Supplementary Description S1. One-page summary describing what the implementation team could provide

Project Support for Implementation of the Alzheimer's and Dementia Care Program (ADC™)

The project team (UCLA, the Education Development Center [EDC], and Spragens and Associates) is committed to helping adopting organizations succeed in implementing the ADC Support to be provided falls into four categories: pre-decisionmaking, training, implementation, and evaluation.

Pre-decisionmaking
The UCLA team will send an Initial Interest form to gather some preliminary background about the organization and then meet by phone to discuss the program and current related activities at the potential adopting site. This will be followed by a Readiness Assessment Instrument for the site to gather more information and support for adoption. A business expert, Lynn Spragens, MBA, is available to discuss the financial case for adoption, including considerations of local markets, needs, payers, and organizational structure.

Training
The UCLA team will lead training of Dementia Care Specialists through an on-line curriculum available through the Gerontological Nurse Practitioner Association (GAPNA), in-person clinical skills training at a GAPNA pre-conference, and a site visit from a dementia expert. Telephone training and clinical technical assistance continues through the implementation phase.

Implementation
Materials developed at UCLA will be adapted by the sites to meet the specific needs of the adopting health system while retaining fidelity to the model. Adopting sites will decide whether to use the Dementia Care Software that has been created specifically for the UCLA ADC to facilitate care management and tracking processes and outcomes or to perform the necessary tracking and quality assessment functions through a different method. A milestone chart template will be modified by each site to meet the local environment and timelines will be established for meeting the milestones. The project team will provide technical assistance throughout the course of implementation including providing advice as needed and trouble shooting. Each adopting site will be site-visited by a project team content expert to facilitate implantation. Other technical support will include monthly telephonic learning calls where participants set their own agenda, a dissemination web-site, an on-line community of adopters, and group webinars. The project team will also work with the adopting sites to help them maximize revenue for the program using existing Medicare codes and covered services.

Evaluation
The project team will help each adopting site determine whether the program is achieving intended results. Both process and outcome measures will be assessed for at least 1 year of program operation. Process measures include number of referrals, number of patients seen and number that remain in the program, and quality indicators collected through the software described above, As part of implementation, adopting sites will collect clinical information about patient behavioral symptoms and caregiver symptoms of strain, distress, depression. This information will be analyzed at UCLA and fed back to the adopting sites to allow them to gauge whether they are meeting their expectations for the program and how they compare to other adopting sites and the original UCLA implementation. Similar analyses will be conducted for health care utilization obtained from the adopting institution's electronic health records.

This project support, funded through the John A. Hartford Foundation, will help facilitate success for the initial sites adopting ADC™.

One-page summary describing expectations of adopting sites

Minimum Requirements for Implementation of the Alzheimer's and Dementia Care Program

Successful adoption of the Alzheimer's and Dementia Care Program™ depends on implementing a minimum structure and process and the collection of outcomes that will be critical to justifying support for maintenance. Only by implementing the program with fidelity can sites expect to achieve success of the program comparable to that of UCLA.

Structure

The current UCLA model is 1 FTE nurse practitioner Dementia Care Specialist (DCS) and 1 FTE Dementia Care Assistant (DCA) per 300 patients although a staffing ratio of 1 FTE DCS and 0.5 FTE DCA per 250 patients is also possible. Full implementation with initial staffing (described below) for 250-300 patients is recommended, However, some programs may elect to begin with partial implementation with 125 to 150 patients served and 50% of the staffing below, the minimum amount that would be needed to implement the program with fidelity.

- DCS: 1.0 FTE
- DCA: 0.5-1.0 to assist with care coordination and check-ins with stable patients
- Clinic office staff: 0.40 FTE to handle calls and scheduling
- Physician Medical Director to supervise DCS: 0.10 FTE
- Program Manager: 0.20 FTE to support operations and outcome reporting
- 24/7 coverage: can be provided by geriatrics or other physician on-call group
- Established relationships with community-based organizations
- Dementia Care Specialists have access to and chart in electronic health record
- Established process for communicating with referring/primary care providers
    - Established psychiatry, neurology, psychology, and social work referrals Processes*

- In person initial assessments
- Follow-up contact at least every 4 months
- In-person follow-up visits at least annually
- DCS added to the care team in the electronic health record
- Contact with attending physician/inpatient team when patients are hospitalized
    - Determination of acuity levels for each patient according to protocols and adjust frequency of contact based on acuity levels

Outcomes*

- Program operations - numbers of patients and caregivers seen (quarterly)
- Fidelity and quality data (quarterly)
- Patient and caregiver characteristics (baseline only)

Optional -

- Patient and caregiver outcomes (annually)
- Utilization outcomes – ED visits, hospitalizations, inpatient length of stays

Supplementary Figure S1. Readiness Assessment Instrument

Readiness Assessment Survey

This questionnaire is intended to help your organization better clarify the need for the Alzheimer's and Dementia Care (ADC) Program ™ and help determine whether the ADC Program ™ is the right fit for your organization at this time. Some of these questions may require additional data gathering from your organization. For size and descriptors of the population to be served, estimates are sufficient but answers to questions about decision-making, commitment, and sustainability should be discussed within the organization to provide the most accurate information.

Name of Organization:	
Name of Person Completing form:	
Date:	

DESCRIPTION OF ORGANIZATION'S PATIENT POPULATION

1) How many patients are served by the organization? _____

a. How many persons 65+ years are cared for? _____

b. Estimated # of diagnosed patients with Alzheimer's Disease or other dementias _____

2) What systematic efforts are currently in place for dementia care in your organization?

ORGANIZATIONAL NEEDS ASSESSMENT FOR UCLA ADC

Dementia Organizational Goals	**High Priority**	**Medium Priority**	**Low Priority**
Improve dementia quality of care			
Increase dementia care coordination			
Improve clinical outcomes of patients			
Reduce burden on primary care providers			
Reduce burden on specialist physicians (e.g., psychiatry, neurology)			
Increase access to dementia care			
Reduce caregiver stress			
Reduce ED utilization			
Sustainability based on billing revenues			
Reduce hospitalization			
Reduce hospital length of stay			
Reduce ICU days			
Reduce long-term nursing home placement			
Increase hospice use for appropriate patients			
Alignment with recommendations from Age-Friendly health systems initiatives			
Market differentiator for quality (prestige & marketing)			

3) Briefly describe your process for assessing baseline performance and gaps.

a. What information did you collect? Did you use any particular tools?

b. How was baseline information used to clarify goals, priority, or fit?

4) Is your organization likely to: (choose one)

_____Begin implementation in one site or practice, then spread to other sites?

_____Implement in one site or location only?

_____Plan for comprehensive implementation across all appropriate sites?

ORGANIZATIONAL DECISION-MAKING AND COMMITMENT

1) Who (names and titles) would need to sign off to adopt and implement the program?

2) What other stakeholder groups will need to be engaged?

3) To implement the ADC Model, you will need to support the components in the next table. Please indicate (mark **X**) your organization's current readiness for each element:

Necessary Resources	**eady in place**	**Not in place but resources are available**	**Not in place and would be difficult to secure resources**
Advance Practice Provider (NP or PA) at least 50% effort			
Clinical support for Advance Practice Provider			
Medical Director with expertise in dementia care at least 10% effort			
24/7/365 Coverage for program *After-hours and weekends by phone*			
Relationships with community-based organizations to provide additional services			
Access to utilization data for persons receiving dementia services			

Other things to consider that will affect implementation:

- Electronic health record that has case management functionality
- Relationships with physician practices as referral sources and partners for care of patients in the program
- Referral network and/or within-organization capability for memory evaluation and determining dementia diagnosis

ORGANIZATIONAL OUTCOMES THAT MATTER AND SUSTAINABILITY

1) What outcomes do you hope to achieve by implementing the ADC model? How will you measure these?

2) What outcomes would you need to achieve in order to consider the model a success? What would you need to be able to show in order adopt the model beyond the pilot?

Lastly, if there is any additional information that would be relevant/helpful in regards to implementation of the program, please let us know.

Supplementary Table S1. Table of adopting sites and timelines for adoption

Site	Location	Academic / Non-Academic	Urban / Rural	Nonprofit / For-Profit	Ethnicity / Race	inical Site Leaders	Initial Interest Form Date (S1)	Initial Phone Call Date (S2)	S2 – S1 (Days)	Readiness Assessment Form Date (S3)	S3 – S2 (Days)	Letter of Agreement Date (S4)	S4 – S3 (Days)	First Patient Seen (S5)	S5 – S4 (Days)	Total Adoption Time (Days)
A	California	Academic	Urban	Private, Nonprofit	12% Black	Geriatrics / Physician	1/11/2019	11/17/2020	676	2/17/2021	92	3/10/2021	21	7/5/2021	117	906
B	New York	Non-Academic	Urban	Private, Nonprofit	16% atino 11% Black	Geriatrics and Palliative Medicine / Physician	3/5/2019	3/8/2019	3	9/17/2019	193	10/1/2020	380	2/2/2021	124	700
C	New York	Academic	Urban	Private, Nonprofit	3.5 % Latino 40.7% Black	Geriatrics / Clinical Chief	3/6/2019	3/12/2019	6	3/25/2019	13	12/4/2019	254	TBD	NA	NA
D	Massachusetts	Academic	Urban	Private, Nonprofit	50% Latino 9% Black	Geriatrics and Palliative Care / Physicians	4/3/2019	4/25/2019	22	9/26/2019	154	10/10/2019	14	2/1/2020	114	304
E	Wyoming	Non-Academic	Rural	Private, Nonprofit	14.8% Latino	Palliative Care / Physician Assistant	4/24/2019	5/23/2019	29	6/27/2019	35	1/20/2020	207	3/8/2021	413	684
F	Delaware	Non-Academic	Urban	Private, Nonprofit	8.7% Latino 23.8% Black	Geriatrics / Endowed Chair	7/23/2019	7/31/2019	8	8/10/2019	10	5/13/2020	277	10/11/2021	516	811
G	Pennsylvania	Academic	Rural	Private, Nonprofit	12% atino 32% Black	eriatrics / Director	10/11/2019	2/2/2021	480	3/10/2021	36	4/7/2021	28	7/12/2021	96	640
H	California	Academic	Urban	Private, Nonprofit	13% atino 17% Black	Neurology / Director	2/7/2020	4/24/2020	77	1/26/2021	277	3/22/2021	55	TBD	NA	NA
I	Pennsylvania	Non-Academic	Urban	Private, Nonprofit	3.1% atino 7.7% Black	eriatrics / Program Director	3/5/2020	4/14/2020	40	4/15/2020	1	5/26/2020	41	7/20/2020	55	137
I	Arizona	Academic	Rural	Private, Nonprofit	14.5% atino 0.6% Black	Palliative Medicine / Director	8/9/2020	9/9/2020	31	10/4/2020	25	10/20/2020	16	5/7/2021	199	271

K	Utah	Academic	Urban	Private, Nonprofit	14.6% atino 1.4% Black	eriatrics / Physician	9/8/2020	9/15/2020	7	12/7/2020	83	1/26/2021	50	7/29/2021	184	324
L	North Carolina	Non-Academic	Rural	Private, For-Profit	52% Black	Geriatrics / Director	10/2/2020	12/16/2020	75	1/12/2021	27	2/17/2021	36	TBD	NA	NA
M	Pennsylvania	Non-Academic	Urban	Private, Nonprofit	12.7% atino 4.3% Black	eriatrics / Director	5/15/2021	8/31/2021	108	9/14/2021	14	9/29/2021	15	2/16/2022	140	277
N	Rhode Island	Academic	Urban	Private, Nonprofit	38 % atino 16% Black	Geriatrician / Physician	5/28/2021	6/17/2021	20	7/14/2021	27	8/25/2021	42	12/21/2021	118	207
								MEAN	113.0		70.5		102.6		202.0	530.8
								SD	203.1		82.5		122.0		143.6	271.8
								MEDIAN	30.0		31.0		41.5		124.0	640.0
								IQR	65.5		73.0		146.3		76.0	418.0
O	Texas	Academic	Urban	Private, nonprofit	7% Latino 8% Black	Geriatrician / Physician	-	-	-	-	-	-	-	7/8/2019	-	-
P	North Carolina	Academic	Urban	Private, nonprofit	13% atino 27% Black	Geriatrician / Physician	-	-	-	-	-	-	-	7/8/2019	-	-
Q	Texas	Academic	Rural	Private, nonprofit	14% atino 16% Black	Geriatrician / Physician	-	-	-	-	-	-	-	7/17/2019	-	-
R	Pennsylvania	Academic	Rural	Private, nonprofit	27% atino 16% Black	Neurologist / Director	-	-	-	-	-	-	-	9/25/2019	-	-

S – Step

Ordered by date that initial interest form was received.

Program adoption takes a median of 4-6 weeks between each step for the first 4 steps, then time from Letter of Agreement to first patient seen is a median of 4 months.)