

Study Objective: Evaluate the feasibility of implementing MIND at Home dementia care coordination into primary care in two large clinics in Iowa and North Carolina.

Background

- The prevalence of people living with dementia (PLWD) is growing and dementia is one of the highest burden, and highest cost chronic conditions in the US.¹⁻⁵
- Care management support within primary care practices is one solution to provide patient- and care partner (CP)-centered care, improve patient care outcomes, and reduce high healthcare costs.⁶
- The Maximizing Independence at Home (MIND at Home) dementia care coordination program is a comprehensive evidence-based approach that combines the benefits of clinic-based health care with home-based supportive services for PLWD, families, and care partners.

Methods

- 100 primary care patients and their CPs recruited for a 3-month intervention period
- Program delivery included:
 - Specialized initial and ongoing training in dementia care for primary care team
 - Comprehensive in-home needs assessment for PLWD and CP assessing 13 domains of needs
 - Development and implementation of individualized care plan for PLWD and CP
 - One home visit per month (goal)
 - Program-specific educational resources and program tools/assessments
 - Interdisciplinary dementia specialist expert case consultation to primary care providers
- Process outcomes included: (1) patients enrolled/declined; (2) PLWD and CP needs identified, met.
- Clinical outcomes: (1) hospital transfers; (2) ED visits; and (3) polypharmacy and appropriate medication use.

Intervention

Figure 1. MIND at Home Program Process



Case Examples

- Fall-risk management/home safety:** Rugs were removed, wandering was addressed, safety pendants were recommended.
- Aging-in-preferred-setting:** PLWD was able to remain in her home longer because of CP support provided.
- Challenging behaviors:** CP was coached on behavior management problem solving techniques to reduce agitation
- Referrals to social and community services:** CP was connected to several social services because of MIND.
- Caregiver Education and coaching:** Provided CP with local dementia support group that meets monthly.
- Transition care:** Provided education, coaching, and referrals for long term care services and supports following a hospitalization

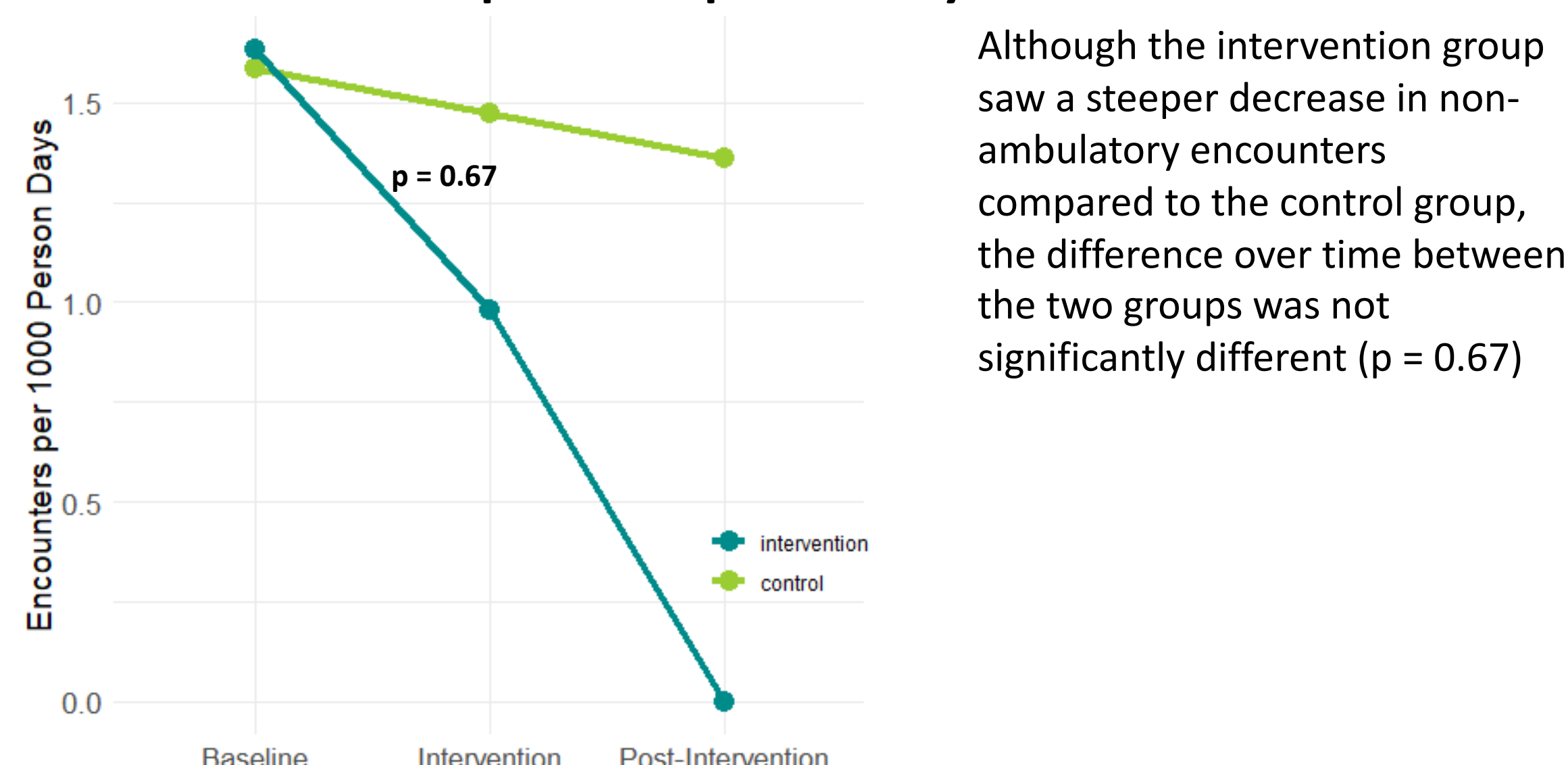
Preliminary Results

Table 1. Characteristics of study and control PLWD

| | Intervention (n=34) | Control (n=98) | p-value |
|---------------------------------------|---------------------|----------------|---------|
| Age, mean (range) | 81 (64-92) | 80 (60-95) | 0.68 |
| Male | 18 (53%) | 50 (51%) | 1 |
| Non-Hispanic White | 33 (97%) | 96 (98%) | 1 |
| RUCA, mean (range) | 3.56 (9) | 3.51 (9) | 0.94 |
| Enrolled in Medicare | 19 (56%) | 56 (57%) | 1 |
| CCI, [†] mean score (range) | 1.71 (0-9) | 1.56 (0-9) | 0.73 |
| Dementia-related Rx [‡] | 26 (77%) | 70 (71%) | 0.73 |
| Dementia diagnosis | 31 (91%) | 64 (65%) | 0.01* |
| Had MMSE [§] (median score) | 61% (24) | -- | -- |
| Had SLUMS [¶] (median score) | 35% (12) | -- | -- |

*Denotes statistical significance; [†]Charlson Comorbidity Index; [‡]Dementia-related Rx includes memantine and acetylcholinesterase (AChE) inhibitors; [§]Mini Mental State Examination; [¶]Saint Louis University Mental Status Examination for Detecting Mild Cognitive Impairment

Figure 2. Number of hospital transfers/ED visits among intervention and control PLWD per 1000 person days



Although the intervention group saw a steeper decrease in non-ambulatory encounters compared to the control group, the difference over time between the two groups was not significantly different (p = 0.67)

Table 2. PLWD and Care Partners' Identified Needs and Needs Met

| Need Type | Need Identified n | Need Met n (% needs met) |
|-------------------------------------|-------------------|--------------------------|
| PLWD Needs | 330 | 317 (96%) |
| Home and Personal Safety | 106 | 105 (99%) |
| General Health Care | 70 | 69 (99%) |
| Daily and Meaningful Activities | 55 | 48 (87%) |
| Behavioral Symptoms | 40 | 40 (100%) |
| Legal and Advanced Care Planning | 36 | 35 (97%) |
| Cognitive Symptoms | 13 | 13 (100%) |
| Care Financing | 10 | 7 (70%) |
| Care Partner Needs | 135 | 114 (84%) |
| Education | 96 | 80 (83%) |
| Informal and Emotional Support | 21 | 19 (90%) |
| Daily Living | 7 | 7 (100%) |
| Decision Making and Legal Documents | 6 | 5 (83%) |
| Mental Health | 3 | 1 (33%) |
| Health | 2 | 2 (100%) |

Patient/Caregiver Satisfaction

- Patients/care partners liked education and access to a compassionate care coordinator.
- Patients/care partners wished they could receive continued support after the program or in some other way.
- 75% of patients/caregivers rated that they trusted their care coordinator completely.

Lessons Learned

- Underdiagnosis of dementia, especially among rural and lower SES/educ.
- Recruitment was challenging. Trust was a key factor; easier to recruit when patient was part of another established program or when providers referred directly. Caregivers were "in survival mode" post COVID.
- Expansion of enrollment criteria to include dementia-related Rx was necessary due to hesitancy of primary care providers to dx dementia.
- Home visits provided extensive information on daily living (compared to clinic visits alone) and were valuable to comprehensive care planning.
- Interdisciplinary team-based case discussions were viewed as important, and attendance was high throughout pilot.
- Capturing time at home using EMR records is difficult; ascertainment of other outcomes was feasible.

Discussion and Conclusions

- MIND at Home was successfully implemented in the primary care setting and key outcomes could be ascertained through EHRs.
- Pragmatic modifications including optimization of eligibility indicators; streamlining of program assessment and documentation within electronic systems and waiving in-home visit requirement when needed were necessary to meet the local needs and context of each health system.
- An embedded pragmatic clinic trial (ePCT) is needed to fully evaluate the impact of MIND at Home in the clinical setting on targeted outcomes.

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