers as partners in the care process is critical, especially as cognitive impairment progresses. While early detection does not always change individual provider

prescribing behaviors (Boustani, et al., 2012), knowing an individual's disease status can benefit an individual who is receiving dementia care in a clinic that organizes its care around a dementia disorder and uses one or more evidence-based interventions, including care management models (Gestois, et al., 2012). Early detection also serves as a gateway to other supportive interventions that positively impact an individual's quality of life and care (Callahan, et al., 2006).

### **Framing the Care Plan under a Dementia Diagnosis**

Once a dementia diagnosis is established, the diagnosis should provide an organizing framework for all other care. Dementia results in increasing impairment in memory, information processing, and judgment. Thus as the disease progresses, individuals with dementia will have diminished capacity to participate in their care. As this occurs, both the formal and informal caregivers will need to anticipate the needs of a person that has a diagnosis of dementia. Once the disease is detected, it is critical to address it in the care plan. An emerging approach for accomplishing this is to develop the plan for an individual with dementia who has multiple comorbidities. Research suggests that when providers follow disease-specific clinical practice guidelines for each of an individual's conditions with comorbidities, it can lead to ineffective care because the provider may not be at liberty to respond flexibly to the individual's comprehensive needs (Boyd, et al., 2005). Framing a care plan under a dementia diagnosis will shape a more cohesive, responsive, and effective care plan than if a provider designed a plan that addresses needs of an individual with diabetes, osteoporosis, hypertension, and dementia. While there are not treatments for dementia that delay or effectively address symptoms of the disease, the presence of dementia is likely the most important factor that can influence the effectiveness of care and treatment of dementia and all other conditions. Refer to the following video for more information relating to dementia and care management: <http://www.youtube.com/watch?v=sHvRCXpX1aU&feature=related>.

### **Inclusion and Support of Caregivers/Care Partners**

As the disease progresses, persons with dementia become less able to successfully navigate their own care without the ongoing help of family, friends, or paid caregivers. In the early stages of dementia, the caregiver, also known as a care partner, takes on the task of escorting their care receiver to medical appointments and will participate in the exam. When/if individuals with dementia lose the ability to fully participate in their own medical care, it becomes mandatory for caregivers to oversee all aspects of medical assessments, treatment, and medication adherence as well as making medical decisions that will affect quality of life. Medical professionals will rely on caregivers to give them the needed information to provide high quality care for all medical conditions including memory loss. The caregiver role is important and is usually filled by a family member or close friend. If a person with dementia does not have a caregiver, it is the role of the primary physician to impress upon the patient, at the time of diagnosis, the importance of identifying one.

Dementia caregivers are critical partners in assuring adherence to care plans and the caregiver role carries burdens and risks for the caregiver. Thus, a vital role of providers is to connect caregivers

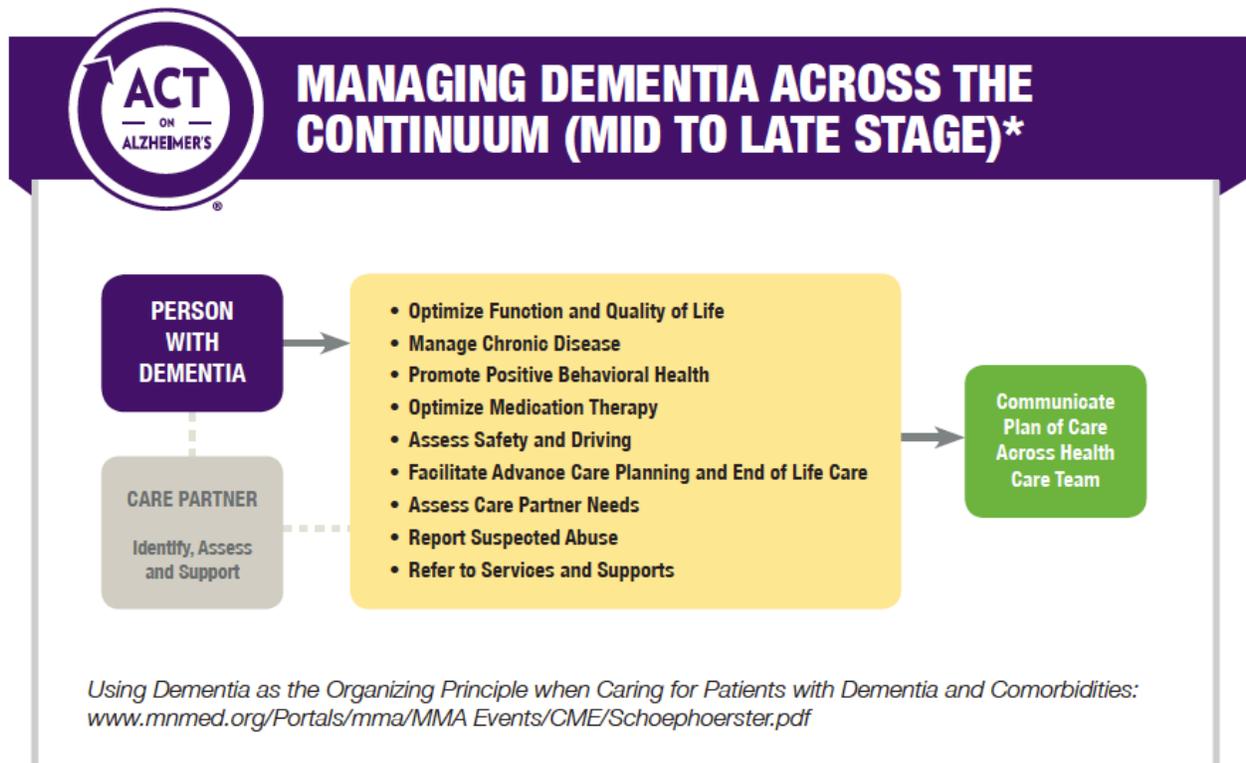
with information about effective caregiver support programs in order to prevent crisis situations and hospital admissions (Villars, et al., 2012).

*ACT on Alzheimer’s Tool: The [After a Diagnosis Tool](#) offers Action steps and tips medical and provider professionals can share with individuals and their family when a diagnosis of Alzheimer’s or dementia is made.*

**Prescribing and Medication Management**

Dementia, as an organizing principle of care, also relates to medication usage and potential adverse reactions. One of the best opportunities to positively affect the cognition of an individual with dementia is found in the careful and attentive management of the drug regimen. Dementia, as a primary diagnosis, requires a medication review in order to consider if specific medications would be contraindicated. For example, the use of drugs like anticholinergic, benzodiazepines, H-2 antagonists, Zolpidem, and antipsychotics which can increase their level of cognitive impairment should be avoided. Due to the diagnosis of dementia, medication adherence will become a challenge to both the individual with dementia and the caregiver. Minimizing the number of medications and simplifying the regiment will be beneficial to overall quality of life and will also be cost effective as the funds will be needed later as the disease progresses.

A comprehensive practice tool for the full disease continuum that addresses the topics above can be accessed at <http://www.actonalz.org/provider-practice-tools>. An overview shot of the tool can be found below:



**Balancing Independence and Safety**

As the disease progresses, it is important to understand the limits of patient abilities and safe functioning to assure a safe environment while fostering the least restrictive living situation for an individual with dementia. As overall functioning decreases, special consideration should be paid to safety. A home safety evaluation should be completed to assess current functional abilities in the home and to identify potential risks. Possible suggestions could include: limiting clutter, removing rugs and other fall hazards, and installing an emergency call system, handrails, and increased lighting. Caregiver safety should also be assessed as well. Training may be needed to prevent injury to both caregiver and care receiver.

**Balancing Benefit and Burden**

Using dementia as the organizing principle of care also informs and likely alters the benefit/burden equation for treating comorbid conditions. Because dementia reduces life expectancy, benefits of prevention of other diseases or conditions may be lower and not always worthy of pursuit. For example, an individual may not live long enough to benefit from a reduction in the microvascular complications of diabetes. Benefits of life-extending treatments for other conditions may be offset by reduced quality of life from cognitive impairment and functional dependency during any additional months or years of life (Brauner, et al., 2000). Similarly, the burdens of care for comorbid conditions are increased in individuals with more advanced dementia and may impact which treatments are pursued. For example, difficulties of a colonoscopy increase exponentially for an individual who is cognitively impaired and does not understand the preparation or the procedure. It is important to consider whether treatment results in clinical improvement or reduced suffering. As dementia progresses and life expectancy decreases, the benefits of preventive measures and treating comorbidities decreases. This benefit/burden analysis regarding treatment is unique for individuals with dementia and is another reason to implement dementia as the organizing diagnosis.

**Effective Care Management and Care Coordination**

In addition to organizing care around the dementia diagnosis, effective dementia care management is a critical element of care and can: 1) delay institutionalization, 2) reduce neuropsychiatric symptoms, and 3) be cost effective (Callahan, et al., 2006), (Mittelman, et al., 2006), (Wolf, et al., 2009). Care coordination typically encompasses the assessment of a patient's needs, development and implementation of a plan of care, and evaluation of the care plan (NTOCC, 2008). One way in which providers can improve outcomes and prevent medical crises in dementia care is to coordinate care through collaborative teams within the clinic and have close ties and referral paths to supportive community-based care (Vickery, et al., 2006), (Guerriero, et al., 2004). A team-based approach to coordination has a positive impact on individuals with dementia, their caregivers, and overall care costs and outcomes (Callahan, et al., 2006). In one study, individuals with dementia received one year of care management by an interdisciplinary team led by an

advanced practice nurse working with the patient's family caregiver and integrated with primary care. The team used standard protocols to initiate treatment and identify, monitor, and treat behavioral and psychological symptoms of dementia, stressing non-pharmacological management. The collaborative care for the treatment of Alzheimer's disease resulted in significant improvement in the quality of care and in behavioral and psychological symptoms of dementia among primary care patients and their caregivers (Callahan, et al., 2006). In a subsequent study, individuals with dementia received tailored care from a collaborative clinic team comprised of a care manager and a primary care physician and supported by specialists in a memory care clinic and information technology resources. The study articulated the multi-component process required for implementing such programs using the reflexive adaptive model (Callahan, et al., 2011). Additionally, in a long-term care or assisted living setting, the resident's care is best coordinated by a multidisciplinary care plan team. This multidisciplinary team includes professionals from nursing, recreation, nutrition, and social work all working together with the family, the person with Alzheimer's disease, and his/her primary physician. The care plan team works together to organize the care for the individual with dementia to foster the highest level of functioning for as long as possible. The care plan team should conduct ongoing assessments that will be used to form a comprehensive plan of care to meet all of the resident's physical, emotional, and spiritual needs.

*ACT on Alzheimer's Tools: The [Care Coordination Practice Tool](#) supports the coordination of care of patients with dementia and their care partners or caregivers. Care coordination amongst the full range of health care providers and care settings is a critical element in providing continuity of care and quality health care to patients with dementia. Care coordination functions to ensure that the agreed-upon plan of care is guided by the goals, needs and preferences of the patient.*

*The [Electronic Medical Record \(EMR\) Decision Support Tools](#) provides a template to assist clinicians in implementing a standardized approach to all aspects of dementia care within the health record: screening, diagnosis, and treatment management. Each tool guides the provider toward best care practices for patients living with Alzheimer's disease or a related dementia, with the benefit of improved diagnosis accuracy and improved care coordination and health outcomes. The tools may be used within a variety of EMR products and can be modified to meet the unique needs of each healthcare system. A guide to implementing the tools provides tips, steps, and case studies.*

### **Focusing on Care Transitions**

Alzheimer's disease and other forms of dementia are progressive, leading to a higher level of care needed as the overall condition deteriorates. Care transitions from one setting to another for persons with dementia are common and often occur after a sudden decline in condition, a hospitalization, or if a caregiver is no longer able to provide care in the current setting. Transitional care is defined as a set of actions designed to ensure the coordination and continuity of health care as individuals transfer between different locations or different levels of care. The goal of such care is to avoid inappropriate and preventable readmissions to assure quality of care and stability of the health of a person with dementia.

Transitional care support is essential for persons with complex care needs, including those with dementia. Many evidence-based models of transitional care exist and have been shown to make a

significant difference on health outcomes, quality, and cost of care compared with individuals who do not receive transitional care, including lower rates of hospitalization and emergency room visits (Coleman, et al., 2001), (Coleman, et al., 2003), (Coleman, et al., 2006), (Naylor, et al., 1994), (Naylor, et al., 1999), (Naylor, et al., 2004).

Although each care transitions/transitional care model developed to date has differences, the following common elements are typically found in the models:

- Comprehensive support of logistical arrangement associated with transitions
- Timely and coordinated primary care follow-up after transition
- Ongoing contact with a designated individual such as a care manager or coach
- In-person, telephonic, or practice-based support and communication interaction before and after transition
- Patient/caregiver education including requests to repeat back the information and understanding
- Patient/caregiver activation whenever possible
- Medication reconciliation
- Facilitated access to community resources, especially with community-based partners with which primary care maintains ongoing relationships
- Focus on effective, interdisciplinary provider-to-provider care communications and transitions, e.g. from primary care to specialty care
- Attention to key indicators or “red flags” of deteriorating health conditions

A table comparing six evidence-based care transition programs is set forth below (Technical Assistance Exchange, 2011):

<p><b>Care Transitions (Coleman)</b>  <a href="http://www.caretransitions.org">www.caretransitions.org</a></p>	<p><b>Transitional Care (Naylor)</b>  <a href="http://www.transitionalcare.info">www.transitionalcare.info</a></p>	<p><b>Better Outcomes for Older Adults through Safe Transitions (BOOST)</b>  <a href="http://www.hospitalmedicine.org">www.hospitalmedicine.org</a></p>	<p><b>The Bridge Plan</b>  <a href="http://www.transitionalcare.org">www.transitionalcare.org</a></p>	<p><b>Guided Care</b>  <a href="http://www.guidedcare.org">www.guidedcare.org</a></p>	<p><b>Geriatric Resources for Assessment of Elders (GRACE)</b>  <a href="http://www.medicine.iu.pui.edu/IUCAR/research/grace.asp">www.medicine.iu.pui.edu/IUCAR/research/grace.asp</a></p>
<p>Transition Coach helps patients and families learn transition-specific self-management by:</p> <ul style="list-style-type: none"> <li>▶ Conducting a hospital visit to introduce the program and tools such as the Personal Health Record (PHR)</li> <li>▶ Conducting one home visit 24-72 hours post-discharge</li> </ul> <p>1. Actively engages patients in medication; helps them develop a clear, easily understandable medication regimen and enter into PHR</p> <p>2. Uses role-playing and other tools to transfer skills to patients and family members on how to communicate needs with health care professionals</p> <p>3. Reviews any “red flags” that indicate a worsening condition and</p>	<p>The Transitional Care nurse:</p> <ul style="list-style-type: none"> <li>▶ Visits patient in the hospital to:                             <ol style="list-style-type: none"> <li>1. Conduct an in-hospital assessment (+ functional status)</li> <li>2. Collaborate with care-team members to reduce adverse events and prevent functional decline</li> <li>3. Develop a streamlined, evidence-based plan of care</li> </ol> </li> <li>▶ Conducts home visit within 24 hours of discharge to assess safety in completing ADLs and IADLs, recommend environmental adaptations, and refer to other services</li> <li>▶ Accompanies patient on first visit with the physician post-discharge and subsequent visits if needed</li> <li>▶ Facilitates physician-nurse collaboration across care episodes</li> <li>▶ Conducts weekly home visits for first month</li> <li>▶ Makes telephone contact</li> </ul>	<p>BOOST includes specific interventions to mitigate high risk patients’ risks for adverse events:</p> <ul style="list-style-type: none"> <li>▶ A standardized discharge process</li> <li>▶ Efforts to improve patient/caregiver preparedness</li> <li>▶ Medication safety</li> <li>▶ Follow-up care</li> </ul> <p>Tool for Addressing Risk: a Geriatric Evaluation for Transitions: TARGET is a 4-part tool that includes:</p> <ul style="list-style-type: none"> <li>▶ Risk stratification process using eight elements</li> <li>▶ Risk-specific intervention plan linked to the 8P risk score summary</li> <li>▶ Universal set of expectations for all patients being</li> </ul>	<p>A hospital-based social work model designed for older adults discharged home from an inpatient hospital stay to safely transition back to the community by providing:</p> <ul style="list-style-type: none"> <li>▶ Intensive care coordination that starts in the hospital and continues after discharge to the community</li> <li>▶ Aging Resource Centers (ARC) inside hospitals that provide a dedicated space for older adults and their caregivers to explore community resources, health information and caregiving materials, and to develop community care plans before discharge.</li> </ul> <p><b>Pre-discharge:</b> Bridge Care Coordinators (BCCs) identify older adult patients who may be at risk for post-discharge complications and meet with them and/or their caregivers to identify unmet needs and set up services prior to discharge. BCCs also prepare for discharge by reviewing medical records or meeting with an interdisciplinary team within the hospital.</p> <p><b>Post-discharge:</b> BCCs call consumers 2 days after discharge to</p>	<p>Program requires that Guided Care Nurse:</p> <ul style="list-style-type: none"> <li>▶ Conduct a comprehensive home assessment</li> <li>▶ Create a care guide and an action plan for the patient</li> <li>▶ Provide monthly monitoring and self-management coaching</li> <li>▶ Smooth transitions into and out of hospitals and other institutions</li> <li>▶ Coordinate care by all providers</li> <li>▶ Provide family caregiver education/support</li> <li>▶ Facilitate access to community based services</li> </ul>	<p>Program requires that nurse practitioner and social worker:</p> <ul style="list-style-type: none"> <li>▶ Offer in-home assessment and care management</li> <li>▶ Collaborate with and support the primary care physician</li> <li>▶ Meet with the patient’s primary care physician to review, modify and prioritize the care plan, then collaborate with the physician</li> <li>▶ Work weekly with geriatrician-led interdisciplinary team to craft patient care plan</li> <li>▶ Conduct at least one in-home follow-up visit to review care plan, and one telephone or</li> </ul>

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<p>response strategies                      ► Making three follow up phone calls focused on reviewing the progress toward established goals, reinforcing the importance of maintaining PHR, and supporting the patient’s self-management</p>	<p>for each week that in-person visit is not scheduled                      ► Is on call seven days per week for home visits and telephone access                      ► Provides active engagement of patients and family caregivers with focus on goals                      ► Provides communication to, between, and among the patient, family caregivers, and health care providers.</p>	<p>discharged from the hospital to home (the Universal Checklist)                      ► General Assessment of Preparedness (GAP), a component list of issues important to providers and patients (and their caregivers) surrounding the readiness of patients for transition out of hospital</p>	<p>conduct a secondary assessment and intervene on identified needs, including understanding discharge instructions, transportation issues, physician follow-up, burdened caregivers, problems with home health care, difficulty obtaining and/or understanding medications.  <b>Follow-up:</b> The BCC follows up with consumers at 30 days post-discharge to track their progress and address needs</p>		<p>face-to-face contact per month                      ► Coordinate care from all providers                      ► Collaborate with hospital discharge planners and make a home visit after any hospitalization</p>

**Case Study Continued:****Pharmacological Intervention:**

*Mr. Johnson is started on Donepezil 5 mg daily for 1 month, increasing to 10 mg daily thereafter. The primary provider explains that this medication only provides symptomatic treatment and does not slow the disease process. It is recommended that the patient avoid taking Tylenol PM due to the diphenhydramine's anticholinergic effects, and he is prescribed trazodone 50 mg at night for insomnia. Since the patient had no evidence for depression by history and score on the Geriatric Depression Scale, there is no role for an antidepressant.*

**Non-Pharmacological Intervention**

*The primary provider has a Family Meeting where he counsels Mr. Johnson and Dave about healthy lifestyle, safety concerns, maximizing his function, socialization, and ongoing education and support of Mr. Johnson and Dave, his care partner. This is the first time that Dave realizes that he is a "care partner." Physical activity is the priority, given Mr. Johnson's diabetes and literature supporting favorable impact of this intervention upon cognition. The patient was recommended to use his home exercise bike for 30 minutes at a time for 3 days weekly. After discussing options for increasing cognitive activity, the patient decides to meet friends to play cards at the senior center twice a week in addition to daily reading. He is also enrolled in a Brain & Body Wellness Program. He is provided a calendar to write down his appointments and activities. At the Brain and Body Wellness program, the health educators stress the importance of a daily routine.*

*The primary provider has numerous safety concerns about Mr. Johnson's living situation. In the setting of newly diagnosed Alzheimer's disease, Mr. Johnson has an increased risk for medication non-adherence. The primary provider recommends that he utilize a pillbox with daily reminders from his son.*

*Dave feels he is able to visit his father once a week and set up two pillboxes indicating the days of the week, one marked "morning" and one marked "evening"; when he makes reminder calls, he can tell his father to take the pills from the appropriate box and indicate the day of the week so that the correct medications are taken. When Dave calls to remind Mr. Johnson about his medication, he will also review the day's activities with him and write them on a white board on the back of his front door.*

*Mr. Johnson and his son get along well. The primary provider discusses the importance of the care partner; Dave will accompany his father to follow-up appointments so that he will also hear the treatment plan, when the next appointment should be, and symptoms and signs to look for that would indicate a need for a more urgent visit.*

*A home care nurse is arranged to go to the home to assess Mr. Johnson's home situation for safety, assess if he is able to follow phone instructions from his son accurately, ensure that he is eating regularly, and ensure adequate housekeeping.*

*Mr. Johnson and Dave decide that it might be a good idea to try putting a small table by the front door where he can leave his keys and a stand up glasses case can be placed next to his favorite reading chair. They will put a white board on the back of the front door indicating where the keys and reading glasses might be. If this doesn't work, they will try another plan.*

*In addition, it is suggested that Dave and his father discuss the possibility of Dave obtaining power of attorney and beginning to manage the patient's finances. All bills are subsequently placed on autopay.*

*Mr. Johnson has been responsible for his own meals. There have been no problems thus far with forgetting to shut off stove burners. The family is counseled about other options that include prepared meals and microwave meals as well as Meals on Wheels.*

*Mr. Johnson's primary provider shares Dave's concerns about Mr. Johnson's driving safety. Due to symptoms of disorientation in familiar places, the primary provider recommends a formal driving evaluation through occupational therapy. Mr. Johnson is instructed not to drive until this evaluation has been completed. Dave sets up transportation to and from the Senior Center for the card game sessions. They will find out if this senior center has meals, and if so, he may eat a warm lunch with his friends on card game days.*

*The primary provider makes a referral to the Alzheimer's Association to provide additional education regarding Alzheimer's disease and information relating to community resources. Mr. Johnson and Dave begin care consultation to learn about the disease, what they might expect as a course of progression, and how to prepare to manage at later stages of the disease. The primary provider sees Mr. Johnson and Dave in follow-up appointments to see how they are coping at home with the new diagnosis. He is tolerating the donepezil without difficulty and adjusting well to his new schedule. His primary provider uses the opportunity to discuss Mr. Johnson's overall healthcare goals, hopes, and fears about the future. Mr. Johnson would like both of his sons to be his joint health care proxies. He mentions his fears about losing his independence and goal of staying in his own home as long as possible. Given this information, they discuss the importance of identifying a health care proxy and writing an advance directive. They make a plan to see each other in three months for follow-up.*

### Module IX: Questions for Review

1. Effective evidenced-based care models for patients with dementia include:
  - a. **Medication reconciliation**
  - b. A physician providing all care
  - c. Annual physical exams
  - d. Free prescriptions
  
2. An appropriate prevention measure for a patient with late stage Alzheimer's disease is:
  - a. Lipid testing
  - b. Fecal occult blood screening
  - c. **Podiatry care for calluses**
  - d. Weekly blood pressure checks
  
3. Mrs. Oakes is a 79 year-old woman with diabetes, hypertension, osteoarthritis, and moderate Alzheimer's disease. She lives with her husband who helps coordinate her care. She is generally calm and happy but easily distressed in unfamiliar environments. The Oakes are very physically active. They walk their dogs daily, play golf weekly, and Mrs. Oakes continues to assist with housekeeping under her husband's supervision. Her blood pressure has been well-controlled with medications, but her glycosylated hemoglobin has been consistently greater than 9 despite dietary modifications and oral medications. Mr. Oakes would like to consult with an orthopedic surgeon about a possible total knee arthroplasty for his wife who has progressively worsening right knee pain and stiffness despite conservative therapeutic interventions. The most important information for the primary MD to communicate to the orthopedic surgeon is regarding Mrs. Oakes:
  - a. Uncontrolled diabetes
  - b. Stable hypertension
  - c. Progressing musculoskeletal symptoms
  - d. **Alzheimer's diagnosis and baseline cognitive status**
  
4. Mr. Akin is an 82 year-old male who has been reporting concerns about his memory to his niece for several months. She schedules him for an annual wellness visit at the primary care clinic where a Mini-Cog screen shows cognitive impairment. A subsequent comprehensive evaluation leads to a diagnosis of early Alzheimer's disease. The patient is also found to have probable gout, mild malnutrition, and several recent falls without injury. At a family conference to discuss the Alzheimer's diagnosis and determine a plan of care, the primary priority should be to:
  - a. Start allopurinol
  - b. **Identify a care partner to attend future appointments with him**
  - c. Set up meals on wheels
  - d. Designate a financial POA
  
4. A 75-year-old patient with an 8 year history of Alzheimer's disease is brought to clinic by his spouse who is providing 24-hour supervision. The spouse reports 2 episodes of bright red blood per rectum in the past week. The patient has a history of colonic polyps with his last colonoscopy at age 65 and worsening constipation. His vital signs are stable and his functional

status is at baseline. Lab testing reveals a mild iron-deficiency anemia. Using the diagnosis of dementia as an organizing principle of care, this patient:

- a. Should be admitted to the hospital for evaluation of GI bleeding
  - b. Should start oral iron therapy
  - c. Should have a goals of care discussion initiated with his care partner/giver**
  - d. Should have a colonoscopy scheduled
5. Ms. Allen is a 92-year-old nursing home resident with Alzheimer's disease. She has been living there for 8 months and has had progressive cognitive decline with increasing behavioral and psychological symptoms of dementia. She is often frightened when alone, easily disturbed by unusual noises or new people, and is physically aggressive when upset. Her code status is DNR/DNI. Her family would "consider" hospitalization if needed. They don't want her to die but also don't want her "to suffer or be so upset".
- Tonight she has developed a fever of 100.5 with a productive cough and a WBC of 12,000 with a left shift. A chest X-ray shows a left lower lobe infiltrate and her O2 sats have decreased to 88% but improve with oxygen therapy. Her BP is in her normal range and her pulse is elevated at 96. The most appropriate intervention for this patient after consultation with her family would be:
- a. Acetaminophen for fever and push fluids
  - b. Initiate antibiotic therapy in the nursing home and have the primary care provider see her in the morning**
  - c. Ambulance transport to the emergency room for evaluation
  - d. Direct admission to the hospital for treatment of nosocomial pneumonia

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