Facilitating Comprehensive Geriatric Assessment in Older Adults with Cardiovascular Disease

Association of Subspecialty Professors Award
Awarded to Geriatric Cardiology Section

Agenda

• Welcome and Introductions
• Background to Award / Grant
• Clin-CARE
• Comprehensive Geriatric Assessment
• Why Geriatric Cardiology?
• Practical Tips for Success
• Collaboration
Introductions

• Mat Maurer, MD
  – Chair, Geriatric Cardiology Member Section of ACC
  – Arnold and Arlene Goldstein Professor of Cardiology, CUMC
  – Director, Clinical Cardiovascular Research Lab for the Elderly

• Jonathan Shaffer, PhD
  – Site PI, Clin-CARE ASP Grant, CUMC
  – Co-Director of Clin-CARE ASP grant
  – Assistant Professor of Medical Sciences (in Medicine and Psychiatry) at CUMC

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Association of Specialty Professors (ASP)

- Organization of specialty internal medicine divisions at medical schools and community teaching hospitals in US and Canada.
- One of five unique, professional associations that collectively form the AAIM (Alliance for Academic Internal Medicine).
- Provides grants
  - GEMSTAR / T. Frank Williams Scholars Program
  - Integrating Geriatrics Into the Specialties of Internal Medicine

Objectives

1. Deploy the Clinical Comprehensive Assessment and Referral Evaluation (Clin-CARE) instrument on the web.
2. Engage FITs in the performance of CGAs with their patients.
3. Demonstrate the value of CGAs in the delivery of high quality patient centered care for older adults with CVD.
4. Develop these assessments into a dataset that facilitates dissemination of scientific knowledge in peer reviewed publications to the broader cardiology community.
Fellow in Training (FIT) Champions

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Deena Goldwater</td>
<td>Mt. Sinai Medical Center/NY</td>
</tr>
<tr>
<td>Lisa LeMond</td>
<td>Oregon Health and Sciences</td>
</tr>
<tr>
<td>Subroto Acharjee</td>
<td>Einstein/Philadelphia</td>
</tr>
<tr>
<td>Tracy Hagerty</td>
<td>Washington University</td>
</tr>
<tr>
<td>Maninder Singh</td>
<td>Guthrie / Pennsylvania</td>
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Clin-CARE
Clinical Comprehensive Assessment and Referral Evaluation

• Systematic interview
• Designed to enhance clinical, teaching and research approaches to understanding the QOL needs of older patients.
• Developed by researchers at the Stroud Center for the Studies of Quality of Life in Geriatrics and Gerontology at Columbia University.
• Been employed for > 4 decades in various NIH funded studies and in clinical environments.

ORIGIN AND DEVELOPMENT OF Clin-CARE

• 1965: Method For Assessment Of Social Adjustment Outcomes Johns Hopkins Psychotherapy Research: SSIAM
• 1976: Method For Assessing Medical And Mental Disorders Of Elderly: US-UK Geriatric Hospital Study: Geriatric Mental State Examination: GMS
• 1977: Method For Assessing Health Related Qualities Of Later Life Comprehensive Assessment And Referral Evaluation: CARE
• 1984: Concise Version Of The Care For Epidemiological And Outcome Studies : SHORT-CARE
• 1990: Concise Version Of The Care For Clinical Geriatric Studies: CLIN-CAR
Aims of Clin-CARE: I

1. Systematically collect information on health-related QoL in older patients for analysis and display.

2. Where QoL refers to health and aging problems that impact negatively on a patient’s subjective *perceptions* and/or on the *ability* of the patient to compensate for that negative impact.

Examples:

- *Perception*: Do you have any difficulty walking outdoors? Difficulty walking outdoors
- *Ability*: How many days gone out of the house in the past week? Days out during past week

AIMS of Clin-CARE: II

The Comprehensive Assessment and Referral Evaluation (CARE)

**Assessment:**
- A guided, sequenced, and specific set of questions with defined and coded answers.

**Comprehensive:**
- Covers QoL indicators relevant to the impact of mental and physical health disorders.
- Includes social and situational determinants of causation and outcomes.

**Referral Evaluation:**
- The profile of information assists a clinical team member to take next steps for intervention.

**Perspective:**
- *Generic*: Includes QoL components found in disparate measures developed for a variety of health and social problems.
AIMS AND CONTENT OF THE CARE: III

- Impacts on QoL may **originate** from single or multiple problems, and may **impact** on a single ability or multiple abilities.
- So assessment has to cover **multiple domains** of problems and impacts.
- Details of problems and impacts may vary by health condition (**condition specific QoL**), but those perceptions and impacts also share some characteristics (**generic QoL**).
- Because co-morbidities are common in older persons, the Clin-CARE emphasizes a **generic** scope for health-related QoL but also includes **specific** items:
  - **Examples:**
    - **Generic:** Walking up stairs or carry a heavy package hurrying without shortness of breath.
    - **Specific:** Describes pain or other discomfort in chest on exertion.

Psychometrics of CARE and variants

- The CARE, SHORT-CARE AND CLIN-CARE have each been extensively developed using state-of-the-art psychometric theories and procedures, between 1977 and 1990.

- Latent class analysis, item bias theory, inter-rater reliability, concurrent and predictive validity, construct validity, latent trait analysis, and cross-cultural consistency have been examined.

- **Attachment lists full citations**
Epidemiological Studies
Based on the ‘CARE’

- Growing Older in New York City in the 1990s: (CARE) Community elders: N=1500+
- Planning for the Elderly; NY Community Council: (CARE) 1980 Community: N=450
- Informants of elders in (INF CARE) NY. 1994: N=199.
- Gospel Oak project. community elders: London borough (SHORT-CARE) N=656.
- Elderly psychiatric patients: Queens County, NY and Camberwell, London.
- CCAP: Patients 65 + in a primary care hospital based service. (CLIN-CARE) N=170
- SHEP: USA: Elderly patients with systolic hypertension. (SHORT-CARE) N=551
- NMAP: North Manhattan: Representative Community (CARE) N=2000+
- NURSING HOME: Residents 65+ years. (INCARE) N=162 in NY, N=159 in London

Attachment lists full citations.

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Comprehensive Geriatric Assessments (CGAs)

- Cornerstone of geriatric medicine
- Improve care and outcomes for frail / chronically ill older adults
- Factors limiting their widespread application include:
  1. They have not been integrated into the traditional systems established to care for elderly patients,
  2. They are time consuming and not reimbursed,
  3. Cost effectiveness of such programs has not been demonstrated,
  4. They have never been automated.

Benefits of CGAs

- Crucial for reducing subsequent morbidity
- Essential for appropriate use of CV services
- Increase patient, caregiver and physician satisfaction
- Guide “patient-centered” CV care for older adults
- Can monitor the progress of individuals over time
- Thus facilitating rapid comparative effectiveness evaluations of ongoing and newly created programs for older adults
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The Aging Population

The aging of the population will have profound influences on health care in the United States and throughout the world.

It is estimated that by 2050, the number of Americans over the age of 65 will double, and the number of Americans over age 85 will increase five-fold or more.

(Source: US Census)
Oldest Old (>85 years) – Fastest growing segment of the population

Why Geriatric Cardiology?

60% of all deaths attributable to CVD occur in the 6% of the population ≥ 75 years of age.

Mainstream Cardiology is “De facto” Geriatric Cardiology

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Average Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart failure</td>
<td>78</td>
</tr>
<tr>
<td>Myocardial Infarction</td>
<td>68</td>
</tr>
<tr>
<td>Atrial Fibrillation</td>
<td>72</td>
</tr>
<tr>
<td>Peripheral Vascular Disease</td>
<td>76</td>
</tr>
<tr>
<td>Stroke / TIA</td>
<td>75</td>
</tr>
</tbody>
</table>
Aortic Valve Replacement: Increasing Need and Greater Success

*JAMA*. 2013;310(19):2078-2085

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Age: A Non-Modifiable Risk Factor?

In the absence of sound evidence, these decisions can be strongly influenced by the stereotypic and often negative perception of older adults (1).

*JACC* 2003;42(8):1427-8
Unique Aspects of CV Care for Older Adults

<table>
<thead>
<tr>
<th>Traditional Cardiology</th>
<th>Geriatric Cardiology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment focused on the heart</td>
<td>Treatment considers the patient</td>
</tr>
<tr>
<td>Few comorbidities</td>
<td>Multiple comorbidities</td>
</tr>
<tr>
<td>Treatment yields expected outcomes</td>
<td>Treatment may result in complex effects</td>
</tr>
<tr>
<td>Large simple trials apply</td>
<td>Large simple trials have limited generalizability</td>
</tr>
<tr>
<td>Evidence-based medicine</td>
<td>Patient-centered evidence-based medicine</td>
</tr>
<tr>
<td>Cardiovascular reserve usually preserved</td>
<td>Cardiovascular reserve usually compromised</td>
</tr>
<tr>
<td>Outcomes: death, MI, revascularization</td>
<td>Outcomes: morbidity, function, independence, cognition</td>
</tr>
</tbody>
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Who can participate?

• Any cardiology fellow including:
  – General Cardiology
  – Subspecialty trainees
• Also allied health professionals
• Reimbursed at $30 / interview
• Meet institutional requirements (e.g. IRB)
  – Possibly exempt, no risk
  – Sample IRB is provided
  – Consent requirement variable
What patients are eligible?

• ≥ 75 years of age.
• Men and women
• Any cardiovascular diagnosis including:
  – Coronary Artery Disease - Dyslipidemia
  – Atrial Fibrillation or Flutter - Systemic Embolism
  – Hypertension - Peripheral Vascular Disease
  – Heart Failure - Prior Stroke or TIA
• Stable outpatients
• English speaking (currently)

Clin-CARE: Domains

• General Health
• ADLs / Mobility
• Subjective Memory / Cognitive Status
• Depressed Mood
• CV and Illness Episode
• Pain
• Effort Intolerance

• Sensory Status
• Living Conditions
• Stresses and Fears
• Health Style
• Service Use
• Communication
• Positive Qualities
### Clin-CARE: Subscales

- General Health
- Health Restrictions
- Self Care
- Service Problems
- Mobility Problem
- Instrumental Activities
- Effort Intolerance
- Neurological
- Respiratory
- Cardiovascular
- Subjective Memory
- Objective Memory
- Medication Test
- Happiness / Satisfaction
- Depressed Mood
- Somatics
- Worrying / Anxiety
- Chronic Illnesses
- Hearing
- Vision
- Oral health
- Social Network
- Living conditions
- Sexual
- Stressors
- Unhealthy Lifestyle
- Cancer alert
- Drug Abuse, Alcohol
- Communication
- Positive attributes

### ClinCARE: Special Considerations

- Establishing rapport and constraints
- Open-ended questions
- Double-barred questions
- Time frame
- Defining terms
ClinCARE: Special Considerations

- Sensitive questions
- Providing and soliciting feedback
- Following up

Proposals for Publication (P&P)

- Submitted to Kelli Bohanan @ kbohanno@acc.org.
- Short (<2 pages)
- Proposed topic
- Authors (preferably multiple FITs)
- Hypothesis
- Data needed
- Analytic approach
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Collaboration

• *collaborate*
  \[kə-ˈla-bə-, ˈrāt\]
  – to work with another person or group in order to achieve or do something
  – to work jointly with others or together especially in an intellectual endeavor

• Examples
  – Cochrane Collaboration
  – Multi-disciplinary teams
  – Consortium – GNYGCC.org
Collaboration

The New England Journal of Medicine

Pilot Grant – 12 months

1/1/2014

Deploy web-based Clin-CARE
www.geriatric-cardiology.org

6/1/2014

Data collection, Reproducibility, Hypotheses

12/1/2014

Abstract Manuscript Preparation

Pilot Grant – 12 months

Future Opportunities

- Self-administration
- Longitudinal data
- Monitor progress of individuals over time
- Evaluate new service
- Comparative effectiveness studies
- Guide “patient-centered” CV care for older adults.
- NCDR
Next Steps

• Review Clin-CARE
• Regulatory Approvals
• Training Interview – by June 1, 2014
• Commence interviews
  – Goal: 500
• Monthly conference calls
  – Discuss progress / issues
  – Review P&Ps

Clin-CARE: Demonstration

www.geriatric-cardiology.org
Questions?