Advancing End-of-Life Care Decisions through a Comprehensive Case Management Approach: A Quality Improvement Project

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Background - FACTS

- ✓ People aged 65 years and older account for:
  - 13% of the U.S. population,[1]
  - 34% of the total healthcare expenditure in the last year of their lives.[2]
  - 30% of annual Medicare expenditure (on 5% of beneficiaries).[3]
  - 40% of Medicare enrollees visit an intensive care unit (ICU) in the last six months of life.
- ✓ ~75% of older patients die *with* some form of pre-determined plan or documentation for EOL care.[4]
  - Has *not* led to fewer hospitalizations or hospital-related deaths. [7]
- ✓ Only 17% of ACP documents are signed and scanned into the EHR.[8]
  - Minnesota: 8 hospital systems reported 15-32% patients have signed ACP document in their EHR.[6]

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ACP Impact and Strategies

1. Avoiding hospital and ICU admissions, during the last six months of life can save an estimated 36% of the nation's healthcare costs.[7]
2. Every $1 spent on ACP saves $2 of healthcare cost.[8]
3. CMS began reimbursement to healthcare providers for two 30-minute visits for counseling patients on ACP.[9]
4. Implementing an ACP *before* a life threatening event would:
   - ✓ Reduce unnecessary or over treatment of medical conditions,
   - ✓ Enable the care team to carry out patient EOL choices,
   - ✓ Reduce patient and family fear,[10]
   - ✓ Reduce confusion and improve communication between the healthcare team and patients.[11,12]

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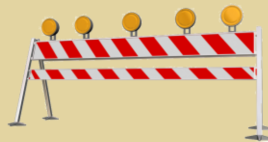
Barriers

Decreasing completion of and access to Advance Care Planning:

- Lack of patient understanding of the process of an ACP[13,14]
- Limited provider time, training, and resources to carry out discussions with patients[15]
- Lack of an accurate tracking system and location of ACP documents in the EHR[16]
- Lack of a formal ACP program in the health system [17-18]



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Purpose

- To address the Institute of Medicine's 2014 recommendation to increase ACP conversations and complete ACP documents.
- Explore the use of an existing case management (CM) process – with enhancements to include ACP components.
- Determine the most effective process of capturing ACP information in a formal written document in a compassionate and meaningful way.
- Better understand and close the gaps and barriers shared between the patient and provider.

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Project Goals

1. To increase the number of ACP conversations and completed ACP documents.
2. To provide education about the process of ACP to participants.
3. To increase the number of ACP documents readily available in the EHR.

Methods

SETTING: UCare for Seniors case management program administered through Fairview Physician Associates an integrated clinical network.

SAMPLE: UCare for Seniors: 14,000 enrollees (≥65 y.o.)

PROJECT POPULATION:

Group 1: decedents in 2014, from whom baseline ACP data were obtained.

Group 2: members in 2014, ACP intervention offered 4-16 months after health event.

Group 3: patients in 2015, ACP intervention offered 2-4 weeks after health event.

INTERVENTION GROUPS INCLUSION CRITERIA:

- ≥1 hospital admission or ≥ 3 emergency department visits within a 12 month period.

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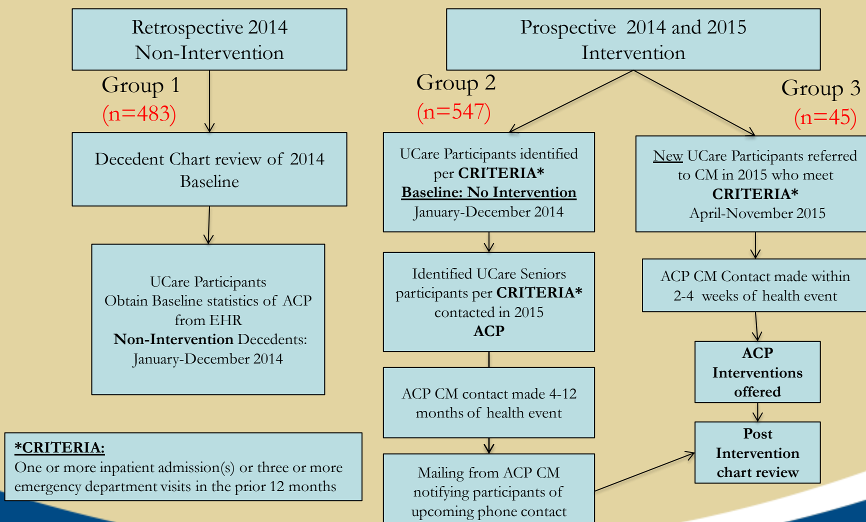
Project Flow Chart



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ACP Project Model

- ✓ Followed the evidenced based practice protocols, training, principles, materials and methodology of Respecting Choices (RC), and Honoring Choices Minnesota.[17,28,30]
- ✓ Leveraged CMs in the ACP process:
  - Served as the point-of-care contact for any patient follow-up after a recent hospitalization.
  - Identified as vital members of the care team whose chief responsibilities include assessment and identification of gaps in care.
  - Provided an excellent opportunity in which to introduce the ACP information.
- ✓ All designated CMs in this project received RC facilitator training.

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Methods

INTERVENTION:

A dedicated ACP-CM initiated patient-centered

- Telephonic, 1:1, or Group facilitation
- Mailings
- Provider-Patient and Provider-CM communication

MEASUREMENTS:

1. Baseline outcome data from a retrospective review for 2014
2. Pre- Post ACP interventions from chart reviews:
   - Number of patients completing an ACP document
   - Number of ACP documents uploaded in EHR
3. Process and components documented

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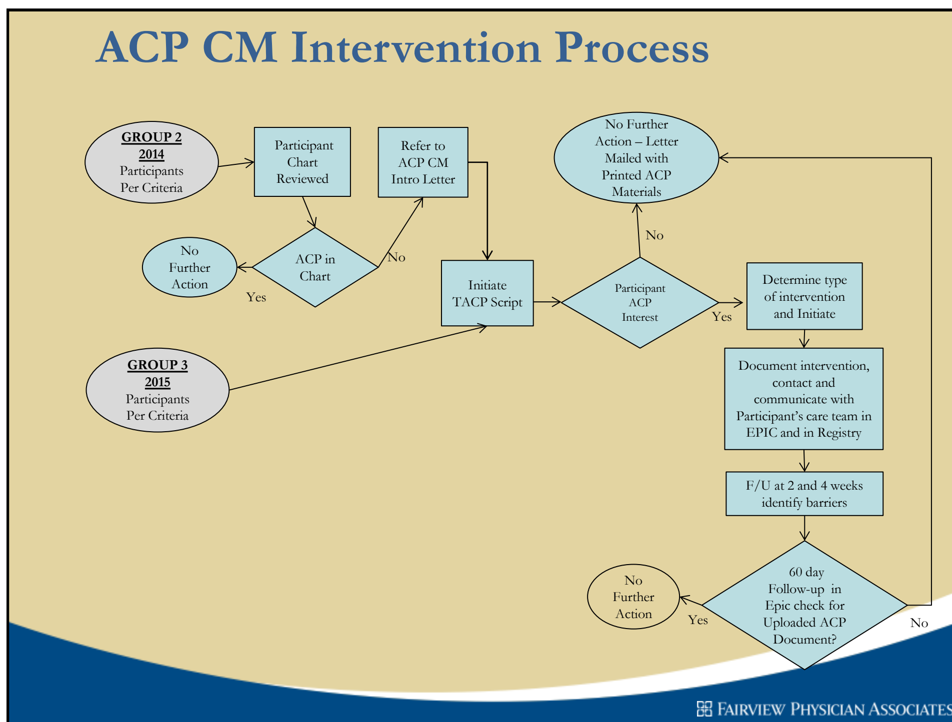

Analysis

DATA:

Registry was developed (Excel) to collect and organize data obtained:

- Patient interactions
- Chart review

  Group 1 (483/500): Decedents from 2014

  Group 2 (547/603): Jan 2014-Jan 2015

  Group 3 (45/79): New Enrollees in 2015

DATA ANALYSIS:

- Pre- and post-intervention chart reviews
- Descriptive statistics of all three groups
- Groups 2 and 3 analyzed using a Fisher's Exact

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Results:
Decedent Group

CHARACTERISTICS OF 2014 DECDEDENT GROUP

		n	%
Group 1 Total		**483**	
Age	65-74	87	18.0%
	75-84	169	35.0%
	85+	227	47.0%
ACP in EHR (ACP, LW, POLST, or DNR			
	Yes	329	68.1%
	No	154	31.9%
DEATH (Hospice Utilize)			
	Yes	231	47.8%
	No	160	33.1%
	Unknown	92	19.0%
Of Participants in Hospice			
	Started < 7 days before death	68	29.4%
	Hospice/Palliative Care Utilized		
	Hospice Care	231	47.8%
	Palliative Care only	53	11.0%
	No	115	23.8%
	Unknown	84	17.4%
Hospitalization within 3 Months of Death			
	Yes	249	51.6%
	No	149	30.8%
	Unknown	85	17.6%

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Results:
Decedent Group
Location of Death

Location Living Prior to Death (All Decedents)	n	%
Community Dwelling	274	56.7%
Nursing Home	88	18.2%
Assisted Living	37	7.7%
TCU	11	2.3%
Hospice Facility	3	0.6%
Unknown	70	14.5%
Location of Death (All Decedents)		
Community Dwelling	154	31.9%
Nursing Home	86	17.8%
Assisted Living	28	5.8%
TCU	9	1.9%
Hospice Facility	19	3.9%
Hospital	97	20.1%
Unknown	90	18.6%
Community Dwelling Decedents (Prior to death)	**n=274**	
Location of Death		
Community Dwelling	152	67.0%
Nursing Home	18	7.9%
Assisted Living	4	1.8%
TCU	3	1.3%
Hospice Facility	9	4.0%
Hospital	77	33.9%
Unknown	11	4.8%

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Key Messages:

1. One third of patients who were community dwellers prior to death died in the hospital.
2. Patients continue to die in expen$ive places.

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Results:

Intervention Groups

DEMOGRAPHICS OF INTERVENTION GROUPS

		Group 2		Group 3	
		n	%	n	%
Participant Total		547		45	
Age yrs					
	65-74	192	35%	27	60%
	75-84	226	41%	13	29%
	85+	129	24%	5	11%
Gender					
	Female	346	63%	23	51%
	Male	201	37%	17	38%
	Unknown	0	0%	5	11%
ACP in EHR Pre-Intervention					
	ACP	177	32%	0	0%
	POLST	66	13%	0	0%
Deceased		28	5%		
Hospice		20	4%		
Hospice, < 7 days before death					
	Yes	0	0%		
	No	24	86%		
	Unknown	4	14%		

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Results

ACP ANALYSIS OF HEALTH EVENT TO ACP COMMUNICATION AND COMPLETION

Outcome	**Group 2** 2104 Participants n=547 (Intervention 4-16 MONTHS)		**Group 3** 2015 New Participants n=45 (Intervention 2-4 WEEKS)	
	Participants without Documents	Post Intervention Documents n (%)	Participants without Documents	Post Intervention Documents n (%)
ACP Documents	370	16 (4.3)	45	**13 (29) ***
POLST	478	39 (8.2)	45	**6 (13)** **

Fisher's Exact p <.05 significant:
* = 0.001
**= 0.26

Results - SUMMARY

Group 1 decedents (483):

- ✓ 329 (68%) had ACP documents or provider orders for life-sustaining treatment (POLST) uploaded in their EHR.

Group 2 members (547),

- ✓ 55 (12.5%) had ACP documents or POLSTs uploaded in their EHR after the intervention.

Group 3 patients (45):

- ✓ 19 (42%) had ACP documents completed and uploaded after the intervention.
- ✓ These results were statistically significant, p-value < 0.001.

Conclusion

This QI project demonstrated how to leverage existing relationships and workflows to develop a platform to introduce EOL conversations and increase completion of ACP documents.

Achieved the three proposed goals:

1. Increase the number of ACP-CM conversations,
2. Document the process to provide education about ACP to participants,
3. Confirm that the completed ACP document was readily available in the patient's EHR.

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Discussion

- ✓ Implementing ACP through CMs should be integrated as a standard of care for older adults.
- ✓ Reduction of the barriers impact the completion of ACP documents.
- ✓ Timing of EOL conversations is crucial - Determine the optimal timing of these conversations.

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Implications

QI Project provides foundational support to:

1. Integrate components of this model as a standard of care for older adults.
2. Serve as a systematic process that justifies reimbursement by Medicare and all insurers.
3. Reimbursement for EOL conversations should not be limited to just to providers, but rather include CMs and other EOL conversation facilitators.

Further Research

- ✓ Transform our current EOL care delivery system and more accurately address, and understand patient, family, and health care team needs at the end-of-life.
- ✓ Determine if ACP documentation and their access in the EHR prevents unnecessary hospitalization, costs and patient suffering.
- ✓ EOL conversations are time intensive – Identify which combination of providers is most effective for ACP completion.

THANK YOU!

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