Coleman Supportive Oncology Initiative
Supportive Care Training Module
Topic: What is Supportive Oncology Care?

Presenters: Frank J. Penedo, PhD and Shelly S. Lo, MD
updated by Christine B. Weldon, MBA; Julia R. Trosman PhD and Betty Roggenkamp, BA

Version: 08282018
Learning Objectives

By the end of this module you should be able to:

1. Define supportive oncology care and describe its role

2. Explain the appropriate timing of supportive oncology care services, with a focus on distress screening

3. Describe factors that may impact the needs of specific patient populations
Supportive Oncology Care Defined

- Includes all the care that cancer patients need outside of their direct medical treatment
- Is care given to improve multiple aspects of quality of life for cancer patients
- Its goal is to prevent or treat the following as early as possible:
  - Symptoms of the disease
  - Side effects caused by treatment
  - Psychological, social and spiritual concerns related to the cancer or its treatment

Conceptual Framework of Supportive Oncology Care

Supportive care guidelines include attention to:

- Distress management
- Palliative care
- Cancer-related fatigue
- Adult cancer pain
- Antiemesis (vomiting and nausea)
- Cancer-associated venous thromboembolic disease
- Cancer- and chemotherapy-induced anemia
- Myeloid growth factors
- Prevention and treatment of cancer-related infections
- Smoking cessation
- Survivorship
- Management of immunotherapy-related toxicities
- Adolescent and Young Adult Oncology
- Older Adult Oncology
- Cancer in people living with HIV
Note: Supportive oncology care includes the 3 CoC standards above - 2.4 Palliative Care Services, 3.2 Psychosocial Distress Screening and 3.3 Survivorship Care Plan.

For more information, see the training modules available in each of these areas.
Timing of Screening

The Commission on Cancer Standard 3.2 requires distress screening at pivotal points in care.

Pivotal points in care include:

- Initial consult and treatment planning
- Transition points in treatment
  - Initiation of treatment or treatment changes
  - Changes in prognosis
  - Change in goals of care
  - Enrollment in a clinical trial
  - Major life events
  - Transition to post-primary and survivorship care
  - Transition to end-of-life considerations
- Introduction of new services (palliative care, hospice care, etc.)
- When the patient or medical team members identify new patient needs or concerns

Patient Centered Psychosocial Supportive Care

**Goal:** To enable patient self-empowerment, respond to emotions and help manage uncertainty

**Should be sensitive to:**
- Patient vulnerability
- Degree of education and patient health literacy
- Possible reluctance to assert preferences and ask questions
- Preferences related to treatment
- Cultural and spiritual beliefs

**Should include:**
- Patient education and empowerment
- Timely communication
- Identifying and documenting a health care proxy
- Information about prognosis
- For patients with stage IV cancer, should include advance care planning
- Coordination and development of a treatment plan
- Consideration of mental health issues
- Shared decision-making

Patlak, M., Balogh, E., Nass, S., Rapporteurs: IOM, 2011
Different Patient Populations Needs

Over the course of their care, patients’ needs for supportive services will vary greatly and will be largely dependent on the individual needs of each patient.

Factors that can impact the type of services needed include:

- The patient’s age
- Functional status
- Coping abilities
- Employment status
- Roles and responsibilities
- Community system
- Access to resources
- The patient’s understanding of their care
- Type of treatment received and modality of care
- Patient’s prognosis and goals of care
- Comorbid diseases
- History of mental health concerns/diagnoses
- Family and support systems
- Insurance benefits or access to insurance
- Financial resources

Alfano, C. M. & Rowland, J. H., 2006
An elderly widowed patient with other comorbidities recently diagnosed with colon cancer. She presents with financial needs, transportation barriers or concerns about how to care for herself at home.

She may also have difficulty understanding her diagnosis, prognosis, care or treatment options.

She may not have a family system that is accessible or able to participate in her care.

Alfano, C. M. & Rowland, J. H., 2006
Different Patient Populations Needs – Example 2

A young adult with lymphoma may have difficulty balancing their family role at home with their new role as a patient.

They will likely have to address employment-related issues (e.g., taking time off from work or pursuing short or long-term disability) and the navigation of potential financial instability that receiving cancer treatment can create.

Patients entering survivorship also have to navigate ongoing psychosocial issues and understand their legal and employment rights as a survivor going forward.
Summary of Points Covered

In this training module we:

• Defined supportive oncology

• Discussed the appropriate timing of distress screening to guide delivery of supportive oncology care

• Differentiated the components that may impact the needs of different patient populations
Next Steps

For more detailed training on this topic, you can go to the following resources:

National Comprehensive Cancer Network®

➢ **NCCN Guidelines® for Supportive Care**
  http://www.nccn.org/professionals/physician_gls/f_guidelines.asp#supportive

➢ **NCCN Continuing Education. NCCN 2015 Congress Webinar Series: Breast Cancer - Supportive Care and Survivorship (Recorded Presentation)**
  https://education.nccn.org/node/65813

➢ **NCCN Clinical Practice Guidelines in Oncology**
Faculty Bio for Frank J. Penedo, PhD

Dr. Frank J. Penedo is the Roswell Park Professor of Medical Social Sciences, Psychology and Psychiatry and Behavioral Sciences. He is also the Program Leader of the Cancer Control and Survivorship Program in the Lurie Cancer Center and the Director of the Cancer Survivorship Institute at Northwestern Medicine. He is trained in clinical psychology and behavioral medicine and his research has focused on evaluating the role of psychosocial, sociocultural and biobehavioral processes in adjustment, health related quality of life (HRQOL) and health outcomes in chronic disease populations with a major emphasis on diverse cancer survivors in regard to race, ethnicity and socio-economic status. Dr. Penedo has served as PI, co-PI or project leader on multiple NIH-funded studies addressing psychosocial and biobehavioral correlates of adjustment and the efficacy of psychosocial interventions in improving HRQOL, symptom burden and health outcomes in chronic disease populations. He has significant expertise in community based, cohort and intervention studies that target cancer survivors and involve collection and analyses of psychosocial and biological data. He has over 110 peer-reviewed publications, has served as associate editor of two major journals in his field, and some of his translational work has been disseminated as clinical intervention tools. Dr. Penedo currently serves as a standing member of the NIH BMIO study section and on the editorial board of several major journals in his field. He is the president elect of the International Society of Behavioral Medicine, a fellow of the Society of Behavioral Medicine and a member of the Academy of Behavioral Medicine Research. He has received numerous awards and also served on the advisory boards of community organizations such as the Wellness Community, the Intercultural Cancer Council and Salud America.

For additional information:
http://www.feinberg.northwestern.edu/faculty-profiles/az/profile.html?xid=24719
Faculty Bio for Nancy Vance, BS

Nancy joined LivingWell Cancer Resource Center now part of Northwestern Medicine, soon after its inception in September 2005. Nancy serves as executive director responsible for leadership oversight of psychosocial support services in Northwestern Medicine’s Western region. Nancy brings to this position 27 years of experience in not for profit leadership most of which has been focused in oncology and patient advocacy. She has successfully lobbied in Washington D.C. on behalf of cancer patients and their families to ensure comprehensive cancer services are available to all who need them. Nancy serves on a variety of not for profit boards including the Cancer Health Alliance of Metropolitan Chicago. Nancy earned a Bachelor of Science degree in Business Administration and Communications from Northern Illinois University.

Link to website with additional information about the faculty member:

www.LivingWellcrc.org
Craig is a board certified oncology social worker who joined LivingWell Cancer Resource Center team in March 2013. He serves as the Lead Oncology Social Worker for the Northwestern Medicine Warrenville, Delnor and Chicago Proton Center. Craig has been instrumental in advocating for the needs of cancer patients since 2009. In January 2014 Craig was recognized by the Association of Oncology Social Work for his leadership in advocating for successful expansion of disability parking benefits for individuals living with cancer in the state of Illinois. Craig is motivated by the idea that good cancer care includes advocacy to help people living with cancer access the resources they require to meet their goals and live well. Craig earned his Masters of Social Work from Aurora University George Williams School of Social Work in 2004.

For additional information:
www.LivingWellcrc.org
Faculty Bio for Shelly S. Lo, MD

Shelly S. Lo, MD Director, Cancer Risk Assessment and Prevention Clinic, Loyola University Medical Center and is a medical oncologist specializing in breast cancer and GI malignancies. She is an associate medical director for Loyola Hospice. She is board certified in Medical Oncology and Hospice and Palliative Care.

For additional information:
https://www.loyolamedicine.org/doctor/shelly-lo
References


References


References


Coleman Supportive Oncology Initiative
Supportive Care Training Module
Topic: Documenting Supportive Care Needs and Referrals in a Patient’s Medical Records

Presenters: James Gerhart, PhD, Aidnag Diaz, MD, Catherine Deamant, MD and Julia Trosman, PhD, MBA
updated by Christine B. Weldon, MBA and Betty Roggenkamp, BA

Version: 08282018
Learning Objectives

By the end of this module you should be able to:

1. Explain the key components of supportive oncology care that should be tracked in medical records

2. Contrast how care sites have implemented supportive oncology screening, results and referrals in Epic electronic health records

3. Describe how care sites have implemented and documented advance care planning in Cerner electronic health records
Delivering High-Quality Cancer Care

Patient supportive care starts at diagnosis thru end of life.

Institute of Medicine (IOM), 2013
Communication Across the Care Team

Commission on Cancer (CoC), Cancer Program Standards: Ensuring Patient-Centered Care, 2016 Edition:

“The structure outlined in Cancer Program Standards: Ensuring Patient-Centered Care ensures that each cancer program seeking accreditation provides all patients with a full range of diagnostic, treatment, and supportive services either on-site at the facility or by referral to another location, including community-based resources”

Documenting a patient’s supportive oncology (distress) screening results, referrals and care in the patient’s medical record informs the entire care team across the care continuum.

- Psychosocial distress screening for patients (including all supportive care needs)
- Referral/receipt of supportive care indicated by screening (e.g., palliative care services)
- Treatment and goals of care planning, when appropriate advance care plans
- Follow-up care at the completion of treatment, including a survivorship care plan

Palliative care refers to patient- and family-centered care that optimizes quality of life and end-of-life care.

Interdisciplinary team of medical and mental health professionals, social workers and spiritual counselors provide palliative care services.

Annually, the cancer committee will define on-site and off-site services. If on-site, a palliative care team member is required to be on this committee.

Palliative care services not provided on-site must be provided through a formal referral to other facilities and/or local agencies.

Compliance with Commission on Cancer, 2016 Standard 2.4, Palliative Care

Palliative care services include:

- Team-based care planning that involves the patient and family
- Pain and non-pain symptom management
- Communication among patients, families, and provider team members
- Continuity of care across a range of clinical settings and services
- Attention to spiritual comfort
- Psychosocial support for patients and families
- Bereavement support for families and care team members
- Hospice care

Documentation: Palliative services, on-site or referral, and the cancer committee minutes documenting the process and monitoring of these services, is to be entered in all standard fields in the Survey Application Record (SAR).

Compliance: Palliative care services are available to patients, either on-site or by referral, and these services are monitored, reviewed and documented in the minutes by the cancer committee.

Compliance with Commission on Cancer, 2016 Standard 3.2, Psychosocial Distress Screening

- **Timing:** All cancer patients must be screened for distress at least one time at a pivotal medical visit.

- **Assessment and Referral:**
  - “If there is clinical evidence of moderate or severe distress based on the results of the distress screening, a member of the patient’s oncology team (physician, nurse, social worker, and/or psychologist) must assess the patient to identify the psychological, behavioral, financial and/or social problems initiating the distress.”
  - “This assessment will confirm the presence of physical, psychological, social, spiritual, and financial support needs and identify the appropriate referrals as needed.”

- **Documentation:** Screening, referral or provision of care, and follow-up are **documented in the patient medical record** to facilitate integrated, high-quality care. Cancer committee minutes documenting the process and monitoring of these services, are to be entered in all standard fields in the Survey Application Record (SAR).

- **Compliance:** The cancer committee develops and implements a process to integrate and monitor on-site psychosocial distress screening and referral for the provision of psychosocial care. This screening process is evaluated, documented and reported to the cancer committee.

Screening data can be entered into an Epic Flowsheet that is linked to a physician visit.
Screening data can be entered into an Epic Flowsheet that is linked to a physician visit.
Epic can compute data and streamline interpretation of data with its Best Practice Alerts (BPA), which can trigger a suggested order.

- This eases interpretation and closes gaps when referrals could be overlooked.
- ‘Do Not Order’ option is needed because providers may have additional information about patient needs (e.g., patient already has a therapist).
- Flowsheet data can be stored longitudinally as an Ambulatory Flowsheet for rapid review, quality improvement and research purposes.
Documenting Advance Care Plan in a Electronic Medical Record (EMR) using Cerner EMR as an Example

Basic Information and Section 1

Section 1: Complete if patient is decisional and selecting a decision maker for future healthcare decisions when patient no longer able to make decisions (applicable for any patient)

Section 2: Complete if patient is NOT decisional and invoking the Health Care Surrogate Act

Section 3: Complete if patient is NOT decisional and patient has previously completed an advance directive

Section 4: Document discussion about advance care planning with patients or legal representative for patients with chronic or advanced, serious illness

Section 5: Document decisions about code status and other life-sustaining treatments for patients with chronic or advanced, serious illness

Basic Information

- Patient selection of decision maker for future healthcare decisions when unable to make decisions
- Name of the Primary decision maker / Address / Phone
- Relationship: Spouse/Partner / Adult Child / Parent / Sibling / Grandchild / OTHER

Power of Attorney for Health Care Form completed (Provide original to patient, maintain copy for medical record)

Verbal decision (as documented above in this note)

Proceed to Sections 4 and 5 if patient has chronic or advanced, serious illness

If NOT decisional, then complete Section 2 if invoking the Health Care Surrogate act or Section 3 if has a previously completed advance directive
### Section 2: Patient not decisional and no advance directive

#### Patient is NOT decisional and invoking Health Care Surrogate Act

This section is completed if the patient lacks decisional capacity. The following information is required to be completed under the IL Health Care Surrogate Act and in accordance with hospital policy:

- I have determined that the patient is NOT decisional.
- The patient does not have an applicable advance directive.
- The following physician has also determined that the patient lacks decision-making capacity.
- I have informed the patient of his/her lack of capacity to make decisions and the designation of a surrogate to make decisions and the extent of the surrogate’s authority to make decisions. Objections by patient.
- The patient is unable to answer.

#### I have identified the appropriate surrogate decision-maker in accordance with the IL Health Care Surrogate Act order of priority

Name / Address / Phone

When more than one individual is in the category of potential surrogates, such as multiple children, then must attempt to come to a consensus.

- Patient's guardian of person
- Patient's spouse or partner of a registered civil union
- Any adult son or daughter of the patient
- Either parent of the patient
- Any adult brother or sister of the patient
- Any adult grandchild of the patient
- A close friend of the patient
- The patient’s guardian of the estate
## Documenting in Cerner EMR as an Example

### Section 3: Patient not decisional and has completed advance directive

<table>
<thead>
<tr>
<th>Identification of designated agent for healthcare</th>
<th>Patient is NOT decisional and has completed an advance directive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the Primary decision maker === / Address === / Phone ===</td>
<td></td>
</tr>
<tr>
<td>Relationship: Spouse/Partner / Adult Child / Parent / Sibling / Grandchild / OTHER</td>
<td></td>
</tr>
<tr>
<td>Legal representative provided a copy of previously completed and valid Power of Attorney for Health Care Form (Maintain copy for medical records)</td>
<td></td>
</tr>
<tr>
<td>Verbal decision by patient to healthcare provider as documented in electronic medical record</td>
<td></td>
</tr>
</tbody>
</table>
# Documenting in Cerner EMR as an Example

## Section 4: Documentation of discussion

### Advance Care Planning Discussion with patients with chronic or advanced, serious illness

<table>
<thead>
<tr>
<th>Present for Discussion</th>
<th>Freetext narrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attending MD / APN / Physician Assistant / Housestaff / RN / Social Worker / Patient / Family member(s)</td>
<td>name, relationship</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient/legal representative understanding of illness</th>
<th>Freetext narrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>(include prognostic understanding)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prior experiences with serious illness with family or friends</th>
<th>Freetext narrative</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Patient's hopes or important goals or upcoming events to achieve for their remaining time or legal representative's hopes/goals for the patient</th>
<th>Freetext narrative</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Patient's worries or fears about the future or legal representative’s concern for the patient</th>
<th>Freetext narrative</th>
</tr>
</thead>
</table>

- Uncontrolled pain or suffering
- Burdening family
- Loss of control/being dependent
- Finances
- OTHER
Documenting in Cerner EMR as an Example

Section 4: Documentation of discussion

[Diagram showing a screenshot of a Cerner EMR interface with various options and sections for documenting discussion, including options for basic information, section numbers, and attestation.]
Documenting in Cerner EMR as an Example

**Section 5: POLST** (Physician Orders for Life-Sustaining Treatment)

<table>
<thead>
<tr>
<th>Section 5</th>
<th>Hide Structure</th>
<th>Use Free Text</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physician Orders for Life-Sustaining Treatment</strong></td>
<td>Code Status: Physician Orders for Life-Sustaining Treatment</td>
<td></td>
</tr>
<tr>
<td><strong>Physician Orders for Life-Sustaining Treatment (Goals based on patient/legal representative understanding and given clarification of gaps in understanding and prognosis)</strong></td>
<td><strong>Full Code</strong> - Attempt to prolong life, including life-sustaining interventions</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>DNR</strong> - Accepts intubation (intubation will occur in the event of respiratory failure, but chest compressions will not be performed in the event of cardiac arrest)</td>
<td>Time-limited trial with intent to improve to independence / Accepts tracheostomy and long-term ventilation</td>
</tr>
<tr>
<td></td>
<td><strong>DNR-DNI</strong> - Accepts limited interventions (antibiotics, fluids, blood products, cardiac monitoring, vasopressors, ICU, dialysis, BiPap)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>DNR-DNI - Comfort care</strong> (use medications and other measures to relieve pain and suffering as needed for comfort)</td>
<td></td>
</tr>
<tr>
<td><strong>Artificial Nutrition Decisions:</strong> (Optional to Complete)</td>
<td><strong>No artificial nutrition by tube</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Trial period of artificial nutrition by tube</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Long-term artificial nutrition by tube, as indicated</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Not addressed</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Orders</strong></td>
<td><strong>Order Profile</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attending Attestation</th>
<th>Hide Structure</th>
<th>Use Free Text</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attending Physician Addendum</strong></td>
<td><strong>Personal participation:</strong> History / Physical exam / MDM / OTHER</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Supervisory role:</strong> History / Physical exam / MDM / OTHER</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Case discussed with:</strong> Fellow / Resident / Student / NP / PA / CRNA / OTHER</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Procedures:</strong> Supervised / Performed / Assisted / Present for key portions / OTHER</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Interpretation and Plan:</strong> Agree + / Agree with exception + / OTHER</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Time:</strong> Critical Care Time + / Discharge Time + / Counseling Time +</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Notes:</strong> Free text</td>
<td></td>
</tr>
</tbody>
</table>

Screen shot provided by Cook County Health and Hospitals System
EMR Documentation of Advance Care Planning

- Create single uniform site for documentation of advance care planning information.
  - Epic example - create a Navigator
  - Cerner example - use the Advance Directive folder or tab

- Consider an EMR reminder for patients with cancer.

- Consider creation of code status in a prominent location, such as in the banner, that appears when record is opened.
Summary of Points Covered

In this training module we addressed:

- Components that should be documented, according to CoC standards
- Strategies for complying with CoC standards in Epic
- Approaches for documenting advance care plans in Cerner
Next Steps

For more detailed training on this topic, you can go to the following resources:

National Comprehensive Cancer Network®
- NCCN Clinical Guidelines®
- NCCN Clinical Guidelines®- Distress Management, Version 2.2018 – February 23, 2018

Institute of Medicine
- Cancer Care for the Whole Patient: Meeting Psychosocial Health Needs

American College of Surgeons
- Commission on Cancer, Cancer Program Standards: Ensuring Patient-Centered Care, 2016 Edition
Faculty Bio for James Gerhart, Ph.D.

Dr. Gerhart is an assistant professor and licensed clinical psychologist at the Rush Cancer Center. His research focuses on stress related to chronic illnesses including cancer. Dr. Gerhart is particularly interested in the ways that family and professional caregivers respond when patients express their emotions about cancer. His current projects include the Coleman Supportive Oncology Initiative, and enhancing resilience among professional caregivers.

For additional information:
https://www.researchgate.net/profile/James_Gerhart
Faculty Bio for Aidnag Diaz, MD

Dr. Diaz is an associate professor and chairman of the Cancer Committee at Rush University Medical Center. He obtained his Bachelors and Masters degrees in Nuclear Engineering from Columbia University School of Engineering and Applied Science (SEAS) in New York City, and M.D. and M.P.H. degrees from Columbia University College of Physicians and Surgeons (P&S). He has worked and conducted research at leading institutions such as Brookhaven National Laboratory, Neutron Therapy Facility (NTF) at Fermilab, the University of Washington, and the Cancer Therapy and Research Center (CTRC) in San Antonio.

Dr. Diaz has developed specialized clinics for Brain Metastasis and Spinal Tumors, and is the radiation therapist for the Head and Neck and Neuro-Oncology clinics at Rush Cancer Center. In addition to conducting research on radiation therapy for cancer, and providing direct care to patients, Dr. Diaz oversees the Rush Cancer Center’s compliance with Commission on Cancer Standards. Under his leadership, the Rush Cancer Center was surveyed and received accreditation with commendation by the Commission on Cancer.

For additional information:
http://doctors.rush.edu/directory/profile.asp?dbase=main&setsize=10&display=Y&last=Diaz&pict_id=9058954&tab=4
Faculty Bio for Cathy Deamant, MD

Catherine Deamant, MD, graduated from Rush Medical College and completed her internal medicine residency at Michael Reese Hospital in Chicago, IL. From 1990-2014, she worked as a general internist in the Division of General Internal Medicine at Cook County Health and Hospitals System (CCHHS), with a focus on HIV care and homeless healthcare. In 2001, she established the Palliative Care Program for CCHHS.

From 2012-2014, she served as the Program Director for the Hospice and Palliative Medicine Fellowship, in collaboration with Rush University Medical Center and Horizon Hospice. She was an assistant professor at Rush Medical College.

She is board certified in hospice and palliative medicine. Currently, she is an associate hospice medical director for JourneyCare.
Faculty Bio for Julia Trosman, PhD, MBA

Julia Trosman is co-founder and director of the Center for Business Models in Healthcare, a health services research organization focused on precision medicine and personalized care models. She holds adjunct faculty appointments at the Feinberg School Medicine, Northwestern University, and the Department of Clinical Pharmacy, the University of California, San Francisco. Julia’s work is focused on development and implementation of personalized cancer care delivery and reimbursement models, and adoption and reimbursement of precision oncology. Current projects include Coleman Supportive Oncology Initiative and NIH grants on adoption and reimbursement of genomic sequencing and molecular profiling in cancer. Julia holds an MBA degree and a PhD degree in systems engineering.

For additional information:
References


Institute of Medicine (IOM), *Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis*. 2013. Available at: http://www.nap.edu/read/18359/chapter/1#ii.
