

Establishing an Advanced Illness Management (AIM) Model in Community Based Setting



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COLLABORATION FOR HOME CARE ADVANCES IN MANAGEMENT AND PRACTICE



This presentation was delivered by Penny H. Feldman, Director, Center for Home Care Policy & Research, at the Institute of Medicine's one-day symposium entitled, "Health Care Workforce for Older Americans: Promoting Team Care" on October 7, 2008

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Context



VNSNY – Established 1893

- Largest nonprofit home care organization in U.S. – Serves NYC metropolitan area ~31,000 average daily census; ~120,000 patients annually, ~86 service delivery teams, ~2500 nurses, ~650 therapists, ~650 social workers, ~6000 aides

Home Health Care – U.S.

- Post-acute & long term care
- ~8000 Medicare-certified home health agencies (3.3 million discharges in 2005)
- Older persons = 85% of home care episodes; multiple chronic conditions; multiple medications; frailty; cognitive impairment
- “Team-based” service delivery (nurses, therapists, social workers, and aides)
 - Dispersed, generalist nursing workforce
 - Few APNs, little geriatric or palliative care training

Advanced Illness Management (AIM): The Problem and the Opportunity



- **Problem:** Intense, acute care in advanced stages of illness –
 - Does not necessarily = better quality of life or reduced morbidity
 - Does = high Medicare costs, potential misallocation of resources
 - 2000-03: Medicare Spending last 6 months of life (Dartmouth Atlas, 2006)
 - U.S. Hospital days per Medicare enrollee . = 11.7 days
 - NYS Hospital days per Medicare enrollee = 16.9 days
(more than residents of any other state save Hawaii)
 - U.S. Hospice use rate = 27%
 - NYS Hospice use rate = 18.7%
 - 2001-05 Medicare spending on chronically ill decedents, last two years of life (Dartmouth Atlas 2008)
 - All U.S. Hospital Regions = \$46,412
 - NY (Manhattan & Bronx) = \$81,143
- **Goal:** *Create a cost-effective model of advanced illness & palliative care that improves quality of life and appropriateness of care for patients with advanced chronic illness*

Interdisciplinary Team-Based Care

Evidence reviews show that multidisciplinary team-based interventions have been key to promoting comprehensive, person-centered palliative and EOL care

(Francke, 2000; Lorenz, 2008; NQF, 2006; WHO, 2004)

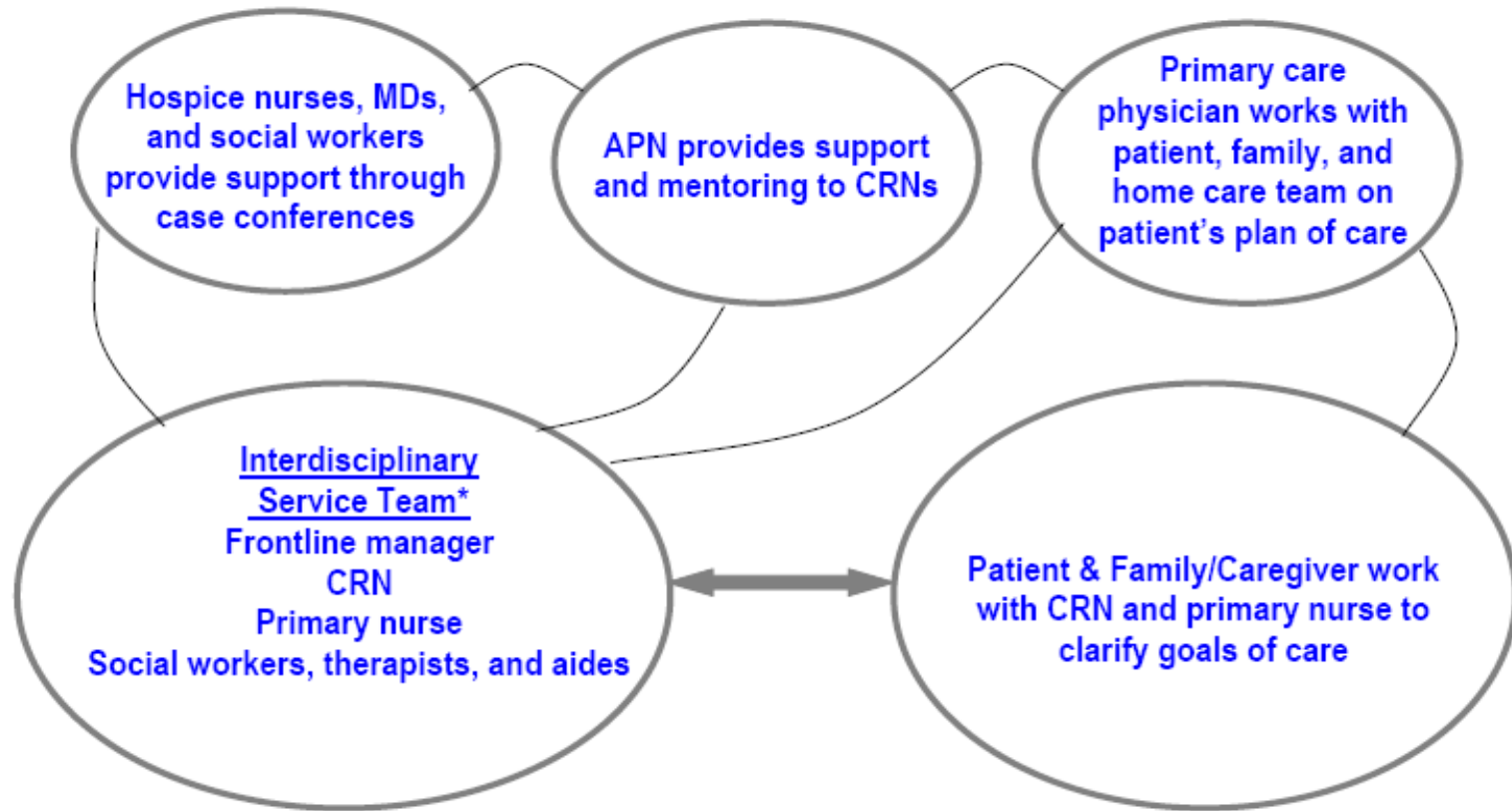
VNSNY AIM Program: Objective 1



Embed home-based palliative care into routine practice of the home care team:

- Build team capacity for an interdisciplinary approach to advanced illness management
 - Deploy APN, MD, SW to direct, guide and support
 - Designate AIM Clinical Resource Nurse (CRN) for each service team
 - Develop collaboration between CRN, primary nurse, hospice & patient/family
- Prepare/implement collaborative, individualized AIM plans: advance care directives, ED alternatives, palliative care, hospice referral

Building Team Capacity for Advanced Illness Management



*Roles of Team Members

- Frontline service manager addresses CRN assignment and caseload issues
- CRN collaborates with primary nurse on AIM plan of care
- Primary nurse follows up with patient, family, and primary care physician on AIM plan of care
- Social workers, therapists, and aides provide additional support to patients as needed

VNSNY AIM Program: Objective 2



Develop a clinical career path for frontline nurses that can be broadly replicated by Medicare/Medicaid certified home health agencies (CHHAs):

- Develop an advanced clinical position for generalist homecare RNs who generally lack clinical career opportunities in traditional CHHAs
- Provide CEU-eligible trainings on how to:
 - Assess patients for advanced illness management and palliative care needs
 - Manage pain and non-pain symptoms
 - Communicate about advanced illness and goals of care with patients, caregivers, collaborating nurses, and physicians
- Provide ongoing mentoring and clinical support to CRNs by a palliative care-certified APN

Program Development and Training



Development & Planning: AIM protocols, assessment tool, roles & responsibilities, electronic patient screening/tracking system, training curriculum

Clinical Resource Nurse (CRN) Training & Support:

- 12 hours of training in advanced illness management provided by 2 APNs specializing in palliative care (eligible for CEUs)
- APNs “shadowed” CRNs making visits to AIM patients during initial training phase
- Clinicians on 5 service teams received instruction on collaborating with CRNs assigned to their teams
- Ongoing one-on-one mentoring by APNs
- Regular case conferences with Hospice clinicians

AIM CRN Workforce

- 13 nurses trained as CRNs
- Tenure at VNSNY ranges from 2 – 28 years
 - Average of 10 years
- Diverse educational backgrounds
 - 3 BSN-level nurses
 - 6 MSN-level nurses
 - 3 Nurse Practitioners
 - 1 AIDS certified RN
- Languages spoken: Greek (1), Tagalog (3), Chinese (1), Korean (3), Polish (1), English only (4)

Patient Eligibility Criteria for AIM Program

Risk algorithm: Patients must meet 1 of these 3 criteria:

- **A.** Life expectancy < 6 months AND either poor overall prognosis or poor rehabilitation prognosis

OR

- **B.** Poor prognosis AND a primary diagnosis of 1 of the following diseases with severity of 3 or greater:

Malignant neoplasm, Heart failure-CHF, Ischemic heart disease, HIV, Renal Failure, Hepatic Failure, COPD, Parkinson's, Multiple Sclerosis, ALS, Huntington's, and Alzheimer's (for Alzheimer's only, severity must be 4)

OR

- **C.** A primary or secondary diagnosis of one of the diseases listed above with severity of 4

AIM Implementation



Implementation: December 2007 to date

- 13 CRNs designated, trained and receiving ongoing mentoring
- ~100 field nurses received one-hour initial training on advanced illness management and continue to receive updates and support through CRNs
- 304 patients have received AIM services

Anticipated patient sample

- Total of 350 patients will receive AIM services during a 1-yr period
- 350 control patients
 - Patients served by usual care teams who meet AIM screening criteria during the same timeframe

First 200 AIM-Eligible Patients (Intervention Group): Demographic Characteristics

	N=200
	Percent/Mean
Age in years, mean (SD)	73.8 (14.2)
Female, % (N)	52.5 (N=105)
Lives Alone, % (N)	27.5 (N=55)
Race, % (N)	
White	53.0 (N=106)
Black	14.5 (N=29)
Hispanic	17.0 (N=34)
Asian	15.0 (N=30)
Other	0.5 (N=1)
Language Spoken, % (N)	
English	64.5 (N=129)
Spanish	14.5 (N=29)
Other	21.0 (N=42)
Payor Type, % (N)	
Medicare FFS	53.5 (N=107)
Medicaid FFS	3.0 (N=6)
Dually Eligible	21.5 (N=43)
Managed Care	30.0 (N=60)
Referred from Hospital, % (N)	72.0 (N=144)

First 200 AIM-Eligible Patients (Intervention Group): Demographic Characteristics

	N=200
	Percent/Mean
Life Expectancy Less than 6 Months, %(N)	55.0 (N=110)
Poor Prognosis, %(N)	93.8 (N=180)
Number of Illnesses (range 0 - 5), mean (SD)	4.2 (1.0)
Number of Medications Taken at Admission, mean (SD)	8.5 (4.1)
Number of ADL Assistance Needed, range 0-8, mean (SD)	7.1 (1.7)
Number of IADL Assistance Needed, range 0-6, mean (SD)	5.4 (0.7)
End-Stage Diseases, %(N)*	
Cancer	29.5 (N=59)
Congestive Heart Failure	12.5 (N=25)
Chronic Obstructive Pulmonary Disease	12.0 (N=24)
Other End-Stage Disease (e.g. Ischemic heart disease, HIV, Renal failure, Liver failure, Parkinson's, ALS, Multiple Sclerosis, Huntington's, Alzheimer's)	9.0 (N=18)

**These end-stage diseases do not account for 100% of sample. Roughly 38% of sample met AIM criteria based on life expectancy alone, regardless of diagnosis.*

AIM Case Study



Mrs. Richards , a 71 year-old African American woman, was referred to AIM with a diagnosis of breast cancer, as well as COPD. A CRN made a visit to the patient and determined that she had uncontrolled pain and other symptoms, including edema and shortness of breath, and also showed signs of depression. The patient was unclear about the trajectory of her illness and the goals of her chemo treatment. She also had financial issues and required DME.*

With support from the AIM APN, the CRN collaborated with the patient's primary home care nurse to: (1) talk with the patient and oncologist to clarify the illness trajectory and goals of care, (2) improve pain & symptom management, (3) order DME, and (4) refer to a social worker. The clinical team continued to work together, and the patient was transferred to VNSNY Hospice Care.

Goals of the AIM Evaluation

- Assess the impact of AIM on patient outcomes:
 - Referral to hospice
 - Emergency care utilization and hospital admission
 - Symptom control and quality of life
 - Documentation of advance care directives
- Assess the impact on nurse outcomes:
 - Awareness of palliative care
 - Perceived career opportunities and job satisfaction
- Further develop the CRN role as a career development opportunity; formalize the role within VNSNY staffing and team structure
- Analyze AIM's effect on agency costs and cost-effectiveness
- Understand challenges and identify strategies for implementing/replicating AIM throughout VNSNY's regions and home health agencies nationwide

Hypotheses

Relative to usual care, AIM team patients will have:

- More frequent advance care directives
- Increased hospice referrals
- Fewer hospital readmissions and ED visits
- Better symptom control & improved quality of life

Relative to usual care, AIM team nurses will have:

- Greater awareness/knowledge of palliative care and hospice
- Greater perceived career development opportunity



AIM: System Challenges

Systems and Attitudes:

- Reaching “short-stay” patients covered by managed care
- Initiating & implementing individualized AIM plan before unstable patients cycle back to the hospital in first week of care
- Enlisting the support of families & primary care physicians
- Changing organizational productivity expectations

Resources:

- Establishing a firm mechanism to pay for Advanced Practice Nurses
- Adjusting productivity standards for Clinical Resource Nurses
- Addressing “externalities”

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