Northern New England Clinical Oncology Society’s 2015 Spring Educational Meeting

PROGRAM

Portsmouth Harbor Events, Portsmouth, NH
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>7:30 am</td>
<td>Registration/Exhibits/Breakfast</td>
<td>HARBOR BALLROOM</td>
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<tr>
<td>8:00 am</td>
<td>Patient Assistance Presentation Breakfast</td>
<td>SEAGLASS ROOM</td>
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<tr>
<td>9:30 am</td>
<td>Clinical Pathways Keynote</td>
<td>SEAGLASS ROOM</td>
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<td></td>
<td>Andrew Hertler, MD, FACP, Chief Medical Officer, New Century Health</td>
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<tr>
<td>10:30 am</td>
<td>Networking / Exhibits / Break</td>
<td>HARBOR BALLROOM</td>
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<tr>
<td>11:00 am</td>
<td>Telemedicine for Patients with Cancer: Providing “wrap-around” services for patients and families struggling with cancer</td>
<td>SEAGLASS ROOM</td>
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<td></td>
<td>Moderator: AJ Horvath, Dartmouth-Hitchcock Medical Center</td>
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<td>Presenters/Panelists:</td>
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<td></td>
<td>Terry Rabinowitz, MD, University of Vermont Medical Center</td>
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<td>Eileen McDonald, MBA, MaineHealth</td>
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<td>Rob Ferguson, PhD, Eastern Maine Medical Center</td>
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<tr>
<td>12:20 pm</td>
<td>Lunch/Exhibits</td>
<td>SEAGLASS ROOM/HARBOR BALLROOM</td>
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<tr>
<td>1:00 pm</td>
<td>Cultivating Meaningful Conversations Panel</td>
<td>SEAGLASS ROOM</td>
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<td></td>
<td>Pam Brown, RN, CHPN, MaineGeneral Hospice</td>
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<td>Elizabeth Hart, MD, MaineGeneral Hospice</td>
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<td>Kathleen McBeth, MA, Cancer Patient Support</td>
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<tr>
<td>2:30 pm</td>
<td>Break</td>
<td>HARBOR BALLROOM</td>
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<tr>
<td>2:40 pm</td>
<td>Oral Adherence Panel</td>
<td>SEAGLASS ROOM</td>
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<td>Moderator:</td>
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<tr>
<td></td>
<td>Mary Ann Ellis, PharmD, BCOP, The Center for Cancer Care at Exeter Hospital</td>
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<td>Panelists:</td>
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<td>Kelly McCue, DNP, CNS, OCN, CHPN, Brattleboro Memorial Hospital</td>
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This continuing nursing education activity was approved by the Oncology Nursing Society, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

Criteria for Successful Completion of the Continuing Nursing Education Program
Participants who wish to receive contact hour credit at the conclusion of this program must:

- Sign in and out at the registration table.
- Complete and submit the signed evaluation and participation attestation.

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Patient Assistance Program Breakfast  
Friday, March 27th  
8:00 am – 9:20 am  
Seaglass Room

### Schedule

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Presenter</th>
<th>Time</th>
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<tbody>
<tr>
<td>Welcome</td>
<td>NNECOS</td>
<td>8:00 AM</td>
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<tr>
<td>Lilly</td>
<td>Alan McWilliams</td>
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<tr>
<td>Bristol-Myers Squibb</td>
<td>Erik Evans</td>
<td>8:08 AM</td>
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<tr>
<td>Amgen</td>
<td>Linda Malachowski</td>
<td>8:14 AM</td>
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<tr>
<td>Janssen</td>
<td>Ward Bennett, Reid Harris, Ned Woody</td>
<td>8:20 AM</td>
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<tr>
<td>Novartis Oncology</td>
<td>Matt McNally</td>
<td>8:26 AM</td>
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<tr>
<td>Astellas</td>
<td>Kevin Kobylinski</td>
<td>8:32 AM</td>
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<tr>
<td>Pfizer</td>
<td>Josh Bergren</td>
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<tr>
<td>Takeda Oncology</td>
<td>Jacqueline Buckley, Colleen Early</td>
<td>8:44 AM</td>
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<tr>
<td>Bayer Healthcare</td>
<td>Mark Montello</td>
<td>8:50 AM</td>
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<td>Incyte</td>
<td>Mark Condon, Eric Hyde</td>
<td>8:56 AM</td>
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<tr>
<td>Genentech</td>
<td>Nancy Lee</td>
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<tr>
<td>Celgene</td>
<td>Emily Ackerman</td>
<td>9:08 AM</td>
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Amgen
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Lilly Oncology Patient Access Specialist
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cell: 845.797.2031
http://www.lillypatientone.com/

Novartis Oncology
Patient Assistance Now
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Regional Account Executive - U.S. Market Access
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P 1-774-236-0231
F 1-866-692-8137

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### Spring Meeting Faculty

**Faculty Disclosure Statement:** The Planning Committee has reviewed all presenter disclosure reports, and has implemented strategies to manage those areas of conflict where they exist. Individuals marked with an asterisk* have no significant financial relationships to disclose.

<table>
<thead>
<tr>
<th>Faculty Name</th>
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<td>Maine General Hospice</td>
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<tr>
<td>Andrew Hertler, MD, FACP</td>
<td>New Century Health</td>
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<tr>
<td>Alexander Horvath, BA*</td>
<td>Employment, Stock - New Century Health; Lecture fees - ASCO</td>
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<tr>
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### Planning Committee Members

**Planning Committee Disclosure Statement:** Financial relationships reported by members of the Planning Committee are provided below. Individuals marked with an asterisk* have no significant financial relationships to disclose.

<table>
<thead>
<tr>
<th>Committee Member</th>
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<tbody>
<tr>
<td>Lori Aubrey, BS*</td>
<td>Northern New England Clinical Oncology Society</td>
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<tr>
<td>Martha Byrne, RN, BSN*</td>
<td>The University of Vermont Medical Center</td>
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<tr>
<td>Rob Ferguson, PhD*</td>
<td>Eastern Maine Medical Center</td>
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<tr>
<td>Charlene Forcier, RN, MS, CHPN*</td>
<td>Norris Cotton Cancer Center</td>
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<tr>
<td>Angela Gibbs, RN, MSN, OCN*</td>
<td>Maine Medical Center</td>
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<tr>
<td>Amy Litterini, PT, DPT</td>
<td>The University of New England</td>
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<tr>
<td>Elizabeth McGrath, MS, APRN, AGACNP-BC, AOCNP, ACHPN*</td>
<td>Dartmouth Hitchcock Medical Center</td>
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<tr>
<td>Amy Stansfield, RN, MBA*</td>
<td>Dartmouth Hitchcock Medical Center</td>
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Teva Pharmaceuticals

Commercial support by these organizations does not influence the objectives and content of this activity.
Controlling Oncology Medication Costs Through Risk-Based Reimbursement & Quality-Driven Utilization Management Models

Dr. Andrew Hertler
Chief Medical Officer, New Century Health

Oncology Presentation Roadmap

- Cancer Care Landscape
- Quality & Cost Management Challenges
- Care Delivery Transition: Volume-Based to Value-Based
- Quality & Cost Management Best Practices
- Closing Thoughts

2015 NNECOS Spring Meeting: Dr. Andrew Hertler
Learning Objectives

1. List several CMS-recognized compendia for medical oncology regimens

2. Describe how clinical pathways are developed

3. Describe how clinical pathways evaluate chemotherapeutic and supportive regimens for efficacy, patient side-effect profile (toxicity) and cost

4. Describe how the use of oncology clinical pathways and an exception-based clinical review process can improve cancer care delivery by reducing the number of non-evidence-based chemotherapy regimens

5. Identify several characteristics of risk-based provider reimbursement models.

Cancer Care Landscape

Advances in Cancer Therapy and Care Delivery Are Newsworthy

2015 NNECOS Spring Meeting: Dr. Andrew Hertler
There Is An Urgent Need To Bend The Oncology Affordability Curve

Cancer is the most costly medical item and increasing at 2-3x the rate of other costs

Forecasted Oncology Rx Trend Is Above 20%
Cancer Care Landscape

Payers Are Experiencing An Achievement Gap With Their Oncology Management Objectives

Quality & Cost Management Challenges

“Oncology management drives health plan actuaries crazy. The category has the perfect storm of challenges: low volume, high cost and high variability.”
Quality & Cost Management Challenges

- Misaligned Interests: Patients, Payers and Providers
- Complexity of Medical Oncology Care Delivery
- Lack of Adherence to Evidence-Based Medicine
- Adoption of Clinical Decision Support Technology

End Goal: Balancing The Needs of Patients, Providers and Payers

**Patients**
- Education and navigation through the complex care delivery process
- Treatment close to home
- Having symptoms (pain, nausea, depression, fatigue, etc.) well controlled
- Better understanding of the financial cost related to treatment

**Payers**
- Increased value-based, patient-centered cancer care management
- More effective drug cost management
- Better care quality and adherence to evidence-based medicine

**Oncologists**
- Provide overall direction of cancer care for the patients
- Increased patient survival as long as Quality of Life is maintained
- Efficient process for treatment approvals and timely claims payment
- Meaningful quality metrics and benchmarking
- Access to clinical guidelines and pathways

2015 NNECOS Spring Meeting: Dr. Andrew Hertler
“Cancer” is a constellation of more than 200 different diseases

Lung Cancer:
- Small Cell
- Non-Small Cell
  - Squamous
  - Non-Squamous
    - ALK
    - EGFR

Medical Oncology
- Regimens vs. Individual Drugs
- Multiple Regimens
- Multiple Agents
  - Chemo
  - Supportive
  - Medicare Part B and Part D Rx

- Therapy Administration
  - Infused Agents
  - Oral Agents
Quality & Cost Management Challenges

Traditional Pharmacy Management Techniques Are Insufficiently Comprehensive For Optimal Medical Oncology Management

Which of the following utilization management tools have been applied to manage cancer therapies? Please select all that apply.

- Prior authorization
- Step edits
- Preferred products
- Specific lab or diagnostic values
- Quantity limits
- Clinical treatment pathways

Percentage of Respondents

Care Delivery Transition

Several Models Are Emerging In The Transition to Value-Based Care

Fee-For-Service
- Volume Driven
- No Risk to Care Delivery Providers

Value-Based
- Quality & Cost-Management Driven
- Shared Risk By Care Delivery Stakeholders

- Traditional Physician Reimbursement
- Oncology Practice “Buy & Bill”
- Fee-For-Service “Plus”
- Bundled Payments
- Gain Sharing
- Episode of Care-Based Payments
- Capitation

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Care Delivery Transition

The Optimal Model Will Align High Quality Care With Appropriate Provider Risk

- Lower Provider Risk & Value
- Higher Provider Risk & Value Potential

Oncology Practice Payment Models
- Fee For Service
- Pay For Performance
- Bundled Payments
- Gain-Share / Risk-Share
- Prospective Capitation

Financial Risk To Provider

- Low Risk
- High Risk
- Low Value
- High Value

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Care Delivery Transition

Specialized Clinical Tools Are Required To Improve Cancer Care Quality

Evidence-Based Medicine (EBM)
- Oncology Practice Has an EBM Gap
- Adherence to Evidence-based Oncology Clinical Guidelines < 65%*
- Patient Clinical Outcomes is Very Difficult for Oncology Practices to Measure

Oncology Quality Measurement
- Process Measures
- Clinical Outcomes
- QOPI Measures
- Pathway Compliance = EBM Practice

Clinical Decision Support Tools
- Oncology Requires Uniquely Tailored HIT^*
- EBM Measurement, Documentation & Reporting
- Quality Reporting
- Pathway Compliance Reporting


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Emerging Best Practices Will Enable Care Delivery Stakeholders to Achieve Our “Triple Aim” Targets

- Improved Patient Care Quality
- Reduced Costs
- Better Patient Outcomes
- Clinical Pathways Usage
- Clinical Decision Support Tool Adoption
- Pathway Adherence Reporting
- Clinical Quality Data Metrics
- Sharing of Quality-Driven Savings Between Providers and Health Plans

Pathways
- Best Treatment Option
  - Efficacy
  - Toxicity
  - Cost
- Evidence-Based

Guidelines
- Very Broad
- Compendia-Based
- CMS Recognized Compendia
  - NCCN Drugs and Biologics Compendium
  - AHFS (American Hospital Formulary Service) Drug Information
  - Thomson Micromedex/DrugDex Compendium
  - Elsevier Gold Standard’s Clinical Pharmacology
- American Society of Clinical Oncology (ASCO)
  - Evidence-Based
- National Comprehensive Cancer Network (NCCN)
  - Evidence-Based
  - Consensus Driven
Quality & Cost Management Best Practices

Pathways Drive Care Standardization & EBM Compliance Measurement

1. Efficacy
2. Side Effects
3. Cost

Oncology Pathway

2015 NNECOS Spring Meeting: Dr. Andrew Hertler

Quality & Cost Management Best Practices

Oncology Pathway Development Leverages Internal and External Experts

1. Gather Evidence
2. Community Oncologist Input
3. Initial Pathway Review
4. Independent 3rd Party Expert Review
5. Pathway Revision
6. Medical Policy Compliance/Adoption
7. Input Into Clinical Decision Support Tool

Continuous Monitoring

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Quality & Cost Management Best Practices

“Triple Aim” Objectives

- Improved Patient Care Quality
- Reduced Costs
- Better Patient Outcomes

“Alignment”

- Clinical Pathways Usage
- Clinical Decision Support Tool Adoption
- Pathway Adherence Reporting
- Clinical Quality Data Metrics
- Sharing of Quality-Driven Savings Between Providers and Health Plans
- Oncology Peer-to-Peer U/M Support

High Performing Oncology Care

2015 NNECOS Spring Meeting: Dr. Andrew Hertler

Quality & Cost Management Best Practices

A Risk-Based Oncology Care Delivery Model

Online Treatment Plan Prior Authorization
- CDS
- Pathway Evaluation
- Regimen Review
- Auto Approval
- Non-Compendia Based Regimens
- Peer Review
- Patient Care
- Infused Rx
- Oral Rx
- Health Plan Provider Practice
- Shared Savings
- Benchmarking
- Provider EBM Compliance

2015 NNECOS Spring Meeting: Dr. Andrew Hertler
Quality & Cost Management Best Practices

A Risk-Based Oncology Care Delivery Model

Oncologist to Oncologist Review

- Objective: Reach Consensus on an Evidence-Based Treatment Plan

Methods

- A retrospective clinical review was performed on 1,938 chemotherapy treatment requests (CTRs) withdrawn or recommended adverse determination (RAD), as a consequence of oncologist to oncologist review for two national health insurance carriers.

- The financial impact associated with the clinical intervention was calculated at ASP +6%, net of confirmed resubmissions.

- Resubmissions are defined as those approved treatment requests received within one month of the original withdrawal/RAD for an alternative treatment resulting from the original withdrawal/RAD.

Results

- The average combined membership was 795,679. 5,731 unique patients had requests for chemotherapy treatment during 2012, generating 15,446 CTRs.

- 12.5% (1,938) of those were withdrawn/RAD resulting in a net impact of $15.1M.

- Of the 1,938 withdrawn/RAD, 12.4% (241) resulted in increased quality with an associated increase in cost ($1.8M).

Conclusions

- Cost effective treatment is a function of quality and in not the ultimate goal at the expense of patient outcomes.

- Detailed retrospective case studies were performed on all of the requests that resulted in additional costs. In each case, the quality of care or patient safety was significantly improved by peer-to-peer clinical interventions.

- A patient-centric approach to evidence-based medicine embraces necessary cost increases in favor of clinical quality and patient safety.

*Finding the Value Point in Oncology Care: Optimizing Clinical Quality. McCrone et al; J Clin Oncol 31 2013 (suppl 31; abstr 272)
Quality & Cost Management Best Practices

Tumor Boards, A Variation of Peer-to-Peer Consultation, Increases Care Quality

- Oncology Treatment Planning Review Process
- Clinical Options Reviewed By Multi-Disciplinary Group of Cancer Specialists
- Frequently Used By:
  - Hospital Systems
  - Large Practices
  - Academic Centers

- Group Clinical Review Is Strongly Associated With Better Outcomes
- Patients With Physicians Participating In Tumor Boards Experience:
  - Lower Mortality Rates
  - Increased Clinical Trial Enrollment

*Kenneth L. Kohl et al. Tumor boards among physicians caring for lung and colorectal cancer patients. J Clin Oncol 32, 2014 (suppl 30; abstr 179)

Closing Thoughts

- The current cost trends in oncology are unsustainable for patients, payers and providers
- A comprehensive medical oncology quality approach is necessary to augment specialty pharmacy’s traditional Rx management strategies
- Clinical pathways, especially when paired with a clinical decision support system and robust clinical support, are one tool to improve compliance with evidence-based medicine
- Emerging models of medical oncology care delivery are combining risk-based physician reimbursement with quality-focused technology and benchmarking to align quality and value.
2015 NNECOS Spring Meeting: Dr. Andrew Hertler

Q&A

Presenter's Profile

Andrew Hertler, MD, FACP

Chief Medical Officer | New Century Health

- Nationally recognized leader in medical oncology clinical and quality practice management
- Oncologist with more than 25 years of experience in community and academic-based practice
- Member of American Society of Clinical Oncology (ASCO) Clinical Practice, Quality of Care and Payment Reform Committees
- Previously Administrative Medical Director for Physician Practices at Maine General Medical Center and the Medical Director of the Harold Alfond Center for Cancer Care in Augusta, Maine
- MD from the University of Michigan and BA from Dartmouth College

About New Century Health

New Century Health is the leading specialty care management company specializing in oncology and cardiovascular care. Our care management and clinical intelligence technology platforms connect the physicians, health plans, and ACOs to deliver high quality and efficient specialty care to almost four million Medicare, Commercial and Medicaid members. Since our founding in 2002, health plans and more than 6,000 specialty physicians in 36 states have collaborated with us to improve care quality and value-based care initiatives. An innovative, fast-growing national leader, New Century Health is URAC accredited for Health Utilization Management and is also an official licensee of the NCCN Drugs & Biologics Compendium™. To learn more, visit www.newcenturyhealth.com.
Telemedicine for Patients with Cancer

How to provide “wrap-around” service for patients and families struggling with cancer

Panelists

Eileen McDonald, MBA
Maine Health

Rob Ferguson, PhD
Eastern Maine Medical Center

Terry Rabinowitz, MD
University of Vermont Medical Center

Moderator: AJ Horvath, Dartmouth-Hitchcock
What is Telemedicine?

• Formally defined, telemedicine is the use of medical information exchanged from one site to another via electronic communications to improve a patient’s clinical health status. Telemedicine includes a growing variety of applications and services using two-way video, email, smart phones, wireless tools and other forms of telecommunications technology.

Source: [http://www.americantelemed.org](http://www.americantelemed.org)

Key Terms

• eConsult
• eVisit
• RPM or RMS
• Store & Forward
• Telemedicine Clinic
• Virtual Visit
Examples: Improvement Domains

- Financial
- Learning
- Experience
- Quality
- Vision and Strategy
- Telemedicine Future Growth

Why?
- Technology
- Legislative changes
- Customer
- Payment reform
Using Telemedicine to Deliver Care to Patients and Families Struggling with Cancer

Terry Rabinowitz, MD, DDS
Professor, Departments of Psychiatry and Family Medicine,
University of Vermont College of Medicine
Medical Director of Telemedicine and Division of Consultation
Psychiatry and Psychosomatic Medicine,
University of Vermont Medical Center
Burlington, VT

Michael Edwards, PhD
Consultant, Northeast Telehealth Resource Center
Director of Research and Education,
Regional Medical Center at Lubec (FQHC)
Lubec, ME

People with Cancer and Their Loved Ones

Afraid
Pained
Confused
Depressed
Hopeless
Alone
This is Often Worse with Increasing Distances from Care Providers
Especially for those who are very rural

Potential Problems
- Fewer visits
- More cancellations
- Greater expense
- More uncomfortable
- Lack of local expertise
- More time away
- Decreased adherence
- Worse outcomes
Frontier and Remote Areas

Frontier areas are the most remote and geographically isolated areas in the United States. These areas are usually sparsely populated and face extreme distances and travel time to services of any kind. [Think ≤10-20 persons/mi²]

http://frontierus.org/defining-frontier/
County Mapping of Cancer Mortality and Rurality

Counties with higher mortality rates (CDC, 2009-2013) may be seen to often correspond to higher rurality levels.
Rural-urban comparisons have identified higher age-, race-, and sex-adjusted cancer incidence and mortality rates in urban populations for most anatomic sites, suggesting that rural populations are at lower risk from cancer.

Conversely, findings that rural cancer patients are diagnosed at later stages of disease, that higher proportions of rural cancer cases are unstaged at diagnosis, and that rural cancer patients are at a more advanced stage of illness when referred to home health care agencies, suggest that rural cancer patients are disadvantaged when compared to their urban counterparts [Monroe AC, Ricketts TC, Savitz LA. J Rural Health, 1992].

Those in more deprived groups and rural areas had higher cancer mortality than more affluent and urban residents, with excess risk being marked for lung, colorectal, prostate, and cervical cancers [Singh GK, Williams SD, Siapush M, Mulhollen A. J Cancer Epidemiol, 2011].

Telemedicine Might be a Way to Address Some Unmet Needs
Telemedicine and Cancer Care
What’s Been Done/What Could be Done

Some Encouraging (and pretty cool) Work
Telemedicine has been used successfully for direct patient care in Kansas

- Also a method of providing supportive care for persons with cancer, including assessments of pain and nutrition
- Televised tumor conferences and nursing education courses can help smaller communities develop a level of expertise that allows patients to be treated locally

[Doolittle GC, Allen A. J Telemed Telecare, 1997]

Doolittle et al 1998

Examined a home-based telemedicine system for hospice care

- Pilot study of telenursing for terminally ill patients
  - Used public telephone network
  - Interactive video equipment installed in three nurses’ homes and in homes of six hospice patients
  - Nurses conducted video assessments to determine whether an in person visit was necessary
For traditional care, the average cost per visit was $133
Average telehospice visit cost was $29

A teleoncology study conducted in 1995 showed that the average cost was $812 per consultation
Data from from 2000 showed that the average cost was $410 per consultation, a decrease of almost 50%
[Doolittle et al 2004]
Feasibility study of remote psychotherapy in 10 terminally ill patients with cancer with diagnoses of adjustment disorder or major depression; 9 completers

- Six sessions of individual cognitive therapy
- Sessions alternated between face-to-face sessions and remote sessions delivered by analogue videophone
- Of 53 completed therapy sessions, 21 were by videophone and 32 were conducted face-to-face

[Cluver et al 2005]

Videophone support for a child undergoing bone marrow transplantation (BMT)

- 8 yo boy with ADHD and behavior problems
- Internet-based videophone in the patient's hospital room two days post-transplant
- A second videophone in the patient's home using the existing home telephone line
- 14 videophone calls were made over nine-day period
  - Improved interfamily social and emotional support, and appeared to reduce some of the inherent anxiety and distress associated with BMT

[Bensink et al 2006]
Examined whether centralized telephone-based care management coupled with automated symptom monitoring can improve depression and pain in patients with cancer

- Randomized controlled trial in 16 community-based urban and rural oncology practices
- 202 patients randomly assigned to receive the intervention and 203 to receive usual care
- Intervention group received centralized telecare management by a nurse-physician specialist team coupled with automated home-based symptom monitoring by interactive voice recording or Internet
  - Of the 274 patients with pain, 137 patients in the intervention group had greater improvements in pain severity over the 12 months of the trial than the 137 patients in the usual-care group
  - For 309 patients with depression, the 154 patients in the intervention group had greater improvements in depression severity over the 12 months of the trial

Zilliacus et al 2010

Twelve women who had received telemedicine genetic counseling for hereditary breast and/or ovarian cancer (HBOC) within the previous 12 months participated in a semi-structured telephone interview

- Explored women’s experience with telegenetics, satisfaction, perceived advantages and disadvantages and quality of the interaction with their counselors
- Overall, women were highly satisfied with telegenetics
  - It offered them convenience and reduced travel and associated costs
  - One woman with a recent cancer diagnosis, said telemedicine was unable to meet her needs for psychosocial support
Helping the Helpers

Doorenbos et al 2011
- The Native People for Cancer Control Telehealth Network used telehealth technology to deliver a cancer education series to rural healthcare providers who treated American Indians and Alaska Native people
  - Evaluation indicated videoconferencing technology was positively received for delivery of the educational sessions
  - This series demonstrated videoconferencing was a satisfactory means of delivering real-time, interactive cancer educational programming to providers who might not otherwise have access to such programs

CTX
Tumor Boards

Menon, Stapleton, McVeigh, Rabinowitz 2014
- Many critically ill patients who transfer from rural hospitals to tertiary care centers (TCCs) have poor prognoses
  - Family members are unable to discuss patient prognosis and goals of care with TCC providers until after transfer
- We conducted teleconferences prior to transfer to facilitate early family discussions
  - We conducted a retrospective review of these telemedicine family conferences among critically ill patients requested for transfer
Office for the Advancement of Telehealth (OAT)

...provides support for the establishment and development of Telehealth Resource Centers (TRCs). These centers are to assist health care organizations, health care networks, and health care providers in the implementation of cost-effective telehealth programs to serve rural and medically underserved areas and populations.

Telehealth Resource Centers
We competed for and were awarded a new two-year grant from OAT to develop and implement the Northeast Telehealth Resource Center (NETRC)

- Our third cycle
UVMMC and University of Vermont College of Medicine

- Network links 16 hospitals and three nursing homes in VT and NY
- Delivers distance education (e.g., Grand Rounds) and tele-consultations in pediatric critical care, psychiatry (NH, child and adolescent), palliative care, maternal and fetal medicine, and wound care
- Research collaboration
  - Nursing home telepsychiatry, PTSD treatment for veterans and trauma responders, palliative care, homebound elders
- Website: www.fahc.org/telemedicine/

Medical Care Development, ME

- Program and Fiscal Management
- Outreach and Marketing
- Business Plan Development
NETRC Partners

- Regional Medical Center at Lubec, ME
  - Consultant to NETRC
  - Transition from previous resource center
  - Formerly supported Maine Telehealth Services
  - Enhance the capacity of rural providers
  - Support a favorable policy environment
  - Conduct innovative projects that explore new technologies and contexts for use

If you’re interested in taking a telemedicine approach to help your patients and their families

We can help!
Perceived Cognitive Impairments

FACT-Cog
Higher is Better

Perceived Cognitive Abilities

Neuropsychological Testing Outcomes
Higher is Better

Symbol-Digit-Processing Speed

CVLT-II- Verbal Memory
Guide to Beginning a Telehealth Program

Below are the generic areas that require consideration for establishing a telehealth program. This is not intended to be an exhaustive list, however it covers most aspects of developing a telehealth program.*

<table>
<thead>
<tr>
<th>Content Area</th>
<th>Tasks</th>
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<tbody>
<tr>
<td>Early Phase</td>
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<tr>
<td>Identify telehealth partner</td>
<td>Identify partner whose senior management supports the concept of a telehealth agreement (this will save a lot of time)</td>
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<tr>
<td>Define scope of telehealth services</td>
<td>Collaboratively define scope of services including: pilot phase, factors that will determine success, value, need for expansion / closure, general metrics / evaluation</td>
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<tr>
<td>Credentialing of provider(s)</td>
<td>Providers need to be credentialed in remote site</td>
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<tr>
<td>Confirm insurance coverage</td>
<td>Verify insurance coverage for services (this may include applying for coverage by insurers such as Medicaid)</td>
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<tr>
<td>Develop contract</td>
<td>Legal counsel to develop contract</td>
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<tr>
<td>Involve IT departments</td>
<td>Both sites need to involve IT to recommend resource options for secure and reliable telehealth service delivery</td>
</tr>
</tbody>
</table>

| Mid Phase |       |
| Assemble teams from both originating and remote sites | Establish regular means of communication, deliberation and decision making. Teams should at least include: Billing/finance, Information Services, Clinical champions and colleagues who will be integrally involved in the service, any ancillary service staff who may be related to the service, administrative leader from both originating and remote sites. |
| Purchase, install, test equipment | IT staff from both sites need to identify, purchase, install and test equipment that is secure and compatible with all related systems. |
| Establish patient related work flows / processes | Determine how patients will be: Referred, Scheduled (takes place for both locations). For emergency related services, establish a process that ensures prompt availability by originating site for remote site, Follow up, Billed |
| Establish other processes | Education of local providers about the new remote service, Referral process, Patient documentation to referring and/or primary care provider post visit |
| Marketing considerations | Determine which aspects of the program will be marketed by which organization or will it marketed as a “joint” program, Develop a communication plan so program is understood and utilized, Consider an open house |
| Evaluation Plan | Planning for evaluation should begin as early as the two organizations begin talks about telehealth. Throughout the mid phase build processes that allow for data capture / reporting that meet evaluation criteria |

Count Down to Go Live

| “Test” Day | Schedule 1-2 practice sessions before Go Live |
| Go Live | Consider a light schedule for the first few days in case there are unexpected circumstances |

*Prior to beginning a telehealth program, take time to talk with major insurers about their coverage for such services. Telehealth has both a professional service component (billed by the professional providing the services) as well as a facility fee (billed by the remote site where the patient receives services).*
Cultivating Meaningful Conversations

Communication is the most important tool we have...

- Establishes:
  - Trust
  - Rapport
  - Reduces anxiety, uncertainty
  - Educates
  - Provides support
  - Helps establish a treatment plan
Delivering bad news

- Done well......
- If not done well.....

Effective Communication is Essential
COMMUNICATION

So much gets lost in the translation…….

- Most patients want “all of the information”
- They want to discuss
  - Cardiopulmonary resuscitation
  - Ventilation
  - End of Life Decisions
  - Advanced Directives
- Common elements to the wishes of dying people
Consider the Conversation

How to Have the Difficult Conversation With Patients and Families Facing Advanced Illness

- [https://www.youtube.com/watch?feature=player_detailpage&v=45b2QZxDd_o](https://www.youtube.com/watch?feature=player_detailpage&v=45b2QZxDd_o)
Questions reflecting patient values

- “Has anything happened in your past that shaped your feelings about medical treatment?”
- “What frightens you most about medical treatment?”
- “If treatment doesn’t go as hoped, what would be most important to you?”
- “Under what circumstances would you want goals to switch from attempting to prolong life to focusing on comfort?”
- “What quality of life would you find acceptable or unacceptable?”
- “What will help you to live with joy and meaning for the time you have left?”

Steps To Effectively Deliver Difficult News

- SPIKES
  - Setting
  - Perception
  - Invitation
  - Knowledge
  - Emotion
  - Summary
Our role is not to cheer them up or offer suggestions on how to die, or tell them how to grieve. All we can do is provide some companionship and comfort along the way.

Honesty, clarity, and full disclosure are the best tools we have to guide each patient to follow their path towards life’s end.
Hard Choices for Loving People
by Hank Dunn

Go Wish Game
Objectives/Discussion Points

- Discuss the barriers to adherence and provide insight as to how these barriers may be overcome.
- Describe how staff are trained to educate patients prescribed oral chemotherapeutic drugs.
- What are effective aids to improve oral adherence?
- How is adherence quantified? Is there an optimal threshold?
Barriers to Adherence

- Social and Economic Factors
- Healthcare
- Disease
- Treatment related
- Patient related

Social and Economic Factors

- English Language proficiency
- Family/Social Support Network
- Unstable living conditions/Homelessness
- Work/Social Lifestyle
- Access to healthcare facilities and/or pharmacy
- Health Insurance
- Medication Cost
Healthcare Factors

- Provider-Patient relationship
- Provider communication skills
- Positive reinforcement from Provider
- Lack of knowledge on adherence and of effective interventions for improving it
- Lack of continuity of care
- Patient written information ≠ Literacy level

Disease Factors

- Severity of symptoms
- Asymptomatic disease
Treatment-related Factors

- Complexity of medication regimen
- Lack of immediate benefit of therapy
- Actual/perceived unpleasant side effects
- Treatment interferes or requires significant behavioral changes in lifestyle

Patient-related Factors - Physical

- Visual
- Hearing
- Cognitive
- Mobility/dexterity
- Swallowing
Patient-related Factors-Behavioral

- Knowledge about disease
- Perceived benefit of treatment
- Expectations or attitudes toward treatment
- Motivation
- Fear of possible adverse effects
- Confidence in ability to follow treatment regimen
- Psychosocial stress, anxiety, anger
- Alcohol or substance abuse

Educating the Educator

**SIMPLE Intervention**

S = Simplify the regimen
I = Impart knowledge
M = Modify patients beliefs and human behavior
P = Provide communication and trust
L = Leave the bias
E = Evaluating adherence
Adherence Aids

- Pill Boxes: Medidos, Jewelry
- Blister packaging
- Calendars
- Reminder packaging
- Smartphone apps
- Telephone calls/texts
- Alarm clocks/Watches

Pharmacist: "and which medication reminder device would you like to use with this prescription?"
Quantifying Adherence

- How do you define non-adherence?
- Is there an optimal percentage?
- Are there any guidelines?

References

- Agboola, S., et al. (2014) Improving Outcomes in Cancer Patients on Oral anti-Cancer Medications Using a Novel Mobile Phone-Based Intervention: Study Design of a Randomized Controlled Trial. (iMIR Res Protoc: 3(69)).
Faculty Bios

Pam Brown, RN, CHPN
Pamela J. Brown, RN, CHPN, is a Certified Hospice and Palliative Care Nurse who currently serves as Hospice Educator and a Hospice Clinical Nurse for MaineGeneral Hospice. She also serves as a nurse consultant for HealthReach Hospice, helping patients with acute and chronic pain episodes as well as those confronted with end-of-life issues. Pam received her associate's degree in nursing from Central Maine Medical Center School of Nursing.

Mary Ann Ellis, PharmD, BCOP
Mary is Coordinator of Oncology Pharmacy at the Center for Cancer Care at Exeter Hospital. She received her BS in Pharmacy from Northeastern University, and went on to earn a Pharm. D. degree and complete a PGY-1 from St. Louis College of Pharmacy. She achieved her BCOP in 2008 and has worked at Exeter Hospital’s pharmacy department since 2003 with a career focused on oncology.

Rob Ferguson, PhD
Rob Ferguson is a clinical psychologist with the Behavioral Medicine Service of the Department of Rehabilitation Medicine at Eastern Maine Medical Center and Lafayette Family Cancer Center. His clinical and research interests are in the treatment of late cognitive effects of cancer treatment, cancer survivorship and palliative care including pain and symptom management. Specific research interest is on electronic (telehealth) delivery of cognitive-behavioral therapy for cancer survivors with late cognitive effects cancer treatment. Funding sources for current and past research include the National Cancer Institute, NIH Office of Research on Women’s Health, the Lance Armstrong Foundation, Komen Foundation and the Maine Cancer Foundation.

Elizabeth Hart, MD
Elizabeth Hart is Medical Director of MaineGeneral Hospice and holds certificates of added qualifications in both geriatrics and hospice and palliative medicine. Her clinical practice focuses on the care of people living in nursing homes, and for those living with dementia or nearing the end of life. A graduate of Harvard-Radcliffe Colleges and Dartmouth Medical School with a background in medical humanities and medical ethics, she completed residency and her geriatric fellowship at Maine-Dartmouth Family Practice Residency. She has recently completed a Practice Change Fellowship, a geriatric leadership program supported by the Atlantic Philanthropies and the John A Hartford Foundation. In a collaborative partnership with the Maine Hospice Council and the Maine Office of Elder Services she leads an advance care planning initiative “Cultivating Meaningful Conversations to Guide Care.”

Andrew Hertler, MD, FACP
Andrew Hertler is Chief Medical Officer of New Century Health. A highly experienced oncologist and physician executive, Dr. Hertler is one of the pioneers in integrating quality and efficiencies measures into the oncology care delivery process. Previously, Dr. Hertler was the Medical Director for Physician Practices at Maine General Medical Center and the Medical Director of the Harold Alfond Center for Cancer Care in Augusta, Maine. Dr. Hertler is a medical oncologist with over 25 years of experience in community-based practice. A past president of the Northern New England Clinical Oncology Society, Dr. Hertler continues to serve on several ASCO committees focused on quality and payment reform. Earlier in his career, Dr. Hertler was Assistant Professor of Medicine in Hematology/Oncology at the Louisiana State University Medical School. Dr. Hertler received his medical degree from the University of Michigan and completed his residency in internal medicine at University of Michigan–affiliated hospitals. He later completed a fellowship in medical oncology/hematology at Duke University Medical Center. He received his bachelor’s degree in chemistry with highest honors from Dartmouth College.

Alexander Horvath, BA
AJ Horvath is the administrative director of the Dartmouth-Hitchcock Center for Telehealth in Lebanon, NH. In this role, he facilitates the adoption and growth of telehealth technology and services throughout the Dartmouth-Hitchcock (D-H) organization, in accordance with D-H’s strategic objectives and mission. Horvath also works with regional partnering organizations to integrate service delivery and education through the use of telehealth technology. Horvath has 20 years of business and healthcare experience and previously served as the director of D-H’s Heart & Vascular Center. Prior to joining D-H, he was the chief financial officer for a community mental health center in Vermont; the vice president of clinical services for a community hospital in New Hampshire; and worked as a consultant in the IT and manufacturing industries. Horvath has co-authored articles on the impact of process
improvement and the use of lean principles on the costs associated with healthcare delivery, and recently expanded this study by comparing similar procedures performed in different healthcare systems in Europe. He graduated from Union College with a BA in managerial economics.

**Nancy Kennedy, RN, OCN**
Nancy is an oncology nurse coordinator for Dartmouth Hitchcock Medical Center. She served as nurse representative to the DHMC Quality Improvement Project, “Improving Adherence and Reducing Errors with Oral Chemotherapy.” Nancy’s nursing degree is from Champlain Valley Physicians Hospital School of Nursing in Plattsburgh, NY.

**Kathleen McBeth, MA**
Kathleen is the full time coordinator with the Cancer Patient Support Program. She is a Licensed Psychologist, with a focus on health psychology and adjustment to illness. Kathleen obtained her master’s in Clinical Psychology from St. Michael’s College in Colchester Vermont. She was an intern at the Cancer Patient Support Program and is delighted to return as the coordinator. Kathleen facilitated the Vermont Community Depression Project, has been a presenter at the Weekend of Hope, Stowe, VT, and the Lymphoma Symposium, Dartmouth Hospital, Lebanon, NH. Kathleen is a cancer survivor and after her own treatment she returned to school to “give back” by providing psychological services to survivors and their families. In her free time she enjoys hiking and backwoods cross country skiing with her dog, being with her family, knitting, reading, and having a good laugh.

**Kelly McCue, DNP, CNS, OCN, CHPN**
Kelly McCue is the administrator for the Comprehensive Breast Care Program at Brattleboro Memorial Hospital and has 33 years of oncology experience. Her doctoral research study examined the factors that present barriers and challenges to oral chemotherapy adherence with the goal to improve quality of care related to oral chemotherapy agent administration. Dr. McCue received her undergraduate degree in nursing from Southern Connecticut State University, her MSN, CNS Oncology from Loyola University, and her Doctorate of Nursing Practice from Northeastern University.

**Eileen McDonald, MBA**
Eileen McDonald is Program Manager for Oncology and Palliative Care at MaineHealth. She has eight years of experience in oncology administration, including the development of two telehealth cancer genetic counseling programs in mid and Eastern Maine. She holds an undergraduate degree in health management and policy from the University of New Hampshire and a Master of Science in Business from Husson University.

**Elizabeth B. McGrath, MSN, APRN**
Elizabeth McGrath is a nurse practitioner at Dartmouth Hitchcock Medical Center in the Norris Cotton Cancer Center and is a member of the GI Oncology Program and an Instructor at the Geisel School of Medicine. Elizabeth is an expert in oncology nursing with over 30 years’ experience in both community and academic settings, as a clinician, educator, and researcher and in leadership. She joined the staff of the NCCC in 2009. In 2011 she was a sub investigator in a CDC funded study “Reducing Disparities in Health for Vulnerable Populations in NH and VT: Journey Forward Cancer Survivor Care Planning in the Rural Northeast.” She is currently pursuing a DNP degree at Northeastern University. Practice interests include symptom management, palliative care and geriatric oncology.

**Terry Rabinowitz, MD**
Terry Rabinowitz is Professor of Psychiatry and Family Medicine at the University of Vermont Medical Center. He has served as Director of Telemedicine since 2005, and has been a telepsychiatry provider since 2002. Dr. Rabinowitz is a leader of an active telemedicine program that includes telepsychiatry, teledermatology, teleoncology, orthopedics, MFM and other specialties. He holds an undergraduate degree in chemistry from Lehman College, a DDS from SUNY Stony Brook, and an MD in psychiatry from Case Western Reserve University.

**Maureen Stannard, RN, OCN**
Maureen Stannard is a GI Oncology Research Nurse at the Dartmouth Hitchcock Medical Center. She has been an oncology nurse for more than 19 years, OCN certified for more than 15 years and is also certified in chemotherapy/biotherapy. Maureen has extensive experience teaching nurses in the research arena. She received her BSN from the University of Vermont.
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2015 Spring Meeting & OCN Review Pre-Registered Attendees

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Save the Date!
NNECOS 2015 Annual Meeting
& Palliative Care Symposium
October 23-24, 2015
Sable Oaks Marriott, Portland, ME

Tentative Agenda Highlights Include
4th Annual Palliative Care Symposium ~ Surgical Track ~ Survivorship Track ~ Genetics/Genomics Track ~ Payment Reform ~ Fellows Career Session ~ Steven Grunberg Memorial Lecture ~ Annual Abstract Presentation Session ~ Come Home Project ~ ASCO Advocacy Nursing and Allied Health Professional Advisory Committee Breakouts