



## Research Opportunities in Palliative Care AACN Doctoral Conference January 30, 2015

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### Imperative for palliative care research



- Need for a better quality of care for persons with serious and complex illnesses
- Medical care for patients with serious illness is usually characterized by:
  - inadequately treated physical distress
  - fragmented care systems
  - poor communication between clinicians, patients, and families
  - enormous strains on family caregiver and support systems.





Palliative Care Research – current status

### DO

## Palliative care research lags behind clinical growth

- Despite growth of hospice & palliative care, palliative care research relatively underdeveloped
- Evidence base guiding clinical practice "woefully inadequate"
- Must focus on:
  - Answering important clinical questions
- Using appropriate research instruments, designs, and analytic techniques



### Evidence base - Current status



- Inadequate evidence base to support appropriate care of persons with serious and life-limiting illness
- · Lack of junior and mid-career investigators
- Lack of sustainable research centers

# Evidence Base: Research Publications in Oncology and Palliative Care 16000 14000 12000 100000 100000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 100000 10000 10000 10000 10000 100000 10000 10000 10000 1000

# Symptoms previously seen as unimportant Interesting in so far as they guide the clinician to a diagnosis Will go away when the disease is cured Difficult population to study Multiple symptoms and concurrent problems Very sick population with limited tolerance for lengthy protocols and instruments High mortality rate with associated missing data Difficult outcomes to study Often not amenable to traditional research designs



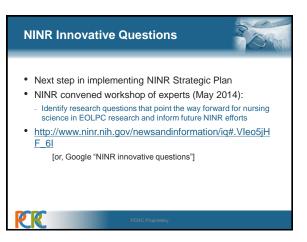


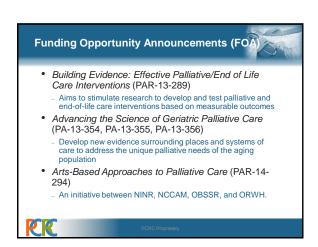


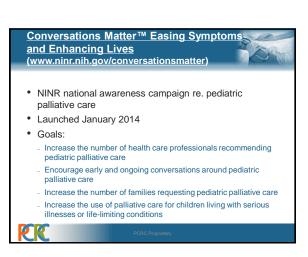




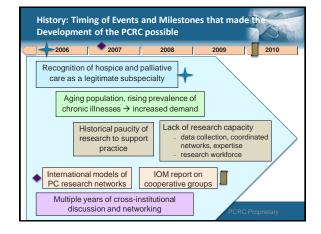












### **PCRC Vision**



Excellent palliative care at the bedside is contingent on best evidence and a scientific underpinning for what we do, so that:

- No patient dies alone, in pain, or without dignity.
- Palliative care responds effectively to suffering at all points in the life/illness trajectory.
- · Palliative care enhances living.



### **PCRC Mission**



To develop <u>scientifically-based methods</u> that lead to <u>meaningful evidence</u> for <u>improving quality of life</u> of <u>patients</u> with advanced and/or potentially life-limiting illnesses, and their <u>caregivers</u> including family members and providers of care.

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### **PCRC Overarching Strategy**



- 1. Develop efficient palliative care research capacity nationally.
  - Infrastructure
  - Data systems and procedures
  - Metrics
- Support the conduct, analysis, and dissemination of highquality research in palliative care.
- 3. Train and mentor **new**, **existing**, **and future clinician- scientists** committed to advancing palliative care research.



### **Grant funding through NINR**



- UC4 award (ARRA funding): UC4NR12584
  - o Creation and Demonstration of a Palliative Care Research Cooperative
    - 10/1/2010 09/30/2013 [3 year]
- U24 award: 1U24NR014637
  - Enhancing palliative care research capacity through refinement and expansion of the Palliative Care Research Cooperative Group
    - 10/1/2013 09/30/2018 [5 year]

Co-Principal Investigators: Amy Abernethy, MD PhD (Duke)

Jean Kutner, MD, MSPH (UC)

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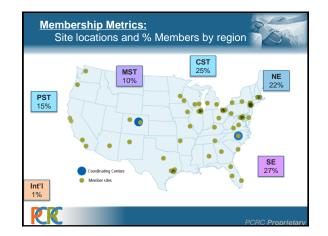
PCRC Proprietary

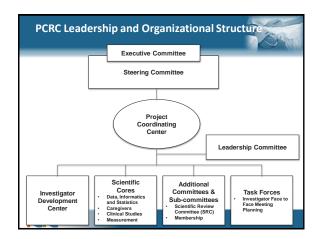
## Palliative Care Research Cooperative (PCRC) Founded in January 2010 First research cooperative in the US that focuses specifically on issues relevant to palliative and end of life care (PCEOL) Developed infrastructure to provide centralized services, including informatics and electronic data capture interface

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### **Project Coordinating Center**

Co-Directors: Amy Abernethy & Jean Kutner



- · Study development: grant development & writing, protocol development, concept review
- Study conduct: site development, training, quality assurance, data management
- Study management: administration, finance, grant management, performance monitoring, reporting
- Coordination within and between studies, participants, investigators, stakeholders, and sites
- Communication: website, newsletters, investigator meetings
- Dissemination: increase visibility of PCRC and its studies



### **Investigator Development Center (IDC)**





- · Multi-faceted approach to workforce development for PCEOL research
  - · Leverages PCRC resources and infrastructure
- Provide resources and expertise to junior PCEOL investigators
- Facilitates **mentorship** relationships between senior mentors and researchers new to PCEOL research or particular types of research (e.g., industry trials, collaborating with the VA)
- · PCRC Pilot Grant Awards



### Data, Informatics and Statistics Core (DISC)

Director: Greg Samsa, PhD Lead Statistician: Patrick (Jud) Blatchford, PhD



- · Statistical and data-related aspects of trial design, evaluation, quality assurance, data analysis, reporting, and data sharing
- · IT and clinical informatics support (e.g., standardized electronic data collection methodologies)
- Create interoperable data elements (variables) and core measures (instruments / questionnaires)
- Align with and incorporate relevant national initiatives
- · Integrate information from electronic health records (EHRs)

### **PCRC Caregiver Research Core**

Director: Betty Ferrell, PhD RN Sub-Investigator: Virginia Sun, PhD RN



- Identifying preferred caregiver study designs, measures, and instruments
- Elevating quality and prominence of caregiver research
- Defining priority gaps in caregiver research and providing direction to investigators
- Seeking opportunities to add caregiver component to approved PCRC studies



### **Clinical Studies Core**

Director: Francis (Frank) Keefe, PhD Sub-Investigator: Tammy Somers, PhD



- Provide guidance in matching study design to research question
  - Methods relevant to PCEOL intervention studies, clinical trials, and biobehavioral outcomes
- · Facilitate prompt responses to funding opportunities
- Connect investigators to consultants (including PCRC experts) who work closely with investigators to develop high-quality PCFOL studies
- Incorporate novel approaches into PCEOL studies, such as biobehavioral interventions for symptom management



### **Measurement Core**

Director: Ethan Basch, MD MSc Sub-Investigator: Antonia Bennett, PhD



- Provide advice regarding study measures and study-specific challenges
- · Identify measures relevant to EOLPC populations, eg:
  - measurement tools appropriate for populations with changing and declining cognition;
  - tools for measuring quality-of-life among caregivers of PCEOL patients; and
  - o instruments appropriate for use in people with multiple co-morbid conditions
- Provide centrality and standardization of outcomes, measures, and metrics in study conceptualization, design, conduct, and analysis





### **EXAMPLES OF PCRC PRODUCTS**



PCRC Proprietary

### **Core Measures & Core Data Elements Library**



- Commonly used forms such as enrollment, demographics, and baseline clinical data.
- · Common forms library
  - Survey instruments to measure concepts such as: symptoms, pain, health related quality of life, depression, coping, well-being, selfefficacy, satisfaction with care, and caregiver burden
- · Library of PCRC-preferred common data elements
  - Provide recommendations for elements in use / existence that are relevant and applicable to be cost effective and allow for multi-study data analysis.
- Common data formats and web-based data forms /electronic data entry system



### PCRC Studies: Completed

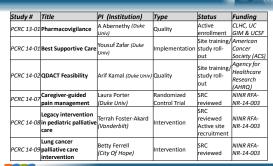


Study #	Title	PI (Institution)	Туре	Status	Funding
		A Abernethy (Duke Univ) J Kutner (Univ Colorado)	Control Trial	Closed; manuscript under review after revision	NINR UC4



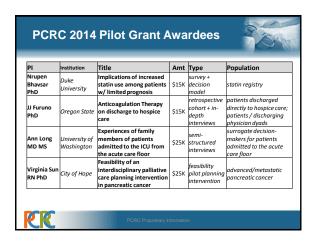
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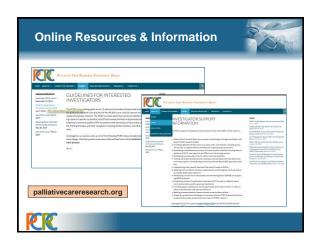
### PCRC Studies: SRC Reviewed / Active





PCRC Proprietary Information















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