Using An Alzheimer's Disease and Related Dementia Clinical Decision Support and Care Planning Software System in an Outpatient Nurse Practitioner Clinic

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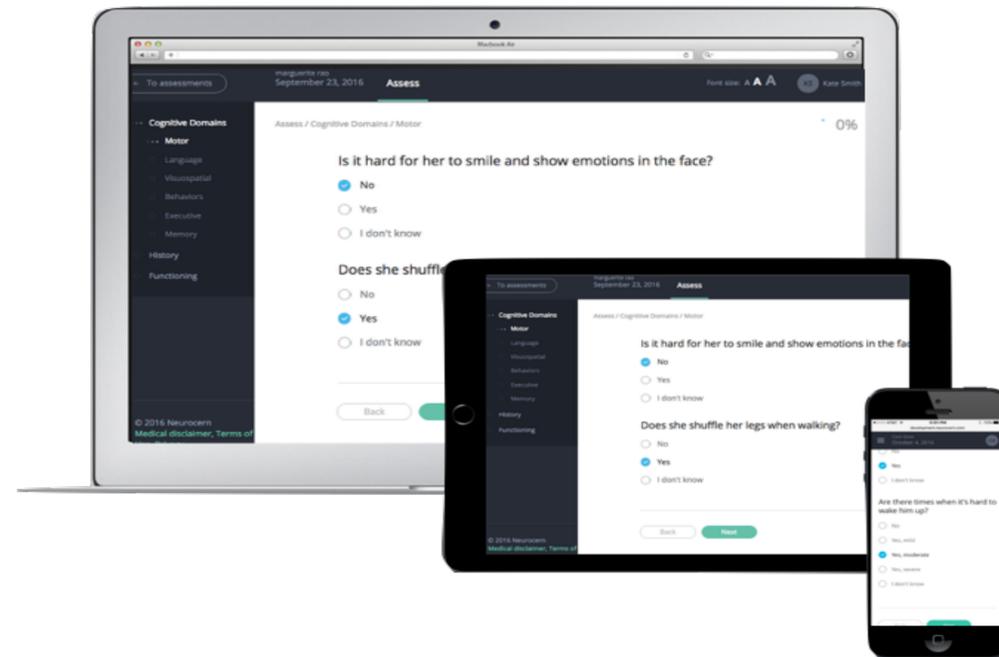
Objective/Introduction

To explore the benefits of using a clinical decision support and care planning software system for Alzheimer's Disease and Related Dementia (ADRD) in an outpatient primary care nurse practitioner (NP) setting.

As the population ages, there will be more demand for specialized services to diagnose and care for ADRD. However due to long wait-times and a shortage of memory disorder physicians, primary care physicians are often the main point of contact for ADRD patients and families. Provider studies have demonstrated 49% of these primary care physician practices have NPs or physician assistants (PAs).
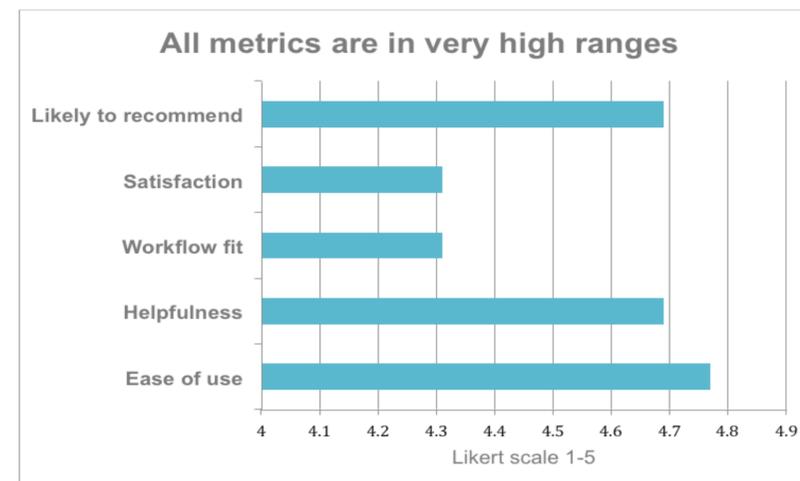
Methods

A clinical decision support and care planning tool (CDS-CPL) developed by Neurocern, was introduced in a primary care setting with a nurse practitioner in a community-based hospital setting in Illinois. Using caregiver's answers to an online questionnaire, the software was able to generate evidence-based recommendations and best practices on proper neurological physical exam techniques, differential diagnosis, referrals, medications, orders to consider, and individualized care plans. The IRB-approved research study tested clinical workflow, usability, and overall clinician satisfaction.

Figures

Clinical Decision Support and Care Planning Software System (CDS-CPL)

https://www.alz.org/facts/downloads/facts_figures_2016.pdf
Park M, Cherry D, Decker SL. Nurse practitioners, certified nurse midwives, and physician assistants in physician offices. NCHS data brief, no 69. Hyattsville, MD: National Center for Health Statistics. 2011.

Results

A total of 13 ADRD patients and family caregivers were entered into the study before abstract submission. A five-point Likert scale was used to capture overall clinician satisfaction with this CDS- CPL, workflow integration, and net-promoter score (likelihood to recommend to a colleague). Average satisfaction score was >90%, workflow integration score was 86%, and net-promoter score was >90%

Patient Gender	5 M, 8 F
Age Range	59-93
Stage	MCI=1, mild=5, moderate=5, severe=2
Dementia Subtypes	Dementia NOS= 6, AD= 4, DLB=1, bvFTD=1, MCI=1

Conclusions

Due to increasing prevalence of ADRD coupled with a shortage of physicians, more healthcare systems may turn to physician extenders (NPs and PAs) to manage ADRD in the outpatient setting. This study serves to examine the usability of an ADRD clinical decision support and care planning software system in an outpatient NP setting and highlights the usability, satisfaction, and integration of neuroscience-based CDS into usual care. Further research is warranted to study on-going workflow integration and software customization to include local care resource recommendations, and family caregiver engagement.