Implementing

PROVEN

PRagmatic Trial of Video Education in Nursing Homes

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Purpose

- Present the background and design of the PROVEN trial
- Implementation challenges
- Implications for future programs & studies

PROVEN: Objective

- To conduct a pragmatic cluster RCT of an Advance Care Planning video intervention in NH patients with advanced comorbid conditions in two NH healthcare systems

Background: Nursing Homes

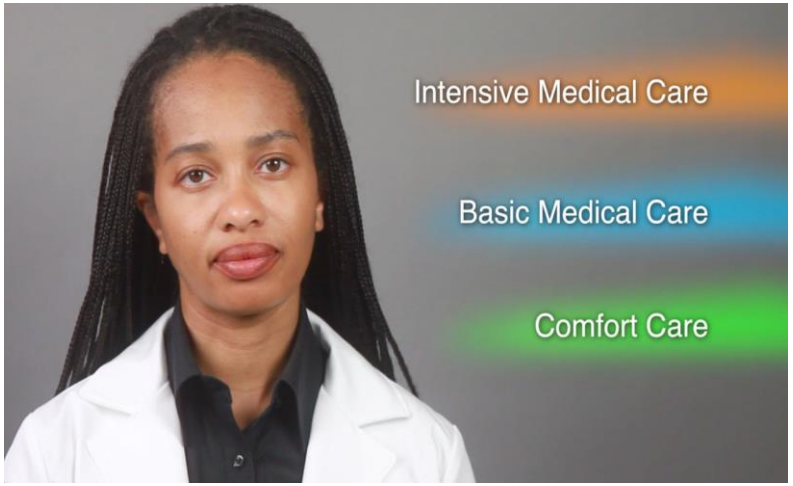
- NHs are complex health care systems
- Patients are medically complex with advanced comorbid illness
- Like Hospitals, NHs charged with guiding patient decision making by default

Background: Traditional ACP

- Problems with traditional ACP
  - Ad hoc
  - Knowledge and communications skills of providers variable
  - Scenarios hard to visualize
  - Health care literacy is a barrier

Background: ACP videos

- Options for care with visual images
- Broad goals of care
  - Life prolongation, limited, comfort
- Specific conditions/treatments
- Adjunct to counseling
- 6-8 minutes
- Multiple languages



PROVEN: Intervention NHs

- 24 month accrual; 12 month follow-up
- Suite of 5 ACP videos
  - Goals of Care, Advanced Dementia, Hospitalization, Hospice, ACP for Healthy Patients
- Offered facility-wide
  - All new admits, at care-planning meetings for long-stay, readmission
- Flexible (who, how, which video)
- Tablet devices, internet via URL and password
- Training: corporate level, webinars, toolkit

PROVEN: Primary Outcome

- Number of hospital transfers*/person-days alive among Fee-For-Service Medicare beneficiaries >=65 years old who are in a NH >=90 days ("long-stay") and who have EITHER advanced dementia or advanced congestive heart failure/chronic obstructive lung disease
- This is our **target** cohort.

* Transfers include hospital admissions, Observation Stays & ED visits.

Why Should ACP affect Hospital Transfers in Target Cohort?

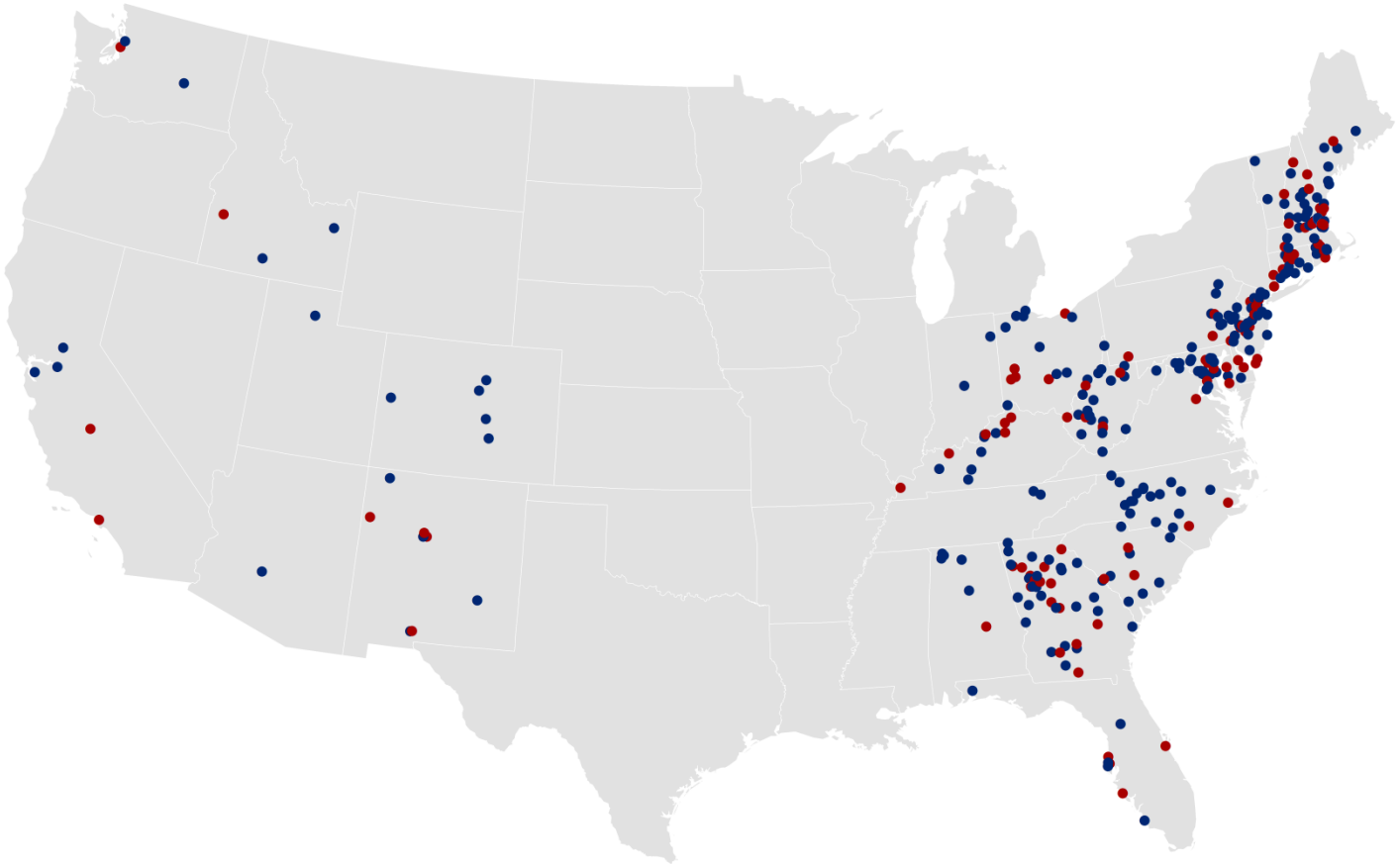
- Video sensitizes patients and family to realistic expectations of hospital-level care
- Video prompts ACP discussions with physician or nurse practitioner
- Preferences document in DNR/DNH or other care restriction orders
- Next change in medical condition should not trigger a hospital transfer

PROVEN: Secondary Outcomes

- **Non-target** cohort (for both long- and short stay):
  - Number of hospital transfers/person-days alive (over either 12 months for long stay or 90 days for short stay)

- **Target** and **non-target** cohorts (for both long- and short stay):
  - Presence of advance directives: Do Not Hospitalize, Do Not Resuscitate, or no tube-feeding (Available for sub-sample)
  - Burdensome treatments (feeding tubes, parenteral therapy)
  - Hospice enrollment

Distribution of PROVEN NHs



PROVEN centers
(as of 2/16/2017)

- Intervention
- Control

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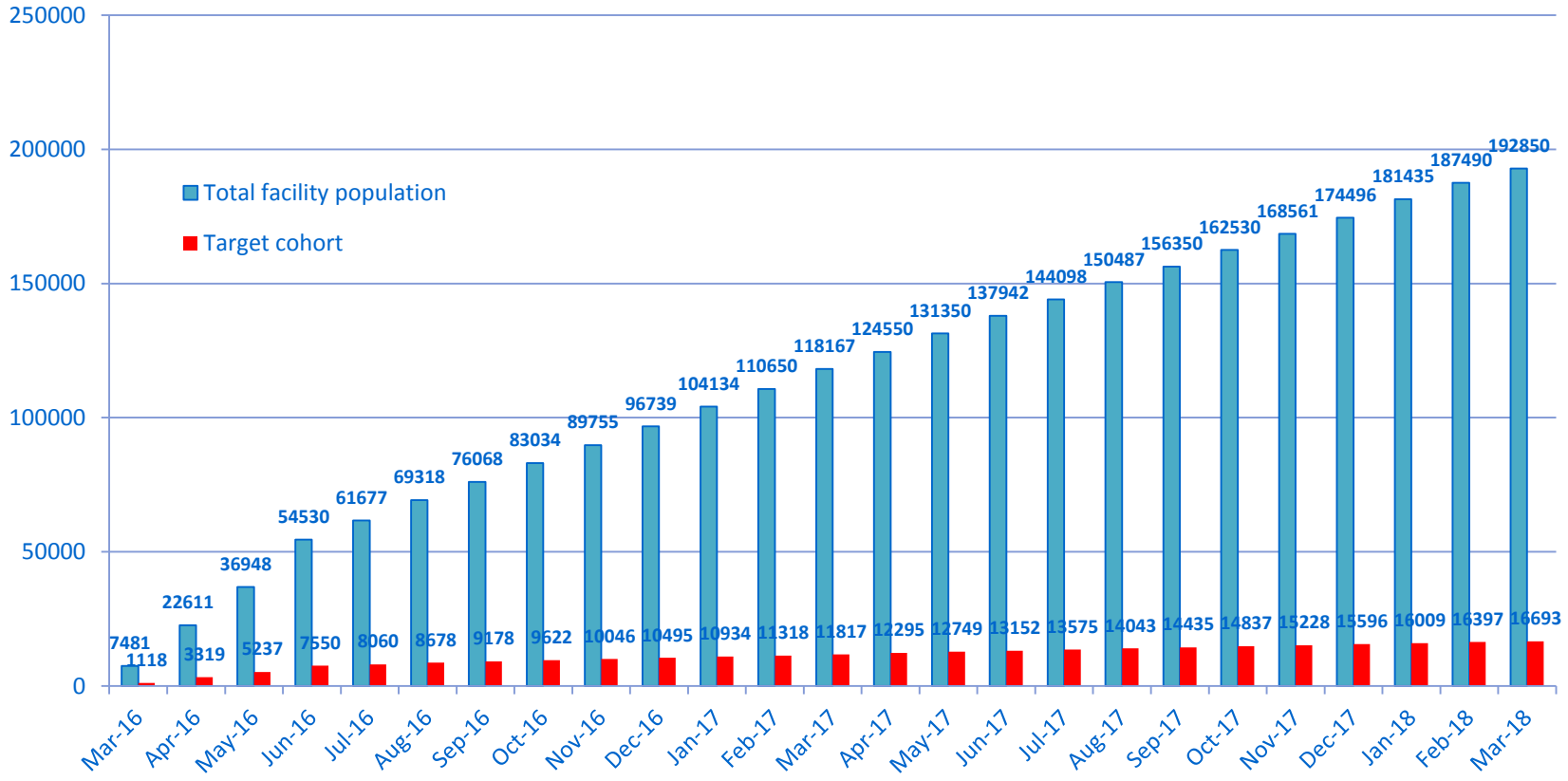
Total Facility Population and Target Cohort Accrual during Implementation Phase (Both Intervention & Control Groups)



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Implementing PROVEN

- Topics for today's presentation:
  - Challenges during implementation
  - Documenting the implementation of the intervention

Challenges during implementation

- Two main challenge areas:

1. **Defining compliance**

2. Triaging Long-stay patients

Documenting the ACP Video Program

- A Video Status Report User-Defined Assessment (VSR UDA) was programmed in the EMRs of our healthcare system partners.
- Each time a video is offered to a patient or his/her family, a VSR UDA is to be completed – even if a video is not shown.
- Documented each time Staff distribute the Web Site url to families to view at home.
- Intended to document variation in implementation for analytic use

Example VSR UDA data points

- Date video offered
- Which event triggered the video offer?
- Was a video shown?
  - If shown:
    - Date shown
    - Which video(s) shown?
    - Who showed the video?
    - Who viewed the video?
    - Any distress observed?
  - If not shown, why not?

Initial definition of compliance

- ACP Video Program compliance was initially defined as **completion of a VSR UDA** each time a **video was offered.**

Group Phone Calls

- As part of our continuous quality assurance, we conducted Group Phone Calls.
- Challenges/Barriers
- Cross-pollination of solutions

Group Phone Calls

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- Challenges/Barriers
- Cross-pollination of solutions
- From April 2016 through May 2017, there were 115 unique conference calls with 439 attendees from 100 unique facilities.

Focus on the VSR UDA

- On the regular healthcare system group "check in" calls with NHs and during formal re-training webinars, emphasis was placed on **offering videos**.

- NHs that were compliant with **offering videos** were celebrated and highlighted.

Needed to redefine compliance

- HOWEVER, when we added the proportion of **videos actually shown** to the compliance reports….

- We found that even NHs highly-compliant **offering videos** did not have high rates of actually **showing videos**!

Change in tune: Show the video

- Compliance reports now include **videos shown**.
- On the regular healthcare system group "check in" calls with NHs and during formal re-training webinars, emphasis is now placed on **showing the video**.
- NHs that are compliant with **showing the video** are celebrated and highlighted as program benchmarks.
- Target set for each center to have a "**video shown**" rate of at least 50%.

Challenges during implementation

- Two main challenge areas:

1. **Defining compliance**

2. Triaging Long-stay patients

1:1 Conference Calls

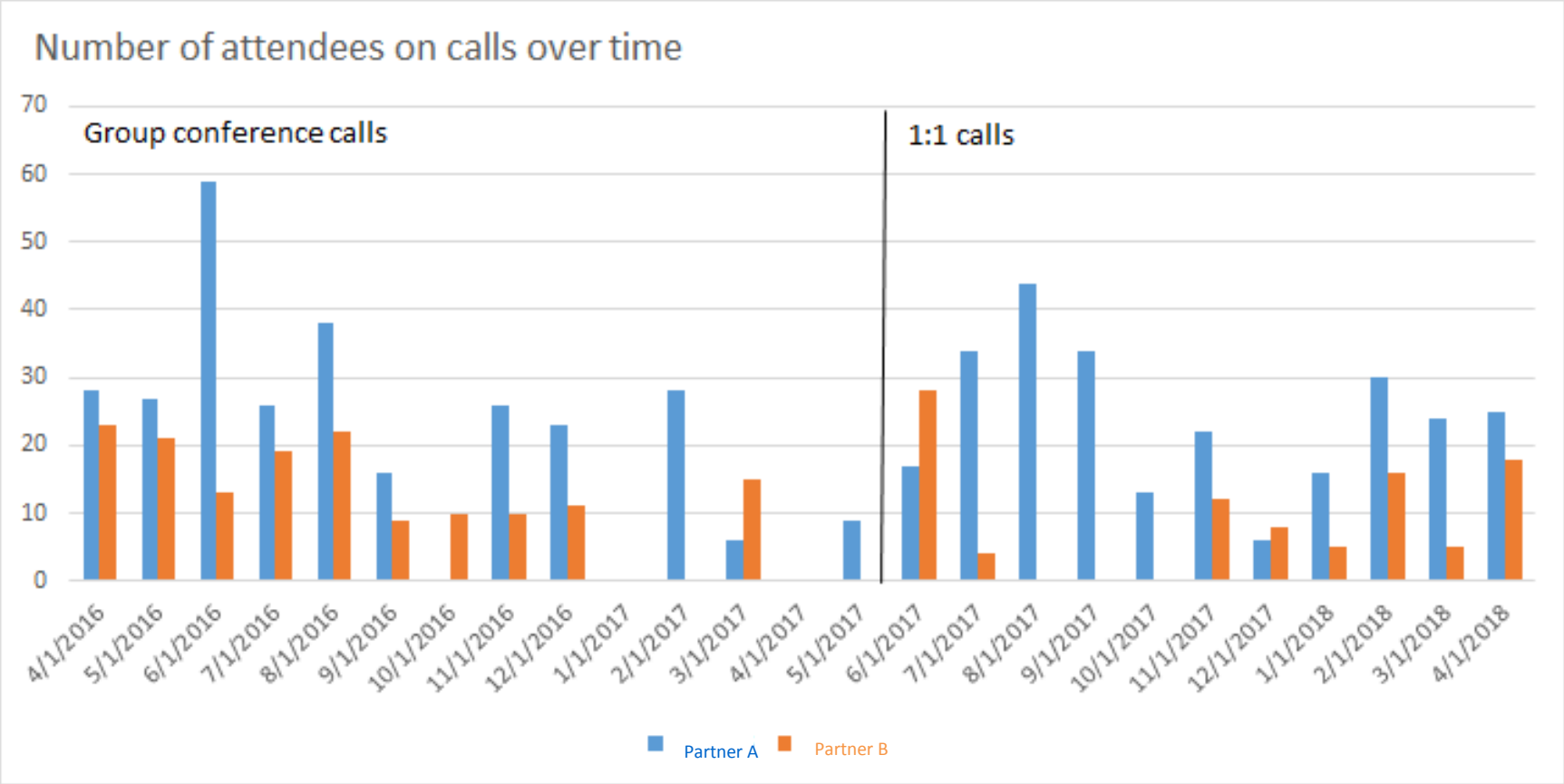
- From April 2016 through May 2017, there were 115 unique conference calls with 439 attendees from 100 unique facilities.

1:1 Conference Calls

- From April 2016 through May 2017, there were 115 unique conference calls with 439 attendees from 100 unique facilities.

- From June 2017 through April 2018, there were 220 unique 1:1 calls with 361 attendees from 96 unique facilities.

Group vs. Individual Calls



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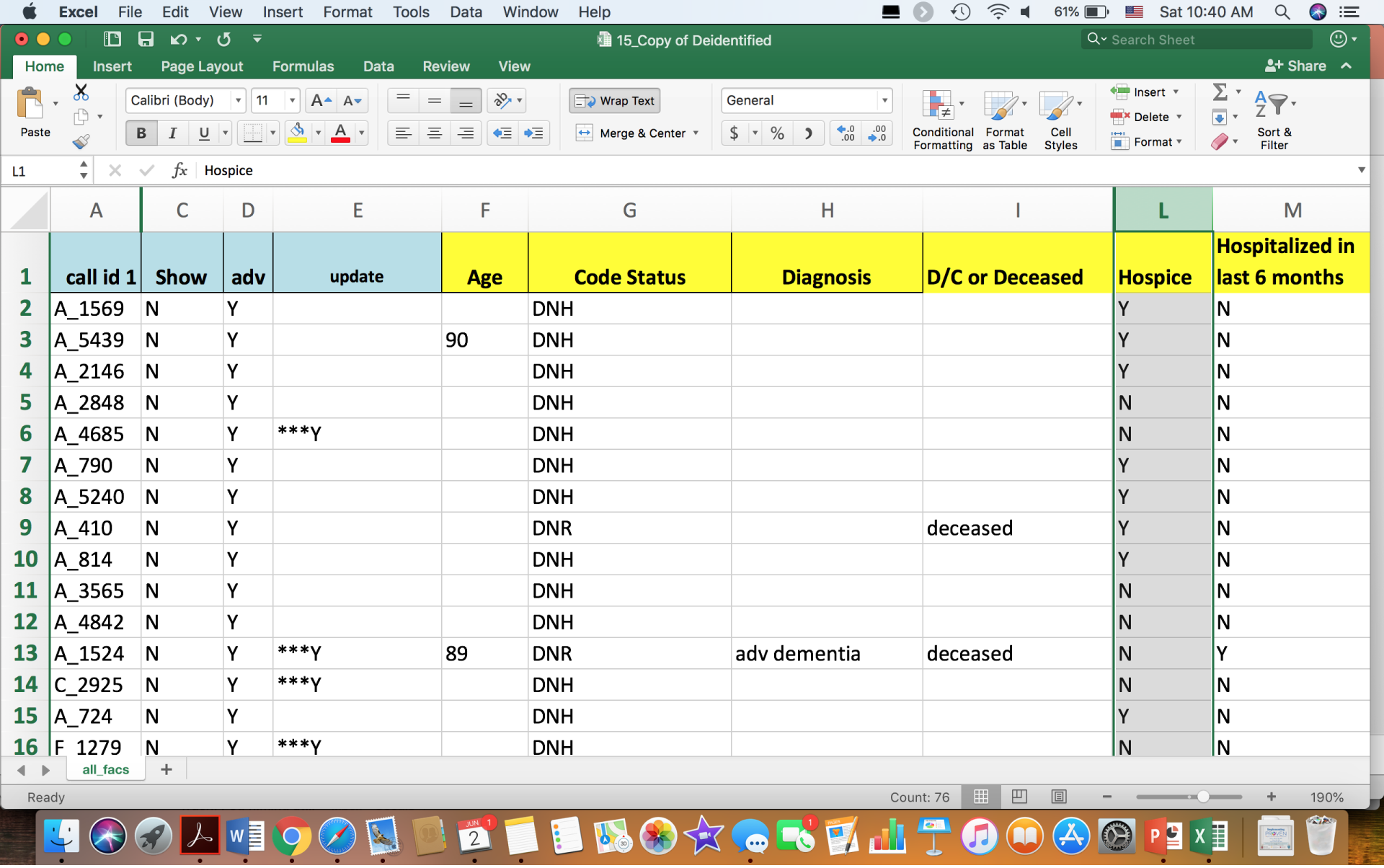
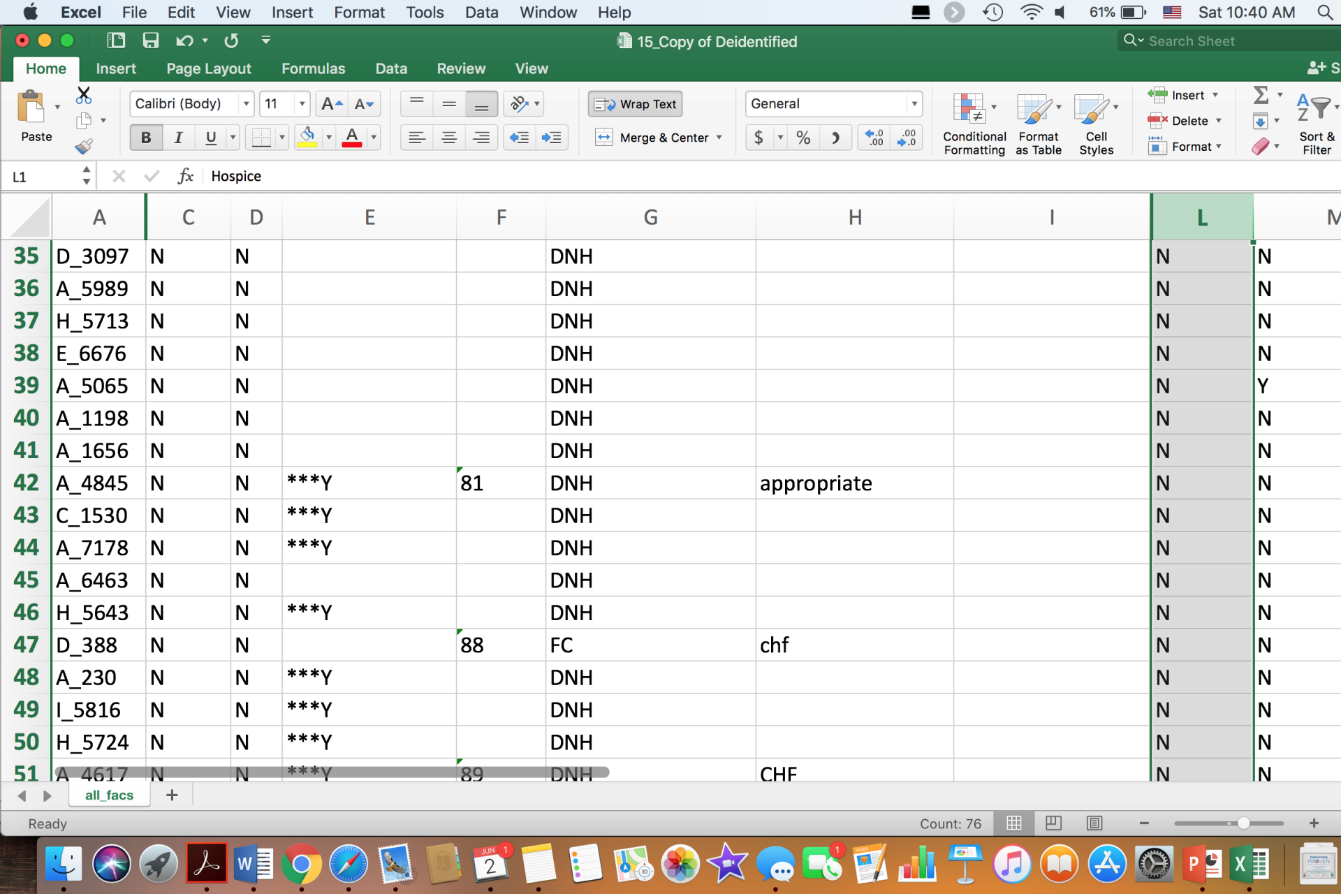


	A	C	D	E	F	G	H	I	L	M
1	call id 1	Show	adv	update	Age	Code Status	Diagnosis	D/C or Deceased	Hospice	Hospitalized in last 6 months
2	A_1569	N	Y			DNH			Y	N
3	A_5439	N	Y		90	DNH			Y	N
4	A_2146	N	Y			DNH			Y	N
5	A_2848	N	Y			DNH			N	N
6	A_4685	N	Y	***Y		DNH			N	N
7	A_790	N	Y			DNH			Y	N
8	A_5240	N	Y			DNH			Y	N
9	A_410	N	Y			DNR		deceased	Y	N
10	A_814	N	Y			DNH			Y	N
11	A_3565	N	Y			DNH			N	N
12	A_4842	N	Y			DNH			N	N
13	A_1524	N	Y	***Y	89	DNR	adv dementia	deceased	N	Y
14	C_2925	N	Y	***Y		DNH			N	N
15	A_724	N	Y			DNH			Y	N
16	F_1279	N	Y	***Y		DNH			N	N



	A	C	D	E	F	G	H	I	L	M
35	D_3097	N	N			DNH			N	N
36	A_5989	N	N			DNH			N	N
37	H_5713	N	N			DNH			N	N
38	E_6676	N	N			DNH			N	N
39	A_5065	N	N			DNH			N	Y
40	A_1198	N	N			DNH			N	N
41	A_1656	N	N			DNH			N	N
42	A_4845	N	N	***Y	81	DNH	appropriate		N	N
43	C_1530	N	N	***Y		DNH			N	N
44	A_7178	N	N	***Y		DNH			N	N
45	A_6463	N	N			DNH			N	N
46	H_5643	N	N	***Y		DNH			N	N
47	D_388	N	N		88	FC	chf		N	N
48	A_230	N	N	***Y		DNH			N	N
49	I_5816	N	N	***Y		DNH			N	N
50	H_5724	N	N	***Y		DNH			N	N
51	A_4617	N	N	***Y	89	DNH	CHF		N	N

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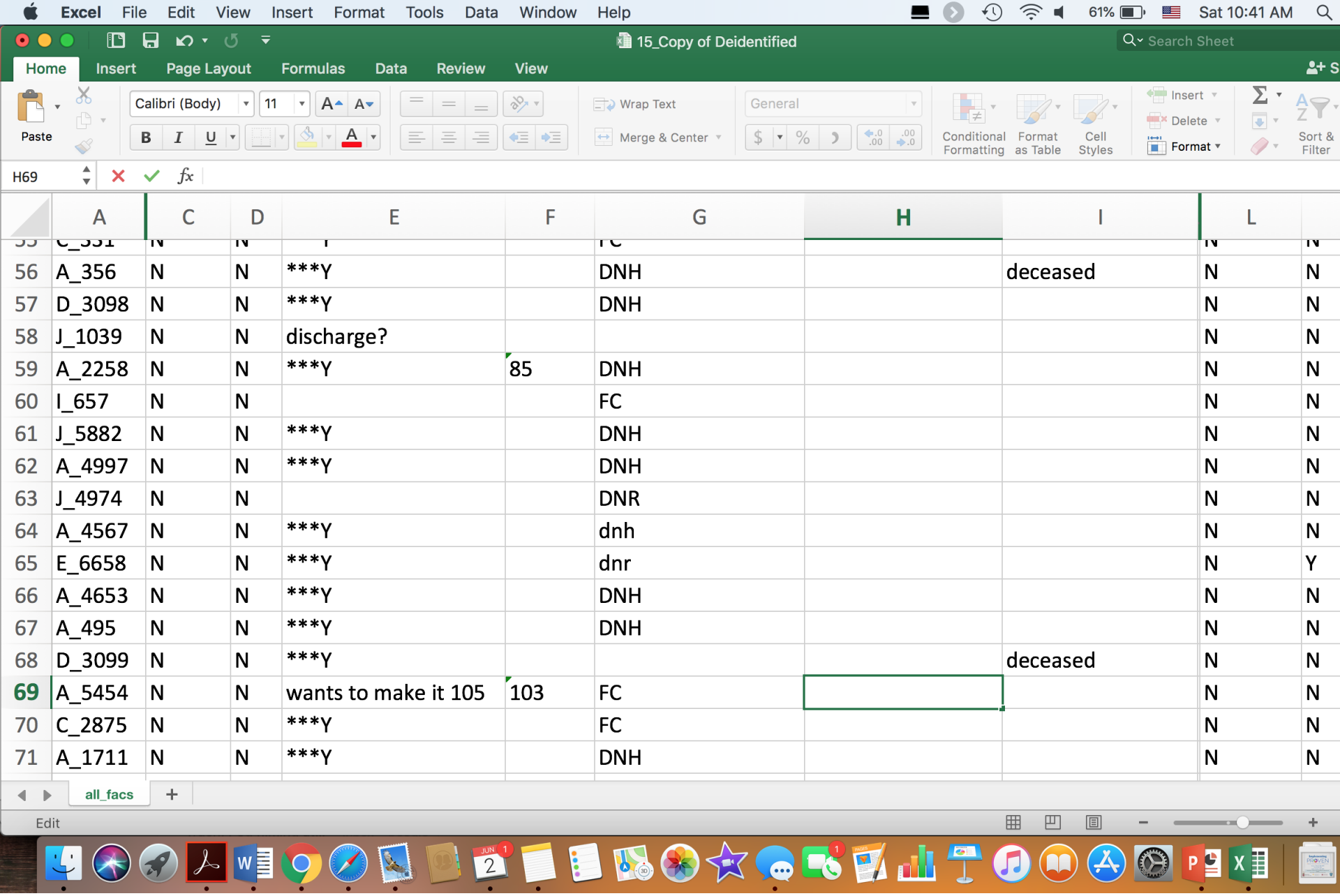

	A	C	D	E	F	G	H	I	L	
56	A_356	N	N	***Y		DNH		deceased	N	N
57	D_3098	N	N	***Y		DNH			N	N
58	J_1039	N	N	discharge?					N	N
59	A_2258	N	N	***Y	85	DNH			N	N
60	I_657	N	N			FC			N	N
61	J_5882	N	N	***Y		DNH			N	N
62	A_4997	N	N	***Y		DNH			N	N
63	J_4974	N	N			DNR			N	N
64	A_4567	N	N	***Y		dnh			N	N
65	E_6658	N	N	***Y		dnr			N	Y
66	A_4653	N	N	***Y		DNH			N	N
67	A_495	N	N	***Y		DNH			N	N
68	D_3099	N	N	***Y				deceased	N	N
69	A_5454	N	N	wants to make it 105	103	FC			N	N
70	C_2875	N	N	***Y		FC			N	N
71	A_1711	N	N	***Y		DNH			N	N

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Non-Entry of VSR UDAs

- Not completed
- Group visits
- Given link but not documented

NH Partner #1

Table 3b. Compliance for Long-stay Residents	March 1, 2016 - March 31, 2017		March 1, 2016 - September 30, 2017		To date/overall: March 1, 2016 - March 31, 2018	
Residents EVER*** long-stay	2,499		2,909		3,263	
VSR UDAs EVER*** completed	869	34.8%	1293	44.4%	1493	45.8%
VSR UDAs EVER*** shown	511	20.4%	795	27.3%	934	28.6%

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NH Partner #1

Table 3b2. Compliance for Target Cohort**** (NEW TABLE)	To date/overall	
	March 1, 2016 - March 31, 2018	
Residents EVER*** target cohort	1,140	
VSR UDAs EVER*** completed	515	45.2%
VSR UDAs EVER*** shown	295	25.9%

Table 3b. Compliance for Long-stay Residents					To date/overall	
	March 1, 2016 - March 31, 2017		March 1, 2016 - September 30, 2017		March 1, 2016 - March 31, 2018	
Residents EVER*** long-stay	2,499		2,909		3,263	
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NH Partner #2

Table 3d. Compliance for Long-stay Residents					To date/overall	
	April 1, 2016 - March 31, 2017		March 1, 2016 - September 30, 2017		March 1, 2016 - March 31, 2018	
Residents EVER*** long-stay	10,308		11,974		13,568	
VSR UDAs EVER*** completed	4,153	40.29%	6,231	52.0%	7,903	58.2%
VSR UDAs EVER*** shown	872	8.46%	1,448	12.1%	1,849	13.6%

NH Partner #2

Table 3d2. Compliance for Target Cohort**** (NEW TABLE) **	To date/overall	
	March 1, 2016 - March 31, 2018	
Residents EVER*** target cohort	4,373	
VSR UDAs EVER*** completed	2,262	51.7%
VSR UDAs EVER*** shown	483	11.0%

Table 3d. Compliance for Long-stay Residents					To date/overall	
	April 1, 2016 - March 31, 2017		March 1, 2016 - September 30, 2017		March 1, 2016 - March 31, 2018	
Residents EVER*** long-stay	10,308		11,974		13,568	
VSR UDAs EVER*** completed	4,153	40.29%	6,231	52.0%	7,903	58.2%
VSR UDAs EVER*** shown	872	8.46%	1,448	12.1%	1,849	13.6%

Rule of Thirds for QI Work

- 1/3 high-performers
- 1/3 somewhat engaged
- 1/3 not engaged

Current Status

- Permitted to extend enrollment from 18 to 24 months (increase sample size)
- Much more intensive exhortation to show the videos and initiate ACP discussions
- Third of facilities not really implementing
- Proposed an “as treated” analysis, BUT
- Primary outcome still as originally stated

So, How Pragmatic is PROVEN now?

- Each Change to the Intervention Implementation model considered in light of PRECIS-2 principles
- Clearly even a multi-facility pilot doesn't uncover all operational implementation impediments
- In "real" world health systems test new programs with pilots as well

Lessons & Implications for ACP

- ACP Videos Selected because standardized and ready for broad implementation
- Unanticipated Complications in the "mechanics" of introducing Videos into daily operations – seemed so simple!
- Just showing video doesn't mean going to next step of Advance Directives

Lessons and Implications for PCTs

- Implementing interventions into NH health care systems in a PCT (or otherwise) requires…
  - Endorsement in Standard Operating Procedures
  - Mandate from senior management
  - (cannot be seen as just “research”)
- Compliance monitoring in PCT
  - Front-line providers may not comply with “new forms” if they don’t see clinical relevance