MEMORY CLINIC:
AN INTERDISCIPLINARY APPROACH TO SUPPORT PERSONS WITH MEMORY LOSS AND THEIR FAMILIES

A Toolkit for Organizations and Providers

HADI Hawaii Alzheimer’s Disease Initiative
A PROJECT OF THE UH CENTER ON AGING
www.hawaii.edu/aging/hadi
Background

The Hawaii Alzheimer's Disease Initiative (HADI) was funded by the federal Administration for Community Living (HI 90ADPI0022). In 2010, a patient-centered medical home (PCMH) memory clinic model was developed at a Federally Qualified Health Center (FQHC) called Kokua Kaliihi Valley (KKV). It employed a multi-disciplinary team approach, offering comprehensive coordinated care from ADRD diagnosis through end of life. ACL funding enabled the expansion of the memory clinic model to three additional FQHCs and a senior center. Research indicated that interprofessional teams in a memory clinic setting were highly effective in care coordination for persons with mild cognitive impairment and dementia. For more research evidence, refer to:


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Section Overview

The purpose of this toolkit is to document technical assistance for providers seeking to replicate a memory clinic model developed in Hawaii. The appendix at the end of the toolkit includes resources used in the memory clinic’s development and implementation as examples for new programs. Within this section, the Toolkit Overview, a background on Alzheimer’s disease and other dementias (ADRD) is provided, as well as a summary of a few current issues faced by people living with dementia, their family caregivers, and providers. An overview of the memory clinic model, and description of the toolkit and its contents, concludes this section.

Background

Dementia is an umbrella term for Alzheimer’s disease that is characterized by a gradual loss of brain function that becomes severe enough to affect a person’s daily life.

Key Facts:

- Hawaii is home to an estimated 29,000 individuals living with dementia, and by 2025 this number will rise to 35,000; almost 60% reside in the community, and 25% live alone (1-2)
- It is estimated that there are 52,000 dementia family caregivers in Hawaii (2)
- Dementia costs the Hawaii Medicaid program $240 million, and caregivers’ economic value is estimated at $1.7 billion (2)
- There are 5.8 million Americans living with Alzheimer’s disease (5)

Current Issues: Early Diagnosis, Dementia Capable Workforce, Language, and Culture

Many people, often at the beginning and/or with mild cognitive impairment, live undiagnosed with ADRD, and unfortunately, at least half of older adults living with dementia do not have a diagnosis. Among other benefits, early diagnosis gives people access to dementia treatment and families time to plan. Among other barriers to early diagnosis, language and culture can make dementia diagnosis, treatment, and management more challenging.
In Hawaii, for example, the majority of the state’s population is Asian American, Native Hawaiian, or other Pacific Islander (AANHPI). One in 4 Hawaii residents speak a language other than English at home, and for those with limited English proficiency, language access can be a significant barrier to dementia diagnosis and management (9). Dementia is commonly mislabeled as “normal aging” and cultural barriers, denial, and shame impede some patients and families from discussing cognitive concerns with their primary care provider; for example, in Chinese, dementia translates as “crazy catatonic” and the signs and symptoms of dementia are interpreted as a mental illness (10).

While most commonly diagnosed by primary care physicians (PCP), neurologists and other specialists also diagnose dementia. **However, the healthcare and human service workforce is not adequately prepared to diagnose or manage ADRD.** For example, in a national survey of PCPs, the Alzheimer’s Association found (3):

● 40% never or “only sometimes or never” are comfortable personally making a diagnosis of ADRD;
● 50% did not feel adequately prepared to care for individuals with ADRD; and,
● 55% reported there to not be enough dementia care specialists to meet patient demands in their communities.

For providers, staffing shortages create operational crises, restrict service availability, and limit quality control. For example:

● Healthcare and social service provider shortages have escalated during the COVID-19 pandemic, with 20% more PCPs needed than currently practicing in Hawaii (7)
● Hawaii lost 15% of the nursing workforce over the past two years (6)
For individuals, caregivers, and families, provider shortages lead to waitlisted or unavailable services (and thus poor access to respite for family caregivers), specialty providers being hard to access (for example, geriatricians and neurologists) and in severe situations, premature institutionalization. Hawaii has been identified as one of the top 20 “dementia neurology deserts,” meaning the state is projected to have fewer than 10 neurologists per 10,000 people with dementia by 2025 (4). To meet the care needs of people with ADRD, Hawaii’s direct care workforce needs 35% more home health and personal care aids by 2028 (3).

Adding to the strain of providers and family caregivers to provide quality and person-centered care, cultural and linguistic differences may make clinical assessment, treatment, and management more challenging. Documenting clinical data or communicating treatment plans may be more difficult for providers, and families may be called upon to interpret medical information with limited knowledge of the disease, or be unable to find an in-language homecare provider for their loved one, when healthcare staffing shortages are already widespread.

Solutions are urgently needed as people living with dementia are already at an increased risk of institutionalization (12). Innovations may include, among others, new models of care, workforce development initiatives, and/or policy changes.

New federal directives are mobilizing states to develop dementia-capable communities that:

- Educate the public about brain health and fitness, topics that are not routinely discussed in primary care settings,
- Ensure patients and families have access to professionals skilled in identifying and diagnosing dementia,
- Work effectively with individuals and caregivers by offering services that are person-centered, self-directed, and culturally and linguistically appropriate, and
- Build capacity for dementia-capability now and into the future (for example, through resource allocations, workforce development, and quality assurance systems).
With widespread primary care shortages, interdisciplinary, team-based care may be an effective solution to dementia diagnosis, treatment, and management. Dementia care is underrepresented in clinical training. An interdisciplinary, team-based clinical experience fosters the dementia capability of emerging providers, and bringing providers together across disciplines creates the ideal environment for workforce development initiatives. Collaborative care models may produce cost-savings, too, as some studies have suggested. For example, one program, which was operated by a team composed of a PCP, registered nurse, social worker, medical assistant, and technician who could administer neuropsychological tests, documented a cost-savings per patient of up to $2,856 annually (8).

**What is a Memory Clinic?**

Hawaii’s Memory Clinic Model functions as a patient-centered medical home (PCMH) with the goal to bring interdisciplinary dementia management to primary care. A PCMH is defined by the Agency for Healthcare Research and Quality (AHRQ) as a model of primary care that delivers these core functions: comprehensive, patient-centered, coordinated care, accessible services, quality, and safety (11). The goal of Hawaii’s memory clinics are to provide comprehensive dementia assessment and care planning, and to support older adults and their caregivers, irrespective of their ability to pay, as well as care planning, patient and caregiver education, and brain health and fitness.

**Memory Clinic Stations:**

- Medical Assistant
- Primary Care
- Social Worker
- Nurse Care Coordinator
- Behavioral Health
- Dietician
**Toolkit Description and Audience**

Since its inception, Hawaii’s memory clinics have served 165 people with dementia statewide, serving mostly AANHPI older adults and caregivers. Among other benefits, memory clinics optimize the engagement of diverse and hard-to-reach populations, reducing common language and cultural barriers found in delivering primary care and long-term services and supports (LTSS). These memory clinics have been most successful when developed within the communities they intend to serve.

The interdisciplinary, team-based approach embraced through the model allows for replication across a variety of healthcare and community-based settings. The intended audience for this toolkit is broad and includes, but is not limited to:

- Individual providers (for example, PCP or community health worker)
- Healthcare entities (for example, other FQHCs),
- Community-based organizations (for example, a senior center or organization with established trust and history serving a hard-to-reach community, such as people with developmental disabilities who also have dementia),
- Organizations administering federal resources to older adults and their caregivers (for example, organizations delivering services funded by the Older Americans Act),
- Faith-based organizations (these organizations may be particularly helpful in reaching people with memory concerns who are limited English proficient),
- Social workers to help to assess and link individuals and their families to services.
Section References


6. Hawaii News Now (2022). To tackle shortage, Hawaii considers making it easier to hire foreign-trained nurses. To tackle shortage, Hawaii considers making it easier to hire foreign-trained nurses (hawaiinewsnow.com)


10. The Alzheimer’s Association and the National Asian Pacific Center on Aging (2018). Strengthening Community-Based Services for Asian American and Pacific Islanders Affected by Dementia. Strengthening-Community-Based-Services_Asian-6.6.18.pdf (napca.org)

Section Overview

This section will provide an overview of Hawaii’s memory clinic model, including origin, setting, basic programmatic components, and impact data. A case study highlights another memory clinic model in Wisconsin, and a discussion explores the potential variations to tailor memory clinics to other communities and populations.

Origin

Developed in 2010 at Kokua Kalihi Valley (KKV), a federally qualified health center (FQHC) in Kalihi, Hawaii, the memory clinic model was designed as a PCMH with the goal to bring interdisciplinary dementia management to primary care. The inspiration for the memory clinic model comes from modern innovations in diabetes management, which was historically left to endocrinologists. Like the evolution of diabetes management, memory clinics mobilize cross-discipline dementia-capable teams who work in partnership with patients and caregivers. Rich community collaborations have aided dementia management within memory clinics; for example, KKV received mentorship from geriatricians through the Extension for Community Healthcare Outcomes (Project ECHO).
Concurrent to the evolution of Hawaii’s memory clinic and efforts to develop PCMHs was the beginning of a worldwide movement to develop dementia-capable communities. Federal funding granted to the University of Hawaii, Center on Aging in 2015 created an opportune convergence of these systems change efforts across community-based organizations, including FQHCs and other organizations providing long-term services and support (LTSS). This funding kick started the Hawaii Alzheimer’s Disease Initiative (HADI). HADI’s goal is to strengthen Hawaii’s dementia-capability, and among other projects that seek to advance this goal, scaling access to memory clinics across the state has been a primary focus; this toolkit advances HADI’s goal.

**Evidence Base**

Comprehensively, Hawaii’s memory clinics have served approximately 165 patients with dementia. Since its inception, several evaluations have been done citing evidence of the model’s success. Most notably is the research suggesting the model may stabilize institutionalization rates among dementia patients (1). Another study found health and social issues (including caregiver education and health literacy) to have been addressed in 94% of cases and referrals to LTSS accepted in 72% of cases (2). Memory clinics represent the communities they serve and are strategically positioned to reach diverse and hard to reach populations. For example, a 2-year study of KKV’s memory clinic tracked outcomes from 51 patients, 75% of whom were Filipino, also serving many Micronesian, Samoan, and other Asian American patients with dementia and their family caregivers (1).

*Tracking across a two-year study, a preliminary investigation into Hawaii’s memory clinic model suggests the community-based model may stabilize institutionalization rates among dementia patients, advancing the goals of the patient, families, providers, and care systems (10).*
Clinic Setting

Clinics are best developed in the community it intends to serve, with its providers reflecting the community’s ethnic and linguistic diversity, and culturally relevant food/activities within programming. While memory clinics in Hawaii have operated exclusively within FQHCs and a senior center, replication is not limited to these settings.

Memory Clinics in Hawaii:

- Kokua Kalihi Valley (FQHC)
- Kalihi-Palama Health Center (FQHC)
- West Hawaii Community Health Center (FQHC)
- Moloka‘i Community Health Center (FQHC)
- Lanakila Multi-Purpose Senior Center (Community-Based Organization)

Care Stations

Interdisciplinary providers staff 6 core stations. Additional stations increase service offerings (for example, legal services or wellness programs) which may strengthen the utility/experience of the clinic for patients and caregivers.

1. Geriatrician/ Primary Care
2. Social Worker
3. Care Coordinator (RN or LPN)
4. Behavioral Health (LCSW)
5. Dietician (RD or RDN)
6. Medical Assistant (CMA or RMA)

Core Programming

Service and support options within memory clinics vary, however all memory clinics contain the same core programming that includes:

- Comprehensive dementia assessment
- Care planning
- Brain health and fitness
- Patient and caregiver education
Case Study: Wisconsin Alzheimer’s Institute (WAI)

In 1998, WAI- which is within the University of Wisconsin School of Medicine and Public Health- established a statewide network of 38 memory clinics that are affiliated with 26 different healthcare systems or independent medical groups in 21 of 72 Wisconsin counties. Most (56%) are based in primary care, 29% in neurology, and 15% in psychiatry.

WAI provides support and technical assistance to their network, for example through gathering network members twice a year to learn about innovations in dementia care and share best practices. WAI has also developed an online directory of memory clinics for patients. See the directory here: https://wai.wisc.edu/memory-clinic-network-list/ and learn more about WAI’s network of memory clinics here: https://wai.wisc.edu/clinic-network/

Section Discussion

The potential for variations among interdisciplinary models of dementia management are vast. In addition to exploring this toolkit and Hawaii’s memory clinic model, prior to developing a new memory clinic, other resources and long-standing team-based models of dementia care should be explored. These models should be tailored to the unique communities and people for whom they are intended to serve, and engage diverse provider partnerships to ensure cultural and linguistic access. The next section provides a readiness checklist, and the sections thereafter explore operations, reimbursements, provider training, and lessons learned in implementing Hawaii’s memory clinic model.

Section References


2. Assessing Readiness

Section Overview

This section provides a readiness checklist for organizations to guide the planning phase of memory clinic development. This step often takes the longest to ensure a sustainable programmatic infrastructure. It is important to be clear on the capacity and resources needed to implement the memory clinic. At the same time, it is important to have buy-in from leadership and examine whether the memory clinic model aligns with organizational priorities and community needs.

Readiness Checklist

Instructions: The readiness checklist is intended to guide the development of a memory clinic. To score the checklist, under Capacity and Resources, select YES if the resources are currently available, and NO if the resources need to be identified or are not yet developed. The Leadership section contains several questions that necessitate YES or NO responses. Guidance on scoring and interpretation of the readiness checklist is provided in the section discussion.

<table>
<thead>
<tr>
<th>Memory Clinic Implementation: Readiness Checklist</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td><strong>Capacity and Resources</strong></td>
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<tr>
<td>1. A physical site has been identified to host memory clinics. Considerations for this location includes, but may not be limited to:</td>
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<tr>
<td>• Patient privacy and safety</td>
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<tr>
<td>• A layout that allows for easy communication amongst patients, caregivers, and providers as they cycle between stations</td>
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<tr>
<td>• Accessibility (for patients, caregivers, and providers)</td>
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<tr>
<td>• Transportation for patients and caregivers</td>
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<tr>
<td>• Proximity to patients (for recruitment)</td>
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<tr>
<td>• Familiarity and level of trust of organization/location by potential clients</td>
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<td>• Internet connection/laptop/phone connection</td>
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<tr>
<td>• COVID-19 safety considerations (i.e., social distancing)</td>
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</tbody>
</table>
2. Partnerships are secured to administer core memory clinic stations. These may include, but are not limited to a combination of health and social service organizations, universities, and local government providers. Together, these partners have capacity for the following core stations (score each station separately):

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>a. Geriatrician/ Primary Care</td>
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<tr>
<td>b. Social Worker</td>
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<tr>
<td>c. Care Coordinator</td>
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<tr>
<td>d. Behavioral Health</td>
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<tr>
<td>e. Dietician</td>
<td></td>
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<tr>
<td>f. Medical Assistant</td>
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Additional stations such as enhanced service offerings, such as legal services or wellness programs.

3. Provider training needs and resources are identified (see section 5 for core competencies)

4. Funding for memory clinic operations is secured. To aid sustainability, memory clinics often utilize multiple sources of funding.

Funding mechanisms include, but are not limited to:
1. Grants
2. Provider reimbursements
3. Fee-for-service
5. Memory clinic station supplies are identified, and resources are available to acquire these supplies.

   a. Examination table (for primary care)  
   b. Clinical supplies such as:
      - Blood pressure machine
      - Otoscope
      - Weighing scale
      - Pulse oximeter
      - Sanitizer
      - Ear probe covers
      - Glucometer and supplies
      - Sharps container
      - Biohazard bags

   c. Room dividers (as needed to create different stations)  
   d. Xerox machine and paper to make copies of screening instruments  
   e. Name badges of participants and providers  
   f. Color stickers to place on name badges to track which stations the patient has visited.

6. Language access needs are identified, and capacity to provide in-language services is available

7. A communication plan is developed that includes provider roles

8. A lead organization is identified to facilitate communications amongst providers

9. A recruitment strategy is developed that includes, but is not limited to outreach plan and recruitment flyers.

10. An intake packet is developed that includes all paperwork needed to enroll and track patients: consents to release information between the referring organization and memory clinic providers, physician referral forms, personal medical history forms

   **SECTION TOTALS**
### Leadership Considerations

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
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<tbody>
<tr>
<td>1. Does the memory clinic align with the organizational priorities of all its partners?</td>
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<tr>
<td>2. Do all partners collaborate well and will have a say in the memory clinic’s administration and operation?</td>
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<tr>
<td>3. Can leadership and all partners identify a return on investment for participation?</td>
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<tr>
<td>4. Does leadership buy-in that the memory clinic responds to the needs in community being served? (for example, ethnic and linguistic diversity)</td>
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#### Section Discussion

The readiness checklist is one of the first steps in the evolutionary process of memory clinic development. Thus, it should be used as a tool to inform this process along with continual memory clinic exploration. Once you have completed the readiness checklist, quantify each section’s total YES and NO responses. Although these scores do not have a strict interpretation, scores can be broadly interpreted as follows:

**Capacity and Resource Readiness:**

Score of 8 and higher - A score in this range may indicate that your organization and its partners have a solid foundation to begin memory clinic implementation. Capacity and resources have been identified, and the programmatic infrastructure is approaching readiness.

Score between 5 and 7 - A score in this range may indicate that the project is developing capacity, but several programmatic resources still need to be identified to gain readiness for memory clinic implementation.

Score of 4 and below - A score in this range may indicate that the project is early in development. Multidisciplinary partners may have initiated planning discussions, or a physical site might be identified, but many essential resources need to be developed to build capacity for a memory clinic.
Leadership Readiness

Score of 3 and higher - A score in this range may indicate strong leadership support across most or all project partners, and be a firm indicator of project readiness and future sustainability.

Score between 1 and 2 - A score in this range may indicate leadership buy-in from some, but not all project partners. To build readiness, identify opportunities to align the memory clinic with a partner's organizational priorities and identify its return on investment.

Score of 0 - A score in this range may indicate lacking support from organizational and partner leadership, thus low readiness for a memory clinic. Opportunities to align the memory clinic with a partner’s organizational priorities and identify its return on investment should be explored. Sustained low levels of leadership investment suggest the need to explore additional partnerships to gain readiness.
### 3. Training of Memory Clinic Providers

**Section Overview**

Guiding this section, memory clinic models can look to a minimum set of core competencies for individuals that work with persons living with dementia and their family caregivers; these core competencies were developed by the Illinois Department of Public Health (IDPH), the Alzheimer’s Disease Advisory Committee, and Illinois partners (1). A summary of IDPH’s core competencies are shared in this section, as well as guidance from HADI for adoption within a memory clinic setting. A link to IDPH’s core competencies is included within this section’s references, and robust training examples from Hawaii’s memory clinics are included in the toolkit’s Appendix.

**Core Competencies**

Among other impacts, these core competencies support dementia-capable workforce development initiatives, inform direct service delivery, and establish and promote best practices. Some memory clinics may expand and define additional competencies, while others may shift capabilities to different or new providers. For example, community health workers may have capabilities for long-term service and support (LTSS) referrals, strengthen the cultural accessibility of dementia education, maximize participant retention through follow up engagement, or contribute to evaluation activities.

IDPH and its partners recommend the following six core competencies for a dementia-capable workforce, with additional guidance from HADI on its adoption within a memory clinical setting. These competencies are a critical part of the training of memory clinic providers to participate in the implementation and success of the memory clinic.
<table>
<thead>
<tr>
<th><strong>IDPH Dementia Core Competencies</strong></th>
<th><strong>HADI Guidance within a Memory Clinic</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge of Dementia</strong>: Understanding Alzheimer’s disease and related dementias, their effects on brain function, and resultant symptoms.</td>
<td>Advanced competencies, unique to each provider, are required to deliver clinical services and the core stations of a memory clinic. See the toolkit’s appendix for clinical training examples from Hawaii’s memory clinics.</td>
</tr>
<tr>
<td><strong>Person-Centered Care</strong>: Service that maximizes quality of life by optimizing strengths and abilities, also providing care in the least restrictive setting.</td>
<td>Patient-centered team-based primary care seeks patient input at every stage. A memory clinic provider makes priority the relationship between the provider and patient, and also the relationship between providers across the team. These relationships may be easier to cultivate in a team-based model where patients and providers spend 3-4 hours together at a time, offsetting traditional, and commonly rushed, primary care settings.</td>
</tr>
<tr>
<td><strong>Communication</strong>: Communication that is responsive and adaptable to cognitive changes, language, and accessibility needs.</td>
<td>Adapting communication strategies to strengthen communication between providers and patients advances quality person-centered care. For example, memory clinics in Hawaii have included an “Aloha table” as a common gathering area for patients, caregivers, and clinic providers. Communication shared at the “Aloha table” is often shared as a highlight of patient/caregiver (and provider) participation.</td>
</tr>
</tbody>
</table>
### Understanding Behaviors:
The behaviors of people living with dementia are an indication of an emotional condition and therefore, may be a form of communication. Health care workers need to understand how to assess the behaviors and emotional state of a person living with dementia, guiding behavioral support by altering the approach to the person and/or the environment.

### Safety:
Identify and address the safety needs of people living with dementia, and demonstrate the ability to identify, prevent, and report situations of abuse, exploitation, and neglect.

### Palliative Care:
Describe the palliative care approach throughout the entire disease process.

### Each core station of a memory clinic has a role in understanding and supporting patient behavior. Behavioral health clinicians and social workers conduct standardized screenings of well-being with patients and caregivers, while primary care providers conduct clinical assessments of physical and mental health that may also impact patient behavior. Within the “huddle” at the end of each memory clinic, providers come together to aggregate data from each patient and collectively advance treatment goals, including behavioral support.

### In addition to aggregating patient safety data within team-based treatment, memory clinic providers must foster trust and physical and psychological safety with patients and their caregivers. Strategies used by Hawaii’s memory clinics include transparent communication prior to their first visit on the providers that will be seen and billing each patient, as well as wearing color coded stickers unique to each provider on the day-of-clinic, and doing “warm handoffs” between clinic stations.

### From advanced care planning, to LTSS referrals and medication management, shared across the team, memory clinics providers support patients and their caregivers from diagnosis through end of life.

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Section Overview

This section will provide an overview of memory clinic operations. Using Hawaii’s memory clinics as examples, a step-by-step guide through preparations and the day-of clinic will be presented. On the day-of, a memory clinic is operationalized through a minimum of six stations (medical assistant, social worker, care coordinator, dietician, behavioral health, and primary care). This section will conclude with follow-up operations, including outreach, recruitment, and retention.

Recruitment, Screening, and Referral

For most memory clinics, recruitment begins internally within the organization. At LMPSC, for example, a social worker administers a mini cog (standardized cognitive screening tool) to all center members, and for those whose screenings warrant further assessment from a physician, a referral to the memory clinic is suggested. Other screening tools may be used to determine eligibility, such as the AD8.
Recruitment Process

If the person is eligible and interested in the memory clinic, an intake packet is completed. This packet commonly includes a flyer with information about the specific memory clinic, a list of answers to frequently asked questions, consents to release information between the referring organization and memory clinic providers, and physician referral forms. An example is included within this section’s attached resources.

Each memory clinic’s capacity varies, however, between 8-14 patients are recruited for each in-person memory clinic. To protect the health of patients, caregivers, and providers during the COVID-19 pandemic, memory clinics were reduced to 2-3 patients. This enabled caregivers to participate in clinics with patients, while keeping the total number of people at the clinic to 10 or less (including providers).

Reminder calls reduce the likelihood of no-shows and patients/ caregivers forgetting about the memory clinic, and these calls also help mitigate any barriers that may prevent the patient from attending (for example, needing help to arrange transportation). One day prior, a social worker will call each patient scheduled for the monthly memory clinic to remind them of their appointment, documentation to bring, and provide transportation assistance if necessary. It is common for patients to attend several memory clinics, so many of these calls are reminder calls for follow-up patient visits.

In Hawaii, a majority of patients signed up for the memory clinic because they had already brought their concerns to their primary care physician and did not receive any diagnosis, follow-up, or guidance on how to cope with the memory problems they were experiencing. The caregivers and clients both appreciated the additional information and support that they received from the social worker and the rest of the memory clinic staff.

HADI recommends memory clinics to over-schedule monthly clinics to accommodate for a no-show rate up to 50%.

Day-of Operations

Memory Clinic Stations

Six to eight patients participate in each memory clinic, and clinics are 4-6 hours in length. While attending the memory clinic, each patient and caregiver will visit six stations (medical assistant, social worker, care coordinator, dietician, behavioral health, and primary care). While the stations commonly flow in the order listed, stations are not always visited in this order. Each provider is given dot stickers in unique colors; as a patient visits a station/ provider, they are given the provider’s sticker to wear on their name badge. Providers are able to monitor a patient’s colored dots on their name badge to track their progress across all stations.
Memory Clinic Stations

Upon arrival, patients and their caregiver check in with the medical assistant (station 1) for a name badge and to assess the patient's vital signs. Patients (or their caregiver) share with the medical assistant the patient's current medication list, a photo ID, health insurance cards, and after visit summaries from recent ER/hospital stays (if relevant). The medical assistant often supports the development of other medical documentation for patients, including a POLST, or supporting advanced care planning.

After check in, the patient and their caregiver are escorted to the "aloha table," which is a common area in the center of the clinic where patients, caregivers, and volunteers (for example, medical students) convene. At the "aloha table" patients and their caregivers participate in brain fitness games, and do puzzles or Sudoku, which help with cognitive training, especially focus and attention. Patients also meet with the dietician (station 2) at the "aloha table" for MIND diet cooking demonstrations.

Patients and caregivers return to the "aloha table" between clinic stations. There is socialization among patients and caregivers, which has been highlighted as one of the most engaging and rewarding parts of the clinic. Many of the patients don't have regular socialization opportunities, so these monthly clinics decrease isolation and strengthen patient's social connections. When volunteers are available, these positive outcomes are enhanced. For example, at the memory clinic based within LMPSC, a medical student volunteer, who is a young woman from Hawaii who was able to relate to many of the patients because of common cultural backgrounds and experiences, sat at the "Aloha table," with positive experiences expressed from participants and this volunteer alike. She was able to keep patients and caregivers entertained and engaged while they waited for the next station, and also was able to share a few ideas during our team huddle at the end of the clinic. This experience promotes workforce development within the field of geriatric medicine, and is an experience that will be beneficial to her in her future career as a geriatrician.

The social worker (station 3) administers caregiver burden scales (for example, QOL-AD and modified caregiver strain index), assesses social needs, and makes community referrals. Social workers can also help with Advanced Directives, provide caregiver education, and administer evaluation surveys to assess clinic outcomes.
In existing memory clinic models, a registered nurse operates as the care coordinator in station 4. The care coordinator administers cognitive testing (for example, the SLUMS), provides health education, facilitates communication and follow up with other health providers, and sends follow up clinical orders (for example, lab testing).

A licensed clinical social worker (station 5) visits with patients and their caregivers to assess behavioral health needs. Screening tools such as The Geriatric Depression Scale (GDS), Cornell Scale of Depression in Dementia (CSDD) may be necessary for this assessment. Requiring LCSW accreditation for this station is essential as it allows reimbursement for clinical services, reinforcing sustainability of the memory clinic.

The last core station (station 6) is primary care where patients and their caregivers meet with the geriatrician. The geriatrician conducts face to face evaluations, physical examinations, diagnostic testing and referrals. When possible, inclusion of geriatric fellows support expanded clinic capacity, and promote workforce development. In existing memory clinics, geriatric fellows have documented medical histories and conducted physical examinations as part of the geriatric assessment.

Other stations can enhance service offerings of memory clinics, such as legal services, or wellness and cultural programs. Existing memory clinics have integrated lawyers through a medico-legal partnership with the University of Hawaii School of Law, and fellows and medical students in a psychiatry clerkship from the Department of Geriatric Medicine, John A. Burns School of Medicine (JABSOM) through the University of Hawaii.

Memory Clinic Huddle and Follow Up

Hawaii’s memory clinics end with an interdisciplinary team huddle to review each case. Each provider shares findings and together, follow up steps are developed around the patient’s treatment plan. Healthcare providers often follow up on clinical orders, while long-term service and support (LTSS) providers may follow up on social service referrals. These huddles help drive provider efficiencies while advancing healthcare quality and outcomes. The team-based meeting at the end of each memory clinic also fosters a rich clinical learning environment for emerging providers.
Retention

Interdisciplinary models may add value for patients when providers are integrated into a model with a single entry point, and knowing that they can access multiple providers/services in one setting, team-based models of care may also fuel patient retention. Communicating the available services to make patients/caregiver aware of what’s available, while also considering these retention strategies:

- Patients and caregivers often report looking forward to monthly brain healthy cooking demonstrations and eating the registered dietician’s new recipes.
- Some clinics are able to offer transportation, which reduces its occurrence as a common barrier to a patient being able to attend the memory clinic.

Discussion

Enhanced memory clinic models may consider additional innovations, such as partnerships to enhance service offerings, or other stations, such as legal counseling, caregiver interventions, or wellness programs. Additional providers may also be integrated to enhance the clinic’s operations; for example, the integration of Community Health Workers (CHW) has not been tested, however, their integration is expected to enhance cultural accessibility, while also optimizing workforce development. CHWs might also be an untapped resource to fuel recruitment.
LESSONS LEARNED AND NEXT STEPS

Section Overview

Provider reimbursements are the most common form of reimbursement for memory clinic services. While funding is essential for ongoing operations, Hawaii’s memory clinics have learned that long-term sustainability requires resources beyond financing. Staffing shortages, position turnover, buy in from leadership, and recruitment issues are common barriers that have challenged sustainability and growth.

Other strategies used by Hawaii’s memory clinics to aid sustainability include:

- Developing and maintaining a binder that tracks the operational structure, processes, partners, and key resources needed for memory clinic implementation;
- Adapting the model for implementation during disaster;
- Providing students with training and opportunities to work as an interdisciplinary team; and,
- Integrating technical assistance from Hawaii Alzheimer's Disease Initiative (HADI) to grow capacity.

The next section of this toolkit includes lessons learned from implementing an interdisciplinary memory clinic and next steps to consider before starting a new memory clinic.

Lessons Learned

Early Detection

- Evidence of the need for dementia-capable services that aid early detection has been growing. Recent survey findings from the Alzheimer’s Association found 55% of PCPs to believe there to not be enough dementia care specialists to meet patient demands in their communities, and 40% to be uncomfortable diagnosing dementia in patients. Patients and their families share with memory clinic providers about their experiences, and the difficulties they’ve had, trying to access cognitive testing through their PCP.

- Coordinated, one-stop shop team-based primary care increases the clinical visibility of patients as they are together with multiple providers for 3-4 hours at one time.

- Staff at Lanakila Multi-Purpose Senior Center (LMPSC), one of Hawaii’s memory clinics, regularly screen for memory issues using a mini-cog (annually thereafter). This routine screening has helped to track and monitor changes over time, and also served as a great aid to recruitment.
### Culturally and Linguistically Accessible Care Across the Continuum

- The clinic’s comprehensive package of care and services can serve a range of individuals in different situations. Some may come for education and screening, while those already diagnosed may be interested in the MIND diet or concerning behavioral symptoms. The memory clinic can provide support along the continuum from those with memory concerns or in later stages of dementia.

- Having providers from within a community served increases language and cultural access to memory clinic services. For example, in Hawaii’s first memory clinic at Kokua Kalihi Valley, a federally qualified health center in Kalihi, Hawaii, 75% of those served are Filipino, reflecting the community it’s within. Another example is at LMPSC’s memory clinic, where a Japanese-speaking student intern worked with a behavioral health specialist to strengthen cultural and linguistic access to services for Japanese patients.

- Recruitment is aided by strong collaboration with community-based partners. In Hawaii, nearly all recruitment happens internally within the community-based organization that the clinic operates.

### Workforce Development

- An adequate supply of dementia-capable primary care and direct care workers is critically needed in Hawaii.

- Staffing clinicians within LTSS organizations (or vise versa with LTSS providers being within a healthcare setting) may optimize a memory clinic’s operations and aid its sustainability.

- Both the kind of providers, and functions of providers within a memory clinic setting should be explored. For example, community health worker (CHW) practicum students have been valuable participants in planning meetings, and a membership specialist at LMPSC has been trained to conduct routine cognitive screenings upon admission to the Senior Center.

- Staffing turnover is the biggest threat to the model’s sustainability. For example, in Hawaii’s LMPSC memory clinic, the federally qualified healthcare center had a difficult time consistently staffing the memory clinic with a care coordinator (LPN). One solution this memory clinic is exploring is to restaff this station with a medical assistant, rather than an LPN, as LPN’s have been more difficult to hire and sustain.
“A majority of patients signed up for the memory clinic because they had already brought their concerns to their primary care physician and did not receive any diagnosis, follow-up, or guidance on how to cope with the memory problems they were experiencing. The caregivers and clients both appreciated the additional information and support that they received from the social worker and the rest of the memory clinic staff.”

- Cyan Lau, Social Worker, Lanakila Multipurpose Senior Center

INTERESTED IN THE MEMORY CLINIC MODEL?

Next Steps

If your organization/agency is interested in the memory clinic model, the next step is to start having conversations with the community and look at available data, including how many older adults they serve. It is recommended that your organization/agency reach out to the Hawaii Alzheimer’s Disease Initiative or other professionals who specialize in geriatric and dementia care to obtain technical assistance. The next step to memory clinic planning is assessing organizational readiness (refer to Section 2). The completion of this toolkit’s readiness checklist in Section 2 produced a list of actionable items within the survey’s “NO” responses; an organization can look to these items to guide its next steps. A champion or point person within your organization should be identified in order to coordinate initial steps for the development of the memory clinic model. Identifying an organizational champion, obtaining buy-in from leadership, and leveraging key community partnerships in order to identify interdisciplinary providers for the memory clinic stations are all key to a memory clinic’s success in supporting persons with memory loss or dementia and their caregivers.

APPENDIX- PRODUCTS AND SUPPORTING MATERIAL

The following section contains the memory clinic training materials developed by the Hawaii Alzheimer’s Disease Initiative and can be used by other agencies and organizations.

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