



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

**Health Care Workforce for Older Americans:
Promoting Team Care**

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**Panel on “Models of Team Care for the Functionally
Impaired and Nursing Home Eligible”**

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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)

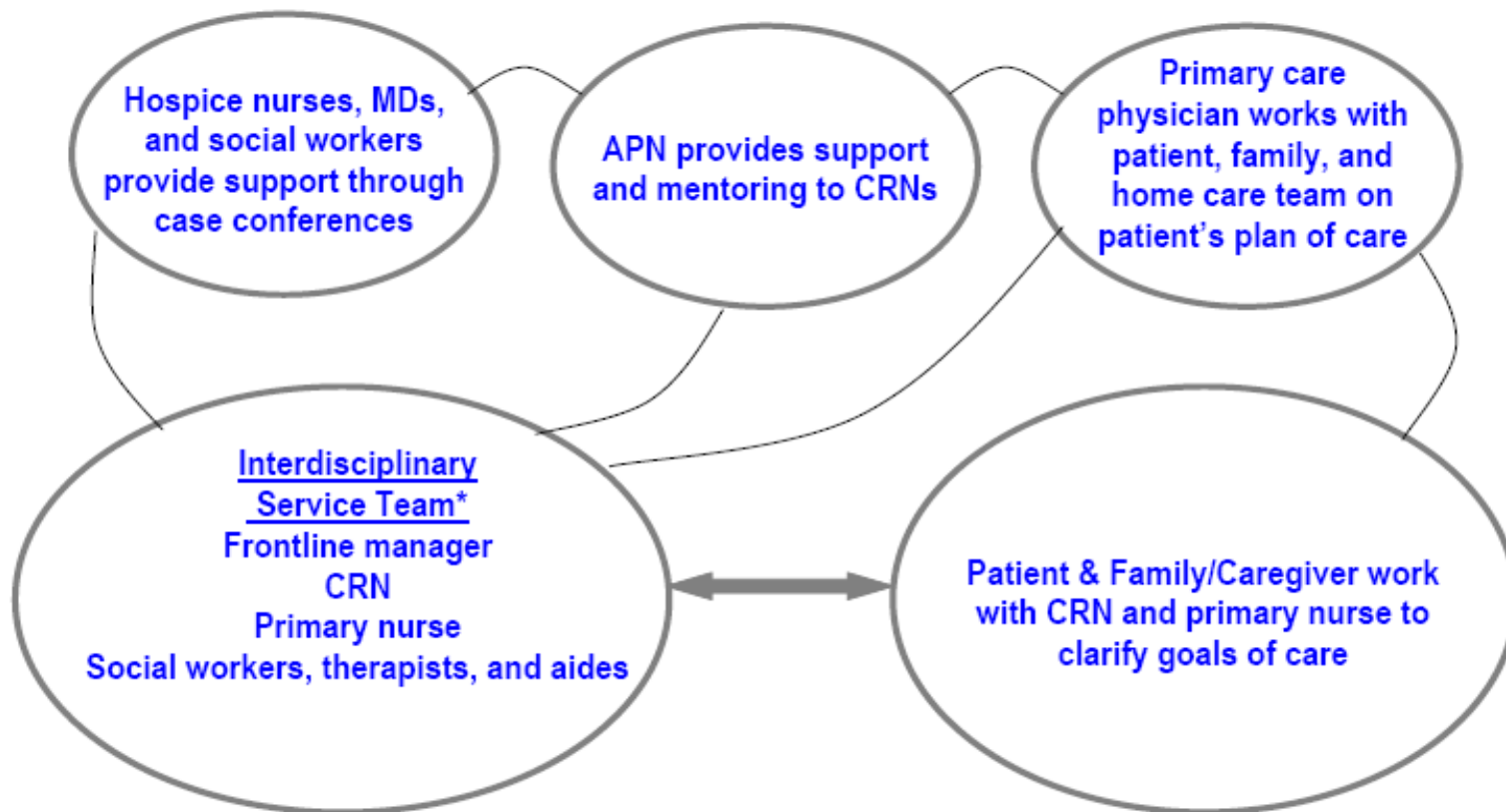
VNSNY AIM Program: Objective 1



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.*



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



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”