How Can Interdisciplinary Cooperation Improve Care for Cancer Patients

5th European Cardiovascular Safety Conference 2011

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Overall Message

• The way that oncologists and cardiologists interact with each other is important
  – patient care outcomes,
  – health care organizational outcomes
  – scientific discovery
  – the fulfillment of the involved physicians
My Goals

• To provoke
  – Some reflection about your own experience and your own sense of emerging opportunities
  – Foster some new ideas for collaboration at the interface of cardiology and oncology

My Perspective

• Medical oncology, palliative care
  – ASCO, AAHPM
• Tertiary cancer center in the U.S.
  – MD Anderson Cancer Center, Houston, Texas
• US National Cancer Institute (NCI) cooperative group trialist
  – Eastern Cooperative Oncology Group (ECOG)
  – MD Anderson Cancer Center CCOP Research Base
Interprofessional Communication: Complex and Critical

Complex
- Physician types
- Scope of interactions
- Types of interactions

Critical
- Patient safety
- Patient satisfaction
- Family satisfaction
- MD satisfaction/QOL
- Reputation/business
- Research progress

Our ideal collaborative culture: a discovery-centered environment

- Compassion
- Accountability
- Level playing field
- Transparency
- Shared resources

- Excellence
- Collaboration
- Respectfulness
- Hard work
- Mentorship
## Physician types: one kind of typology (from the academic perspective)

<table>
<thead>
<tr>
<th>Your Academic Campus</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cancer specialists</td>
<td>• Your satellite heme/onc</td>
</tr>
<tr>
<td>• General oncologists</td>
<td>• Other community cancer specialists</td>
</tr>
<tr>
<td>• Other MDs</td>
<td>• Other community MDs</td>
</tr>
<tr>
<td></td>
<td>Miscellaneous</td>
</tr>
<tr>
<td>Other Academic Center</td>
<td>• Pharma MDs</td>
</tr>
<tr>
<td>• Cancer specialists</td>
<td>• Regulatory agency MDs</td>
</tr>
<tr>
<td>• Other MDs</td>
<td>• Business and lay organization MDs</td>
</tr>
<tr>
<td></td>
<td>• Yet others...</td>
</tr>
</tbody>
</table>

## An alternate typology

- Physician scientists
- Clinical investigators
- Clinicians
  - Including “Master” clinicians with special experience and skills
- Physician administrators in healthcare
- Physicians working outside of direct healthcare
Scope of clinical interactions

- Referral for cancer treatment
- Referral for cardiology care
- Shared care
  - Before, during, or after cancer treatment
- Urgent care
  - ER/ICU
- Post care follow-up (after cardiology care or cancer treatment)
  - Clinical updates,
  - notifications when patient dies

Types of clinical interactions

Frontstage
- Conferences
- On rounds
- With patients
- In chart (EHR)
- Indirect
  - Through patients, mid-level providers
- Snail mail
- Social media

Backstage
- Email
- Phone
- Hallway/elevator
- Social events
Vignette from Dr. Donald Berwick (CMS Administrator in the US)

An attending physician on rounds strides into a hospital room with an entourage of medical students and asks his patient this question: “How can we do a better job of caring for you?”

“Team-Based Competencies: Building a Shared Foundation for Education and Clinical Practice (February 16, 2011). In partnership with the Interprofessional Education Collaborative.

Berwick’s Vignette...

- The patient, a 15-year-old boy named Kevin, has been in and out of the hospital 30 or 40 times for treatment of short bowel syndrome, a condition in which nutrients are not absorbed properly and is commonly caused by the need for surgical removal of the small intestine. This veteran of the health care system says he’s been very happy with the care he has received over the years, but, when pressed, says this: “I have great doctors and nurses here—but can you please talk to each other?”
Vignette: Transitioning patient back to the community (complex survivorship)

...here is a recent one that I found odd. Mrs. X has been with us forever, very complicated, frequently admitted. Cancers now all in remission but still some BM suppression and cardiac issues related to prior extensive chemo for lymphoma. And now after 20yrs of care a community transition case manager is requesting to send her out to somewhere else.
Contemplating this vignette...

• **Current team**: clinical investigator (GI medical oncology) and master clinician (cardiology)
• **Future team**: community medical oncologist and community cardiologist
• **Type of interaction**: mostly indirect (through patient and case manager)

...contemplating this vignette

• How will this transfer of care affect patient care utilization, outcomes, and satisfaction?
• What is the business reality for each of the four physicians in relation to the next 1 year of care provided?
Aspects of Work (applied to patient care)

What is the work group trying to achieve?

Who is responsible for what tasks?

Patient Management Model

Exactly how to perform tasks?

How to exchange information, materials or services?


Physicians care what other physicians think of them

- Respect
- Appreciation
- Understanding (empathy)
- Shared connection(s)

- Patronized
- Abused
  - “dumped upon”
  - Made to look bad
Cancer patients with cardiac co-morbidity are vulnerable

- Patients are often trapped within the skill set of their cancer specialists
  - In part due to the dis-utility of cancer-related death perceived by patients and their oncologist
- Cancer specialists are most often de-skilled in cardiac aspects of care
  - Managing hypertension, CHF, etc are not emphasized
- Most cardiologists have little understanding of cancer care and the changing landscape related to new therapies

“It ain’t what you don’t know that gets you into trouble. It’s what you know for sure that just ain’t so.”

- Mark Twain
**Pitfalls to avoid....at the interface**

- Avoiding conflict
- Assuming you know the whole story
- Repeatedly trying to convince the other party
- Assuming you know their intentions
- Holding the other responsible for fixing the issue

- Proceeding as if it can all be rationale
- Question their ethics
- Use of anger/sarcasm
- Ignoring your own strong emotions
- Proceeding in the heat of the moment

**Your arsenal for effective interprofessional communication**

- Open-minded, curious mindframe
- **Equipoise**
  - Active listening
  - Mindful self-disclosure
  - Explaining/reframing
  - Empathizing
  - Brainstorming
Factors Influencing Change in Interprofessional Education

Reinforcing Change
- Emphasis on quality
- Focus on patient
- Promise of healthcare reform
- Aging society
- Rapid evolution of scientific knowledge

Restraining Change
- Paucity of role models
- Reimbursement
- Resistance to change
- Logistical barriers

"While doing the research, keep in mind there are only two kinds of facts... those that support my position... and inconclusive."
### Cardiology-Oncology Interface: Variety of Professional Stakeholders

<table>
<thead>
<tr>
<th>Professional Organizations</th>
<th>Other Key Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ACC (American College of Cardiology)</td>
<td>• CSRC (Cardiac Safety Research Consortium)</td>
</tr>
<tr>
<td>• AHA (American Heart Association)</td>
<td>• DIA (Drug Information Association)</td>
</tr>
<tr>
<td>• ESC (European Society of Cardiology)</td>
<td>• Government organizations</td>
</tr>
<tr>
<td>• ASCO (American Society of Clinical Oncology)</td>
<td>- NIH/NCI/NHLBI/FDA (US)</td>
</tr>
<tr>
<td>• AACR (American Association for Cancer Research)</td>
<td>- others</td>
</tr>
<tr>
<td>• ESMO (European Society of Medical Oncology)</td>
<td>• Major academic centers</td>
</tr>
<tr>
<td></td>
<td>- Tertiary cancer centers</td>
</tr>
<tr>
<td></td>
<td>- Other academic cancer programs</td>
</tr>
</tbody>
</table>

### Heterogeneity between Stakeholders

- Education
- Advocacy for their members
- Advocacy for the field (science and public health, and drug development)
- Funding research
- Conducting research
An example of new educational collaboration: ASCO & the ACC

- The Cardiac Co-Morbidity Boards—part of ASCO University
- A free product to ASCO members and non-members
  - Requires registration/password
- Case-based learning with leading oncologists and cardiologists as discussants
- Modules include reference to published data and unpublished data presented at national meetings

Cardiac Toxicities Associated with VEGF Signaling Pathway Inhibitors

Daniel J. Lenihan, MD
Kathy Miller, MD
Learning Objectives

• Anticipate and recognize cardiovascular (CV) complications that may arise in cancer patients being treated with VEGF signaling pathway (VSP) inhibitors.

• Describe and incorporate optimal monitoring techniques to ensure patient safety.

• Detail preferred treatment strategies for CV conditions and apply them when appropriate.

• Consider the data that are known and outline needs for future clinical research in regard to the CV toxicities associated with VSP inhibitor regimens.
Incidence of Hypertension

- Though the rates of hypertension in individual trials vary, a recent meta-analysis including nearly 13,000 patients treated with bevacizumab found an overall incidence of significant hypertension of 8%.
- The risk of HTN with other VSP inhibitors is significant

Chu et al. Lancet 2007 Abstract
Ewer, M et al. ESMO 2010
Maitland et al. JNCI 2010

Anthracyclines and Trastuzumab: Cardio-oncology Risk/Benefit

Michael Ewer, MD, JD
Charles E. Geyer, MD, FACP
Planning Group
Richard Steingart, MD
Sandra Swain, MD

This series is co-sponsored by the American College of Cardiology Foundation

Turn your speakers on!
Faculty

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Sandra Swain, MD
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Learning Objectives

• Enhance multidisciplinary awareness of the risks for cardiac toxicity of anthracycline-based chemotherapy followed by taxane chemotherapy combined with trastuzumab in the adjuvant treatment of HER2 positive breast cancer.

• Enhance multidisciplinary awareness of the risks for cardiac toxicity of non-anthracycline-based chemotherapy with trastuzumab in the adjuvant treatment of HER2 positive breast cancer.

• Apply knowledge of risk factors for increased cardiac toxicity to guide clinical choice of chemotherapy regimens to combine with trastuzumab in the adjuvant setting.
Case Presentation

A 66-year-old woman presents with a recently diagnosed 1.2-cm nodule in her left breast.

Biopsy reveals grade 3 infiltrating ductal carcinoma: estrogen receptor-positive (ER-positive), progesterone receptor-negative (PgR-negative), HER2 2+ by immunohistochemistry (IHC), and HER2-positive by fluorescence in situ hybridization (FISH).

A lumpectomy with sentinel node resection is performed, and one of three nodes is positive. Two of 17 nodes are positive in the completion dissection specimen. The resected tumor is ER-positive and PgR-negative. HER2 is positive by FISH (ratio of 4.7).

The patient desires the “best possible” treatment for her disease, and the decision is made to provide chemotherapy followed by endocrine therapy and 1 year of trastuzumab initiated with chemotherapy.

5-Year Cumulative Incidence of Cardiac Events

<table>
<thead>
<tr>
<th>Years Post Day 1 Cycle 5</th>
<th>Cum Inc Arm 1 (%)</th>
<th>Cum Inc Arm 2 (%)</th>
<th>Number At Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>0.5</td>
<td>3.3</td>
<td>1678</td>
</tr>
<tr>
<td>2.0</td>
<td>0.6</td>
<td>3.6</td>
<td>1271</td>
</tr>
<tr>
<td>3.0</td>
<td>0.9</td>
<td>3.8</td>
<td>907</td>
</tr>
<tr>
<td>4.0</td>
<td>0.9</td>
<td>3.8</td>
<td>569</td>
</tr>
<tr>
<td>5.0</td>
<td>0.9</td>
<td>3.8</td>
<td>186</td>
</tr>
</tbody>
</table>

*Arm 1 events among crossover patients censored

Rastogi ASCO 2007 Abstract #512
The challenge of collaboration...research

- Example: let’s propose a cardiotoxicity registry in the US for cancer patients treated in the community and/or academic setting
  - Understand the short and long-term outcomes for patients receiving care in ordinary settings
  - Describe the current patterns of care
  - Promote awareness and dialogue across disciplines and between academic/community MDs
  - Provide useful data to inform future hypothesis-driven research

...the challenge of collaboration

- Who would fund such an initiative?
  - NCI?
    - Cardiology issues have no specific review panel or place in the Division of Cancer Treatment and Diagnosis (DCTD) or the Division of Cancer Prevention (DCP)
  - ASCO or ACC or AHA or some the combination?
    - This would require some new direction and dialogue
  - DIA, CSRC?
  - Others?
    - Philanthropy, pooled pilot funds from academic centers, advocacy organizations, etc.

- Who would provide the scientific review?
- Who would own the data and how would it be shared?
- How could existing registries be harmonized?
"It's nothing that a few stem cells and 75 years of research can't fix."

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Where do Cardiology-Oncology research questions fit in?

Source: Alzheimer's Drug Discovery Foundation
Overall Message

The way that oncologist and cardiologists interact with each other is important to patient care outcomes, health care organizational outcomes, the advancement of science, and to the fulfillment of physicians...

It starts with dialogue, and involves skills that can be learned, developed, and taught