**PRESIDENTIAL ADDRESS**

**On Shifting Ground**

ASTRO President David C. Beyer Talks About Value-based Care: Past, Present and Future

David C. Beyer, MD, FASTRO, of Cancer Center of Northern Arizona, spoke on how past health care hurdles can help the industry overcome the latest challenges presented via the shift from fee-for-service to value-based care. “Health care reform is upon us,” he said. “We cannot avoid it. We cannot ignore it. And we cannot keep doing what we have been doing.”

Dr. Beyer began by detailing the enormous cost of health care in the United States. Data from an Organization for Economic Cooperation and Development (OECD) 2015 report show that the United States has been the world leader in devoting cash resources to health care. This country spends twice as much money on health care than other wealthy nations, including Canada, Switzerland, Japan, Australia, Norway and more. And while we do well on almost every measure of health outcomes, we are not necessarily getting better care — or value — compared with these other countries. The OECD data confirms that countries that spend more per capita on health care enjoy a longer life expectancy; however, the U.S. life expectancy rates lag behind most of these wealthy countries, including some developing countries, at a cost that is at least 40 percent more than our nearest peer and more than twice the average cost in the developed world. “It is hard not to ask the question, what value are we getting for this added cost?” Dr. Beyer mused.

**Experience the 2016 Annual Meeting long after the meeting is over**

Virtual Meeting included with full-conference registrations

The virtual meeting will be available for viewing approximately 24 hours after each session. These professionally recorded sessions provide an excellent informational recap and are a great training tool for continual learning and reference.

Full conference Annual Meeting attendees will receive the virtual meeting as part of their registration.

With the virtual meeting you will receive:

- ✓ Recorded presentation/audio.
- ✓ Downloadable MP3s.
- ✓ 24/7 access.
- ✓ Searchable content.
- ✓ Downloadable PDFs of the PPTs.

You can access the 2016 Annual Meeting Virtual Meeting through the Online Conference Planner or you can log in to MyASTRO and click on Virtual Meeting under My Resources.
PERFORMING YOUR SURGERY, BEFORE ACTUALLY PERFORMING YOUR SURGERY. THAT’S THE DIFFERENCE BETWEEN PRACTICING MEDICINE AND LEADING IT.

Every body is unique, so every surgery should be unique too. That’s why Houston Methodist surgeons use leading-edge technology, like augmented visual imaging, to create a 3-D map of the patient’s body and its vital structures to help them plan in advance. This detailed view allows us to remove a tumor without damaging the tissue around it, leading to not only a more precise surgery but also a less invasive one.

Visit [houstonmethodist.org/cancer](http://houstonmethodist.org/cancer) to explore all the ways we’re leading medicine.
SCHEDULE AT A GLANCE
Tuesday, September 27, 2016

7:30am – 9:00am
ASTRO-NCI Diversity Symposium and Breakfast
Room 153 A/B/C, 1.0 CME, Ticketed Event

7:45am – 9:00am
Oral Scientific Sessions: I: 25 CME
- SS18 - Biology: Radiation Effects on Normal Tissue, Room 206 A/B/C
- SS19 - Lung: SRT/BT/Surgical, Room 157 A/B/C
- SS20 - Physics: Outcome Imaging and Modeling I, Room 156 A/B/C
- SS21 - Patient Safety, Room 104 A/B/C
- SS22 - Late-breaking Abstract Session, Special, Room 052A

9:00am – 9:15am Break
9:15am – 10:15am

10:00am – 11:30am
Awards Ceremony Grand Ballroom
11:30am – 1:00pm
Business Meeting Luncheon
Voting Members only, Room 210 A/B/C

1:00pm – 2:30pm
Workshop 6 – Tools and Techniques of Quality and Safety - Part 1, INTERACTIVE, Room 206 A/B, 1.5 CME

1:00pm – 2:30pm
Oral Scientific Sessions: I: 1.5 CME
- SS23 - Biology: Radiation and Cancer Biology, Room 257 A/B
- SS24 - Physics: Planning and Delivery Strategies, Room 258 A/B/C
- SS25 - Head and Neck Cancers, Room 104 A/B/C

1:00pm – 2:30pm
ePoster Sessions, 1.5 CME
- eP9 - Palliative Care, Room 052 A
- eP10 - Lung, Room 052 B

1:00pm – 2:30pm
Panel 15 – The Changing Role of Radiotherapy in Pediatric Tumors, Room 214 A/B

2:45pm – 4:15pm
Education Sessions: 1.5 CME
- EDU 22 - Radiation and Immuno-therapy: Lessons to Learn for Clinical Translation, Room 107 A/B/C
- EDU 27 - Challenging Cases of Hodgkin’s Lymphoma and Non-Hodgkin’s Lymphoma, INTERACTIVE, Room 253 A/B/C
- EDU 29 - Bladder sparing Trimodality Therapy for Muscle-invasive Bladder Cancer: Current Status, Paradigms, Controversies and Advances, Room 254 A/B

2:30pm – 4:15pm Break

4:25pm – 5:45pm
Oral Scientific Sessions: I: 1.5 CME
- SS26 - Biology: Immunology and Immunotherapy I, Room 257 A/B
- SS27 - CNS - Glomas, Room 160 A/B/C
- SS28 - GU - Bladder and Renal Cancers, Room 258 A/B/C

4:25pm – 5:45pm
ePoster Sessions, 1.5 CME
- eP12 - Breast, Room 052 B

4:25pm – 6:15pm
Panel 16 – RO-ILS and APEX®: Instruments for Quality Improvement, Room 160 A/B/C

4:45pm – 6:15pm
ePoster Sessions, 1.5 CME
- eP13 - Physics: Motion Management, Room 052 A
- eP14 - Biology: Translational Research - Risk Stratification and Prediction of Response, Room 052 A/B/C

4:45pm – 6:15pm
Panels II: 1.5 CME
- Panel 17 - The ABC’s of Transitioning to Image-guided Brachytherapy in Cervical Cancer: Saying Goodbye to Point A, Room 157 A/B/C
- Panel 18 - Strategies for Implementing Patient Reported Outcomes Assess- ment in Radiation Oncology Clinical Practice to Improve Patient Care, INTERACTIVE, Room 253 A/B/C
- Panel 19 - What is the Optimal Time Course for SBRT to Improve outcomes: Reviewing the Evidence from Pre-clinical, Clinical and Modeling, Room 104 A/B/C

4:45pm – 6:15pm
Education Sessions: 1.5 CME
- EDU 34 - Live SA-CME - Serious Toxici- ties Associated with Stereotactic Body Radiotherapy (SBRT) and Strategies to Reduce the Risks, Room 205 A/B/C
- EDU 35 - Current Controversies in Ear- ly-stage Breast Cancer, INTERACTIVE, Room 107 A/B/C
- EDU 36 - Radiation Oncology Coding and Reimbursement Update for CY 2017, Room 156 A/B/C

4:45pm – 6:15pm
Joint Session 3 – Radiation as Adjunct to Immunotherapy: Optimizing Regimens and Sites, Room 153 A/B/C, 1.5 CME

4:45pm – 6:15pm
Workshop 8 - Physician-Scientist Ca- reer in Radiation Oncology: Lessons from ASTRO Award Recipients, INTERACTIVE, Room 206 A/B, 1.5 CME

RO-ILS identifies risk-prone processes and safety best practices

Two year progress report of RO-ILS: Radiation Oncology Incident Learning System

Since its launch in June 2014, more than 220 facilities across the country have joined RO-ILS: Radiation Oncology Incident Learning System to contribute patient safety data to the only medical specialty society-sponsored radiation oncology program of its kind. The mission of RO-ILS is to facilitate safer and higher quality care in radiation oncology by providing a mechanism for shared learning in a secure and non- punitive environment. Participation in RO-ILS provides U.S.-based practices access to a secure, web-based portal and the ability to send safety data to a federally listed Patient Safety Organization (PSO), Clarity PSO.

Under the Patient Safety and Quality Improvement Act of 2005 (PSQIA), certain information, known as patient safety work product, is given privilege and confidentiality protections against disclosure and discoverability in litigation. These protections encourage providers to gather additional information through voluntary patient safety activities, aggregate data across facilities, and drive safer care delivery.

The Radiation Oncology Healthcare Advisory Council (RO-HAC), a group of radiation oncology professionals independently contracted with Clarity PSO, analyzes de-identified data and prepares quarterly reports. The seven quarterly reports posted on the ASTRO website provide the public with valuable information aggregated from across the country including case studies, analysis and commentary with featured themes and suggested interventions. In total, over 2,000 events have been reported to the PSO which include incidents that reached the patient (36%) near misses in which the event did not reach the patient (34%), and unsafe conditions which increase the probability of a safety event (30%). Risk-prone processes identified include any deviation from the originally intended course of treatment and emergent or “rush” treatment. But overall, quality assurance processes already in place are effective in catching near misses and review of plans by physicians, physicists and therapists play a key role in preventing errors from impacting patients.

There is no fee to participate in RO-ILS, an institution must simply sign a contract with Clarity PSO. To join, download the RO-ILS Participation Guide on the ASTRO website (www.astro.org/ROILS) and send a completed Participation Form to Clarity PSO to begin the contracting process. ASTRO would like to thank the American Society of Physicians in Medicine (AAPM) for their commitment to launch and sustain this important program.

To learn more about the program and how RO-ILS facilitates quality improvement at the local and national levels, attend: “RO-ILS and APEX: Instruments for Quality Improvement (Panel 14)” from 2:45 p.m. to 4:15 p.m. in room 107 A/B/C of the Boston Convention and Exhibition Center today!  ▶
ten ASTRO Members Awarded Fellow Designation

ASTRO has chosen 10 distinguished members to receive the ASTRO Fellow designation on the 10th anniversary of the Fellow Program. The 2016 class of Fellows will receive the recognition during today’s Awards Ceremony from 10:15 a.m. to 11:30 a.m. in the Grand Ballroom.

The Fellows Program, started in 2006 and honors those who have been an Active or Emeritus member of ASTRO for at least 15 years, have given the equivalent of 10 years of service to ASTRO and have made significant contributions to the field of radiation oncology in the areas of research, education, patient care or service and leadership.

The members of the 2016 Fellows class are:

- **H. Joseph Barthold**, MD, Beth Israel Deaconess Hospital-Plymouth, Plymouth, Massachusetts
- **Jennifer Ruth Bellon**, MD, Dana-Farber Cancer Institute, Harvard Medical School, Boston
- **Laura A. Dawson**, MD, Princess Margaret Cancer Centre, University of Toronto, Toronto
- **Theodore L. DeWeese**, MD, Johns Hopkins University, Baltimore
- **Shalom Kainicki**, MD, Montefiore Medical Center, Albert Einstein College of Medicine, New York
- **Nancy Price Mendenhall**, MD, University of Florida, Gainesville, Florida
- **William M. Mendenhall**, MD, University of Florida, Gainesville, Florida
- **Todd Pawlicki**, PhD, University of California San Diego, La Jolla, California
- **Timothy D. Solberg**, PhD, University of California San Francisco, San Francisco
- **John H. Suh**, MD, Cleveland Clinic, Cleveland

New in 2017, ASTRO International members are eligible to apply for ASTRO Fellow. Selection will be based upon the same criteria as for Active and Emeritus members.

### SCHEDULE AT A GLANCE

**Wednesday, September 28, 2016**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>7:45am</td>
<td>Social Oral Sessions: 1.25 CME</td>
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<tr>
<td>7:45am</td>
<td><strong>SS32</strong> - Biology - Targeted Delivery of Radiation and Sensitive...</td>
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<tr>
<td>7:45am</td>
<td><strong>SS33</strong> - GU - Prostate Cancer: Imaging and Biomarkers of Response...</td>
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<td>7:45am</td>
<td><strong>SS34</strong> - Head and Neck Cancers, Room 150 A/B/C</td>
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<td>7:45am</td>
<td><strong>SS35</strong> - Pediatrics, Room 206 A/B</td>
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<tr>
<td>7:45am</td>
<td><strong>SS36</strong> - Physics - Outcome Imaging and Modeling II, Room 157 A/B/C</td>
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<tr>
<td>7:45am</td>
<td><strong>SS37</strong> - PRO - Patient Reported Outcomes, Room 104 A/B/C</td>
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<tr>
<td>9:00am</td>
<td>Education Sessions: 1.25 CME</td>
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<tr>
<td>9:15am</td>
<td>Keynote Address I - Safety Culture at a Global Air Carrier, Jason Raginiga, Introduction by Carol A. Hahn, MS, FASRO, Grand Ballroom, 75 CME</td>
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<tr>
<td>10:00am</td>
<td>ASTRO Guidelines Highlight, Grand Ballroom, 50 CME</td>
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<tr>
<td>10:45am</td>
<td>Education Sessions: 1.25 CME</td>
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<tr>
<td>11:00am</td>
<td>Oral Scientific Sessions: 1.5 CME</td>
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<td>11:05am</td>
<td>ePoster Sessions: 1.5 CME</td>
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<tr>
<td>12:30pm</td>
<td>Joint Session 4 - Long-term Cardiac Toxicity: Radiotherapy, Chemotherapy and Practical Solutions, Room 254 A/B</td>
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<td>1:30pm</td>
<td>Lunch Break</td>
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<tr>
<td>1:30pm</td>
<td>Education Sessions: 1.5 CME</td>
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<tr>
<td>3:00pm</td>
<td>Oral Scientific Sessions: 1.5 CME</td>
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<td>3:15pm</td>
<td>ePoster Sessions: 1.5 CME</td>
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<tr>
<td>7:15pm</td>
<td>SORC 2017 Award Ceremony</td>
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### Ten ASTRO Members Awarded Fellow Designation

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Most side effects of radiotherapy, including radiotherapy delivered with Accuray systems, are mild and temporary, often involving fatigue, nausea, and skin irritation. Side effects can be severe, however, leading to pain, alterations in normal body functions (for example, urinary or salivary function), deterioration of quality of life, permanent injury, and even death. Side effects can occur during or shortly after radiation treatment or in the months and years following radiation. The nature and severity of side effects depend on many factors, including the size and location of the treated tumor, the treatment technique (for example, the radiation dose), and the patient’s general medical condition, to name a few. For more details about the side effects of your radiation therapy, and to see if treatment with an Accuray product is right for you, ask your doctor.
**Tuesday’s Menu**

**CHILLED**
- Chop-Chop Vegetable Cobb Salad
  Rows of vegetables with hearty greens and white balsamic vinaigrette
- Mixed Green Salad
  Spring blend, tomato, red onion and English cucumber with choice of buttermilk Ranch or vinaigrette dressings
- New England Farro and Dried Fruit Salad
  Tamari-orange vinaigrette with ginger and five spice
- Gourmet Sandwiches
  - Ham and Swiss on Pretzel Roll – honey Dijonaise
  - Tuscan Chicken Sandwich – roasted pepper, herb aioli and provolone on artisan telera roll
  - ZLT Sandwich – on grilled flatbreads with tomato chutney, chipotle aioli and romaine hearts

**HEATED**
- Wild Mushroom Bisque
  Mascarpone crema
- Grilled Bistro Steaks
  Caramelized onion jus lie'
- Quinoa Arancini
  Fire-roasted vegetables
- White Bean Cassoulet
  Grilled peppers and hearty herbs
- Bakery Fresh Rolls
  From our in-house bakery with sweet butter

**SWEETENED**
- Market Fresh Fruit
  Strawberry-lime chantilly
- N.E. Cookie and Brownie Sampler
- Blueberry Peach Cobbler
  Crème Anglaise
- Fresh Brewed Coffee and Iced Tea

**ASTRO**

**Multidisciplinary Thoracic Cancers Symposium: Bringing Precision Medicine to Thoracic Cancer Care**
- **March 16-18, 2017**
- San Francisco Marriott Marquis, San Francisco
- Co-sponsored by ASCO, ASTRO and STS.

**ASTRO Annual Refresher Course: Core Competencies and Emerging Trends**
- **April 7-9, 2017**
- Fairmont Chicago Millennium Park
- Chicago

**14th Annual Advocacy Day**
- **May 1-2, 2017**
- Loews Madison Hotel
- Washington

**Immunotherapy Workshop:**
**Incorporating Radiation Oncology into Immunotherapy**
- **June 15-16, 2017**
- NIH Campus, Natcher Building
- Bethesda, Maryland

**ASTRO's 59th Annual Meeting:**
**The Healing Art and Science of Radiation Oncology**
- **September 24-27, 2017**
- San Diego Convention Center
- San Diego

**Best of ASTRO**
- **November 10-11, 2017**
- Loews Miami Beach Hotel
- Miami Beach

**ASTRO Coding and Coverage Seminar**
- **December 8-9, 2017**
- ASTRO Headquarters
- Arlington, Virginia

**Coming in 2018!**
**Multidisciplinary Head and Neck Cancers Symposium**
- **February 15-17, 2018**
- Westin Kierland Resort, Scottsdale, Arizona
- Co-sponsored by AHNS, ASCO and ASTRO.

Dr. Beyer then went over some of the previous health care changes over the years, including the creation of the Medicare and Medicaid programs in the 1960s and the creation of the resource-based relative value system in the 1990s. “As we think through these issues that confront us [today], and as we think through how we can better provide value to the care we deliver, we should pause a moment and reflect back on where we are, how we got here and what we can learn from history,” said Dr. Beyer. In terms of past health care changes, Dr. Beyer noted, “First we hated it, then we accepted it, then we figured out how to survive it, then we figured out how to prosper under it,” adding that the same can happen now.

However, “Lost in the last major health care reform was the voice of the patient,” he said. “Do they value what we do as much as we think?” Today, health care providers face more changes, including the Medicare Access and CHIP Reauthorization Act of 2015 and the
“By 2018, half of Medicare spending will be value-based, according to recent government mandates, and providers need to figure out how to make that happen.”

Affordable Care Act, both of which are impacting reimbursement methods. But Dr. Beyer said this is the perfect time to get involved and be a part of the change “to ensure we are rewarded for providing real value.”

During his speech, Dr. Beyer noted that ASTRO is getting involved to take initiative in the transition to value-based care. ASTRO’s payment reform workgroup has put together alternative payment model initiatives to help create new systems for future use in the field of radiation oncology. With fee-for-service being phased out, “We need a different way to align incentives and ensure we deliver value,” Dr. Beyer said.

Solutions may include revised current procedural terminology codes, bundling services, multidisciplinary care, and changes in payment policy. “Let’s be honest with ourselves, it is time to do what is best for the patient and not what I learned to do decades ago in residency,” said Dr. Beyer. “We need to recognize the perspectives of others beyond our field; the patients and the society who pays for it.”

He provided an example that for years, health care providers have not had to worry about what happens when the patient leaves the office, clinic, or emergency department. “If one of our patients visits the emergency room or gets admitted to the hospital due to the ravages of the disease...do we consider that a failure by the radiation oncology team? Yesterday the answer was no; but tomorrow the answer may well be yes,” he said. This scenario will force health care providers to rethink how the office and/or clinic is operating and how to better manage patient symptoms.

By 2018, half of Medicare spending will be value-based, according to recent government mandates, and providers need to figure out how to make that happen. Dr. Beyer noted that radiation oncologists need to innovate and create – try new treatments, combinations, and schedules to find out what works. “We keep pushing that boulder up the hill because we know that once in a while, it will work and we will find a breakthrough,” said Dr. Beyer. “I am challenging you today to take that same drive and passion to create new processes to care for patients, and to do so in ways that matter to them.”

Despite failures that may happen along the way, it’s important to press on. “Our successes will inform the creation of the system of tomorrow,” Dr. Beyer concluded. “And it will help ensure the role of radiation oncology in the care of cancer patients as long as we remember that it is built entirely around and for that patient.”

### INDUSTRY SATELLITE SYMPOSIA

ASTRO has reviewed and approved these symposia as appropriate for presentation. These symposia represent the content and views of the provider and are not part of the official ASTRO Annual Meeting.

**TUESDAY, SEPTEMBER 27**

6:15 p.m. – 6:45 p.m.: Dinner and Registration

6:45 p.m. – 8:15 p.m.: Symposium

**EVALUATING IMMUNOTHERAPY AS A NEW PILLAR OF MULTIMODAL HEAD AND NECK CANCER CARE: WHERE DOES CHECKPOINT BLOCKADE FIT?**

The Westin Boston Waterfront Hotel, Grand Ballroom A

425 Summer St.

Dinner will be provided.

Accreditation: The Medical Learning Institute, Inc. and Peerview Institute for Medical Education are accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

CME Credits: The Medical Learning Institute, Inc. and Peerview Institute for Medical Education designate this live activity for a maximum of 1.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Target Audience: This activity is designed to meet the educational needs of radiation oncologists, medical and surgical oncologists, advanced practice clinicians and other health care professionals involved in the care of patients with head and neck cancer.

Learning Objectives:

After participating in the activity, the learners are expected to be better able to:

- Describe the rationale and mechanisms for therapeutic targeting of the immune system in head and neck cancer.
- Apply efficacy and safety evidence on the use of immune checkpoint inhibitors in head and neck cancer, including recurrent, metastatic disease and/or platinum-refractory settings.
- Summarize potential clinical synergies between immune-oncology strategies and other modalities commonly used for the management of SCCHN.
- Select patients with head and neck cancer who may be eligible for immunotherapies including enrollment in clinical trials.

This activity is supported through educational grants provided by Bristol-Myers Squibb and Merck & Co., Inc.

### INDUSTRY-EXPERT THEATERS

Theaters 1 and 2 are located in the front of Exhibit Hall A, Exhibit Level Industry-Expert Theaters allow companies to present their noteworthy products and services through presentations. Seating is available on a first-come, first-serve basis. The Industry-Expert Theater content and views expressed therein are those of the exhibitor and not of ASTRO. Unless otherwise indicated food will be available for purchase prior to the start of the event in the ASTRO Bistro and concession areas in the rear of Hall B.

**TUESDAY, SEPTEMBER 27**

**THEATER 1, Exhibit Hall**

**NOVEL DELIVERY FOR THE TREATMENT OF BREAKTHROUGH PAIN IN CANCER (BTPs)**

11:45 a.m. - 12:45 p.m.

Company: Depomed, Inc.*

Contact: Tyler Harrington

Phone: 510-744-8597

Email: tharrington@depomed.com

**THEATER 2, Exhibit Hall**

**CLINICAL EXPERIENCE WITH MRI-GUIDED RADIATION THERAPY ON THE MRIdian SYSTEM**

11:45 a.m. - 12:45 p.m.

Company: Viewray*

Contact: Meredith Johnson

Phone: 408-396-2355

Email: mjohson@viewray.com

*Meals will be provided by the company, which may subject you to reporting under the Federal Sunshine Act (the “Open Payments Program”) or other state laws.
**ABSTRACT SUMMARIES**

**Consolidative radiation therapy combined with chemotherapy improves overall survival for patients with early-stage, grade 3 follicular lymphoma**

By Malcolm Mattes, MD

Early-stage grade 3 follicular lymphoma (FL) is a rare entity that may behave more aggressively than low grade FL. National guidelines recommend that either single-modality or combined-modality treatment are reasonable as there is no clear consensus. In this study, The National Cancer Data Base (NCDB) was interrogated for grade 3 early-stage follicular lymphoma patients who received multi-agent chemotherapy with or without consolidative radiation therapy. Univariate analysis was performed to estimate the effect of consolidative radiation therapy on outcomes and multivariate analysis was constructed to estimate the independent effect of overall survival (OS), controlling for factors found to be significantly associated with OS in the univariate analysis. Overall, consolidative radiation therapy was associated with an improved five-year OS of 93.3 percent compared to 77.9 percent (HR 0.44; 95 percent CI, 0.32-0.60, P < .0001). Factors associated with receipt of radiation therapy included facility location, age, clinical stage, and presence of B-symptoms. Multivariate analysis showed OS was associated with age, insurance status, Charlson-Deyo comorbidity index, clinical stage, B-symptoms and consolidative radiotherapy.


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**Long-term survival after SRS for brain metastases—balancing frequency of surveillance and recurrence risk**

By Abigail Stockham, MD

Researchers at University of Pittsburgh Medical Center (UPMC) found that 62 percent of patients treated with stereotactic radiosurgery (SRS) in the treatment of brain metastases experienced intracranial relapse (IR) within two years. Patients without IR by two years were less likely to experience IR in the subsequent two years’ time (25 percent versus 52 percent). Patients’ two to four-year risk of IR was 17 percent with neither failure < 2 years nor SRS treatment volume of ≥ 5 cc, 32 percent with one of these factors, and 66 percent with both factors. RPA, GPA, KPS, primary site, and initial SRS treatment volume were not predictive of IR after two years’ time. Investigator Dr. Austin Vargo at UPMC reports their current practice is to follow patients at three month intervals with MRI for the first one year, every four months with MRI for the next year, then every six months to balance finding additional metastases while small and asymptomatic with the anxiety, inconvenience and expense of undue imaging.

Gogineni E et al. CNS Malignancies Oral Presentations, Abstract: 57 – Longterm Survivorship Following Stereotactic Radiosurgery Alone for Brain Metastases: Risk of Intracranial Failure and Implications for Surveillance and Counseling

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**New consensus contouring guidelines for cervical cancer in development**

By J. Ben Wilkinson, MD

During the oral presentations for gynecologic cancer on Sunday afternoon, Dr. Cate Yashar presented an important update on consensus target definitions for cervical cancer. In their most recent effort, a consortium of leading gynecologic radiation oncologists conducted a study to look for agreement in both GTV and CTV contours for treatment of cervical cancer using IMRT. According to Dr. Yashar, “IMRT for cervical cancer is being used more frequently in the United States. We will use this study to help improve consistency of treatment volumes on clinical trials and in daily practice.” Consensus contours have already been released for MRI-based planning, however, image fusion of the MRI to the planning CT is difficult unless the two scans are obtained with similar bladder and rectal volumes. “One of the exciting things is to see how congruent our volumes are becoming as all of us are gaining more experience using IMRT for cervical cancer,” Dr. Yashar shared. The highest level of agreement was for the cervix and uterus, while parametral, vaginal, and perirectal volumes differed slightly between some experts. “When the same exercise was repeated using MRI scans, the agreement between our group of experts was even more precise.”


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**Soft tissue volume reduction in combination with Deauville score can assist with personalizing treatment for patients with early stage Hodgkin lymphoma**

By Malcolm Mattes, MD

In early-stage classical Hodgkin lymphoma (HL), FDG-PET-CT scans are performed routinely after chemotherapy, and the 5-point Deauville score is used to report response. The authors hypothesized that other PET-CT parameters would improve risk stratification. Evaluated parameters included soft tissue volume (STV), maximum standardized uptake value, metabolic tumor volume, and total lesion glycolysis, as well as the reduction in each parameter. In 202 early-stage HL patients, five-year EFS was 89 percent. All PET-CT parameters were strongly associated with EFS on univariate analysis. Deauville score was highly predictive of outcome but was less discriminating in the Deauville 1-4 subset. Therefore, other parameters were evaluated that would improve risk stratification in this subgroup. STV reduction was highly predictive of outcome. When controlling for Deauville score, STV reduction maintained an independent association with EFS. A model incorporating Deauville score and STV reduction predicted outcome more accurately than Deauville score alone (P = 0.045). Thus, STV reduction is an independent predictor of outcome. In combination with Deauville score, it may improve risk stratification and contribute to response-adapted individualization of therapy.


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**IMRT for breast preferred for patients with high risk of acute reactions**

By Malika L. Siker, MD

Jean-Philippe Pignol, MD and colleagues presented their 10-year results of a multicenter randomized controlled trial comparing standard wedge radiation therapy to tangential breast IMRT. Early results from this trial previously showed that IMRT resulted in improved dose homogeneity and reduced acute skin toxicity. With this update, participants were assessed on long-term endpoints of chronic breast pain, cosmesis, quality of life, and survival measures. Investigators found no significant difference in these endpoints between the treatment arms. However, patients with acute moist desquamation during radiation therapy were found to have increased risk of late subcutaneous fibrosis and telangiectasia. Furthermore, pain during radiation therapy was associated with chronic pain, poorer cosmetic outcome and reduced quality of life.

While breast IMRT did not reduce late effects for all patients, those who experienced more acute toxicity during treatment were at increased risk of developing late effects. “Radiotherapy techniques that reduce toxicity, including breast IMRT, should be considered for patients at higher risk of acute reactions,” concluded the authors.

Pignol J, et al. Breast-TOxicity Oral Presentations, Abstract: 10 – Ten-Year Results of Randomized Controlled Trial Indicates Role for Breast IMRT in Patients at Increased Risk for Acute Toxicities
**Mometasone reduces severity and incidence of dermatitis in patients treated with post-mastectomy radiotherapy**

By Abigail Stockham, MD

Authors from Memorial Sloan-Kettering report a single institution randomized double-blinded trial in patients undergoing post mastectomy radiotherapy (PMRT), which demonstrated superiority of twice daily 0.1 percent mometasone furoate versus Eucerin original cream in reducing the incidence of wet desquamation (45 percent vs 64.5 percent) as well as delaying (45 days vs 35.5 days) and reducing the incidence of grade 3 dermatitis (18.8 percent vs 33.3 percent) of grade 3 desquamation. All patients were treated to 50 Gy with bolus application. The study included patients who underwent expander/autologous reconstruction as well as those not electing for reconstruction. Initially, patients undergoing treatment with intensity modulated radiotherapy (IMRT) were excluded; however, with commencement of use of volumetric arc radiotherapy, these patients were included. No difference in subjective experience of skin-related quality of life was identified. The first author, Dr. Molly Olm-Shipman, reports the current standard practice for patients undergoing postmastectomy radiotherapy at Memorial Sloan-Kettering is to utilize 0.1 percent mometasone furoate upon commencement of PMRT.


**Prostate Stereotactic Body Radiation is well tolerated with few toxicities that need further study in order to identify predictive risk factors**

By Ben King

Dess et al. present data on health-related quality of life (HRQOL) results from men receiving SBRT for prostate cancer in a prospective study. The study consisted of low- (25 percent), intermediate- (57 percent) and high-risk (18 percent) prostate cancer patients with only a small portion (20 percent) receiving concurrent androgen deprivation therapy (ADT). Dr. Robert Dess, the lead author, stated that "80 percent of patients received 7.7.25Gy x 5 fractions as their prescription dose.” Quality of life assessment was performed via the EPIC–26 questionnaire which includes urinary irritative, urinary incontinence, bowel, sexual, hormonal domains at baseline and future time points. Dess stated that "patients do quite well following prostate SBRT with only a small percentage (1-5 percent) having marked multi-domain declines in quality of life score. Early toxicity did seem to predict for toxicity at three and 12 months but no predictors of long-term (2, 3, 5 year) could be identified using baseline factors such as age, dose, ADT, prostate volume or BMI. Future studies aim to identify predictive factors according to Dess.

Dess R, et al. GU-Prostate Oral Sessions, Abstract: 75 – Predictors of Multi-Domain Decline in Health Related Quality of Life after Stereotactic Body Radiation Therapy (SBRT) for Prostate Cancer

**Access to proton therapy limited for children in underserved populations**

By Malika L. Siker, MD

Colette Shen, MD, PhD, Stephanie Terezakis, MD and colleagues reported their results of an analysis investigating the effect of race and socioeconomic factors in the selection of proton therapy in pediatric patients with solid tumors including CNS malignancies. Using the National Cancer Data Base, over 10,000 patients were identified for this study. Race, insurance status, median income and education in the patient’s area of residence, and distance between the patient residence and reporting hospital were examined for the impact on the choice of proton vs photon treatment.

Authors found that patients with Medicaid or no insurance, as well as those living in areas with lower median income and educational level were significantly less likely to receive proton therapy. Distance needed to travel for treatment also significantly affected treatment selection.

According to these investigators, “Whether this disparity is related to differences in referral patterns, knowledge of different treatment modalities, or ability to travel for proton therapy still needs to be further clarified. Given the limited nature of this resource, efforts to improve access to proton therapy for children in underserved populations need to be undertaken.”

Shen, C et al. Health Services Research Oral Presentations, Abstract: 78 – Effect of Socioeconomic and Racial Factors in Selection of Proton Therapy for Pediatric Patients: Analysis of the National Cancer Data Base

**Study finds radiotherapy equal to surgery in treatment of pulmonary oligometastases in terms of overall survival with less toxicity**

By Beatriz Amendola, MD, FASTRO

This IRB-approved retrospective study by Dr. Sapir et al. from the University of Michigan evaluates 104 patients with pulmonary oligometastases from soft-tissue and bone sarcomas comparing surgical resection vs. SBRT treated between 1997 and 2014. The authors used Inverse Probability of Treatment Weighting (IPTW) to adjust for the assignment imbalances of these patients weighting more towards surgical resection (78 patients vs. 26 patients). Results of this study demonstrate no difference in local progression and overall survival between both techniques. Late toxicity consisting of severe dyspnea (grade 3) was 6 percent (5 of 78 patients) after surgical resection and none for radiosurgery. The importance of the study is to demonstrate the value of radiosurgery in this group of patients. Prospective studies are needed to validate these results. Dr. Sapir completed his work during his clinical and research fellowship at the University of Michigan under the mentorship of Dr. Mary Feng and Dr. Theodore Lawrence.

Sapir E, et al. Sarcoma Oral Sessions, Abstract: 56 – Surgical Resection or SBRT for Sarcoma Patients with Pulmonary Metastases

**Proton beam therapy yields low toxicity for Hodgkin lymphoma**

By J. Ben Wilkinson, MD

Dr. Brad Hoppe presented combined data from five institutions yesterday on the use of involved-site proton beam therapy (IS-PBT) for Hodgkin Lymphoma. The analysis showed a comparable rate of disease control and relative low rate of toxicity for both adult and pediatric patients who received this treatment modality. “Although most of the benefits of proton therapy aren’t expected for 20 years or more, we wanted to demonstrate some initial efficacy and acute toxicity data that support use of proton therapy for this disease,” said Hoppe. One of the key findings in the presented data was the absence of both grade 2 and grade 3 pneumonitis, which have been reported in other series using IMRT. Dr. Hoppe also shared “we did not see any unexpected cardiac toxicity,” which is a concern for younger patients receiving conventional radiotherapy to the mediastinum. Typically, an anterior beam is used for disease in front of the heart to avoid excess cardiac dose while a posterior beam may be used for HL involving the axilla in female patients to decrease the risk of secondary breast cancers.


**Consolidative Proton Therapy After First-line Therapy Among Patients with Hodgkin Lymphoma**

By J. Ben Wilkinson, MD

This IRB-approved retrospective study by Dr. Shen et al. from the University of Michigan demonstrated the absence of both grade 2 and grade 3 pneumonitis, which have been reported in other series using IMRT. Dr. Hoppe also shared “we did not see any unexpected cardiac toxicity,” which is a concern for younger patients receiving conventional radiotherapy to the mediastinum. Typically, an anterior beam is used for disease in front of the heart to avoid excess cardiac dose while a posterior beam may be used for HL involving the axilla in female patients to decrease the risk of secondary breast cancers.
STREET TALK
What has been the best session you have attended thus far?

William Demas, MD
Alliance, OH

“The presidential symposium on Sunday was an excellent presentation because of its emphasis on developing value-based radiation oncology services and efforts to achieve that.”

Pramila Rani Anne, MD
Philadelphia, PA

“The presidential symposium on Sunday. I don’t usually treat prostate cancer – I treat gastrointestinal and breast cancers – so it was interesting to hear about the quality and value.”

A. Gabriella Wernicke, MD, MS
New York, NY

“The clinical trials session. The discussion on the improvement of local control for brain metastases was interesting to me.”

INTERNATIONAL ATTENDEE WELCOME BREAKFAST
Welcome Breakfast Highlights
Opportunities for International Attendees

International attendees were invited to a welcome breakfast session that detailed the international-themed courses at the meeting and encouraged collaboration in the field of radiation oncology, with a goal of inspiring attendees to bring modern radiation techniques to their home region.

During the session, Xiao Shen Wang, MD, PhD, of Fudan University Shanghai Cancer Center in China, was honored with the International Abstract Award for his work, titled “Treatment of Cerebral Radiation Necrosis With Nerve Growth Factor – A Prospective, Randomized, Controlled Phase 2 Study.” While giving a brief speech, Dr. Wang said, “It’s a great honor to be here and receive this.”

Attendees were then provided with information on three ASTRO initiatives aimed at extending research and education outside of the United States:

1. Best of ASTRO Licensing – This program allows organizations to license the Best of ASTRO content and hold an officially licensed live meeting in their own country, providing attendees with the top abstracts presented in a practical and useful way from various leaders in the field of radiation oncology. Last year, 10 countries participated in this initiative. For more information, visit www.astro.org/Best-of-ASTRO-Licensing.aspx.

2. eContouring Ambassador Initiative – This program provides opportunities for both domestic ambassadors traveling abroad and international ambassadors wishing to bring contouring training to their facility, region, or country by expanding the reach of contouring training to countries outside of the United States and Canada who demonstrate a training gap and/or need. Information, including applications and guidelines, are available at www.astro.org/Affiliate/International/eContouring-Ambassador-Initiative.

3. ARRO (Association of Residents in Radiation Oncology) International Efforts – The mission of this program is to expand the role of radiation oncologists in achieving more equitable health care for all global citizens through collaborative humanitarian outreach, education, and research, including a mutual mentorship program. Visit www.astro.org/ARRO for more information.

Brachytherapy Pioneer Haakon Ragde, MD, Chosen as ASTRO 2016 Honorary Member

ASTRO has selected Haakon Ragde, MD, as its 2016 Honorary Member, the highest honor ASTRO bestows on distinguished cancer researchers, scientists and leaders in disciplines other than radiation oncology, radiobiology or radiation physics. Ragde will be inducted as the 2016 ASTRO Honorary Member today at the Awards Ceremony from 10:15 a.m. to 11:30 a.m. in the Grand Ballroom.

Dr. Ragde’s work has become the standard of care in a number of areas. As a board certified urologist, he has an impressive array of achievements, including introducing seed implantation for prostate cancer into the U.S., introducing transrectal ultrasonography and introducing the transrectal ultrasound-guided prostate biopsy method now used. He also took part in bone marrow transplant research that earned researcher E. Donnall Thomas, MD, the Nobel Peace Prize in Physiology or Medicine in 1990.

Dr. Ragde retired from active practice in 2003 and now researches immunotherapy. He is conducting a study on immunotherapy on advanced prostate cancer patients at the University of Bergen, Bergen, Norway.
Two junior faculty avail of the ASTRO grant mentorship program

The ASTRO Grant Review Mentorship Program was created for early career investigators to help them develop the skills necessary to successfully apply for funding. This program pairs early-career faculty with senior independent investigators who have successfully obtained RO1-level grants to serve as grant writing mentors in multiple disciplines. This year, two excellent young investigators, who represent their respective fields with exciting and innovative research endeavors, were able to take advantage of this program.

Dr. Rengan is the Program Committee Chair of the Multidisciplinary Thoracic Cancers Symposium. The 2017 Multidisciplinary Thoracic Cancers Symposium will take place March 16-18 at the San Francisco Marriott Marquis. Co-sponsored by ASTRO, the American Society of Clinical Oncology and The Society of Thoracic Surgeons, this practical and clinically-relevant meeting will focus on “Bringing Precision Medicine to Thoracic Cancer Care.”

Thoracic Cancers Symposium highlights new and practical approaches in multidisciplinary treatment

By Ramesh Rengan, MD, PhD, University of Washington, Seattle

Editor’s note: Dr. Rengan is the Program Committee Chair for the Multidisciplinary Thoracic Cancers Symposium.

The overall goal of these health care reforms is to improve outcomes in this deadly disease. Still, there is much more work to be done, and it will require a tight partnership across all of the oncologic disciplines (surgery, medical oncology, radiation oncology) in order to translate the promise of these new therapies for the benefit of all patients with lung cancer—not just the select few. The 2017 Multidisciplinary Thoracic Cancers Symposium will focus on the emerging breakthroughs in management of lung cancer and the relevance and practical applicability of these treatments into the modern thoracic oncology clinic. The program will also cover the application and limitations of advanced radiation and surgical techniques in thoracic malignancies. Educational and scientific content will fill professional practice gaps in patient safety, clinical research, basic science research, technology and technique, educational research and clinical practice.

This meeting will bring together thoracic surgeons, medical oncologists, radiation oncologists, and translational researchers to discuss leading-edge approaches to the management of the lung cancer patient. Ample networking opportunities abound and attendees will be exposed to multidisciplinary discussion, often listed by meeting attendees as a potential challenge or barrier to change.

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It’s not too late to submit a scientific abstract for consideration! The deadline to submit is Wednesday, October 5 at 11:59 p.m. Pacific Time. Registration and housing are open, and the deadline to register at the lowest (early-bird) rates is December 7. Visit www.thoracicsymposium.org for more information.

SEBELIUS continued from page 1

industry, and information was still being exchanged in paper files,” said Ms. Sebelius. “You can’t pay for value unless you can see value, so digital medical information is a huge platform to measure the system.”

“No one has taken an entire nation and updated to an electronic exchange of information,” continued Ms. Sebelius. “We are a work in progress, but this is being watched all over the world.” If the United States is successful, other countries may follow suit, she noted.

Since the passage of the ACA in 2010, other health care reform initiatives have been put forward, including the following that Sebelius discussed:

• The Centers for Medicare and Medicaid Services has set forward a very aggressive and public timetable that by 2018, 50 percent of Medicare payments will have some form of an associated value proposition, for which Sebelius said they are on their way to meeting this goal.

• The Precision Medicine Initiative has a goal of enrolling more than 1 million patients in an effort to dramatically reduce the time and money spent on clinical trials to create a larger patient cohort rather than recruiting patients for every individual trial. This could accelerate the microscope to marketplace pipeline and get cures to the market faster, according to Sebelius.

• The 21st Century Cures Act was created with the goal of providing significant resources to the National Institutes of Health and U.S. Food and Drug Administration to invest in precision medicine. The Act is currently held up in Congress, but Sebelius is hopeful that this will become part of the year-end initiative before President Obama leaves office. “This is very promising and a big jump-start into the future.”

• The Cancer Moonshot Initiative is headed up by Vice President Joseph Biden as an effort to make significant gains in cancer care and treatment in just five years by making therapies available to more patients and focusing on earlier prevention and detection. The Blue Ribbon Panel has provided a list of recommendations for doing so, including an emphasis on clinical trials, a move to engage and empower patients by providing them with information and encouraging participation in treatment decision-making, and focusing more on pediatric cancers.

• The Medicare Access and CHIP Reauthorization Act (MACRA), which is a payment shift where Medicare has announced and put forth a new protocol for how providers, including hospitals and physicians, will be paid in the future.

The overall goal of these health care reforms is to make sure good care is provided to every patient, every time. In the American medical system, health care is not delivered universally among this very diverse country, Sebelius said.

“This system has moved dramatically in eight years,” said Sebelius, noting that the future will be informed by data and quality definitions.

“I’m inspired by the efforts you put forward and the work that you do,” Sebelius concluded.

Wu Liu, PhD

Erina Vlashi, PhD

Ramash Rengan, MD, PhD
What you need to know about MIPS

Are you ready for MACRA? – Part 2

We continue our Q&A with ASTRO’s President David C. Beyer, MD, FASTRO on the new Medicare physician payment system, called MACRA. If you missed Part 1 of the interview, check it out at www.astro.org/showdailies. Today’s focus is on what ASTRO members need to know for MIPS.

What is Merit-Based Incentive Payment System (MIPS)?

MIPS is both familiar and new. Under MIPS, the current quality reporting programs, including the Physician Quality Reporting System (PQRS), Meaningful Use, and the Value-Based Payment Modifier (VM), will all be consolidated into one program. MIPS will have four categories which build off of each of these current programs. So, while the concepts for each of the categories will be vaguely familiar to some of us, the requirements and overall scoring methodology will be new and different.

If radiation oncologists are not participating in the Oncology Care Model or some other APM, then must they participate in MIPS?

Not necessarily. There is the possibility that radiation oncologists could be exempt if they are newly enrolled Medicare providers and low-volume providers that charge Medicare less than $10,000 and who provide care for 100 or fewer Medicare patients. Those exemption thresholds could change, so radiation oncologists will need to keep a close eye on the ASTRO website and ASTROgrams so we can let you know Medicare’s final decision on this. If you don’t meet the exemption, however, yes, you need to participate in MIPS and play the game.

Dr. Beyer, you mentioned that there are four MIPS categories that build off the current programs. What are these four categories?

The four MIPS categories are: Quality, which replaces PQRS; Resource Use, which replaces VM; Advancing Care Information, which replaces Meaningful Use; and Clinical Practice Improvement Activities (CPIA), this is a new category that is not based on any current program.

It seems that, with the exception of the Clinical Practice Improvement Activities category, everything else is staying the same. So how exactly is MIPS “consolidating” and different from the current programs?

As they say, the more things change, the more they stay the same. MIPS consolidates the current programs into one program by sunsetting the separate bonuses and penalties that were associated with each program. When I participate in MIPS, my payment adjustment will be based on my composite, or total, score in all four categories. I’ll receive a score for each category, which will then be combined into my composite score. I’m told that I will have a little bit more flexibility because, in theory, I could excel in three of the four categories, and do poorly in one category, and might still end up with a bonus payment. The MIPS program eliminates the all or nothing approach that has been frustrating to so many physicians.

Are the requirements for the categories the same or different from the current programs?

Well, the CPIA category is brand new, so the requirements for that category will certainly be new. For the other three categories, the requirements are similar, but not exactly the same as what we are used to. CMS has not finalized the MIPS program criteria and requirements, so the following proposed requirements are subject to change:

- **Quality** – This category adopts many of the PQRS measures. As currently proposed, CMS is eliminating the Oncology Measures Group reporting option that is preferred by many of us. We will instead be required to report six measures, of which, at least one must be a cross-cutting measure and another must be an outcome measure or a high priority measure. Performance in each of the measures will be used to determine the score for this category.

- **Resource Use** – We will not need to submit any data for this category. CMS will use our claims data to attribute patients and costs to us, and use that data to determine our scores.

- **Advancing Care Information** – Ah, the category everyone loves to hate. This is essentially Meaningful Use Stage 3. The scoring for this is complicated, which should surprise no one. There is a base score for simply providing a numerator/denominator or answering yes/no to the objectives and measures. In addition, there is another score for performance in the following objectives: Patient Electronic Access, Coordination of Care Through Patient Engagement, and Health Information Exchange. The two scores are then combined for the total score for this category.

- **Clinical Practice Improvement Activities (CPIA)** – I think this category holds a lot of potential. The focus of this category, as indicated by the name, is quality improvement, relying on programs developed by specialty societies, including ASTRO. CMS has proposed over 90 activities that are considered either medium (10 points) or high (20 points) weight. We have the option to select any combination of activities to achieve a total of 60 points. The easiest way to knock out this category is by participating in ASTRO’s RO-ILS and APEX accreditation programs. ASTRO mapped out the 90 activities and determined that participation in these programs automatically exceeds the 60-point threshold. I highly encourage our members to enroll in both of these programs, so this is one less category to keep track of and worry about.

Wow, that’s a lot of information to learn in a short period of time, and then also be subject to the payment adjustments. So are radiation oncologists expected to learn and implement these by January 1, 2017?

You’re right, it is a lot to take in and learn in a short period of time. However, CMS Acting Administrator Slavitt recently announced some flexibility for reporting in 2017. CMS will allow providers to “pick their pace” for the first participation year. You will be able to avoid a negative payment adjustment, and potentially earn a positive payment adjustment by selecting any of the following options: 1) test reporting; 2) partial-year reporting; 3) full-year reporting; or 4) participation in an Advanced APM. The details of these four options will be specified in the final rule.

APEX and RO-ILS: Making MACRA Manageable

**QUESTION:** MACRA is so complex and compliance with the new MIPS measures requirements seems somewhat daunting to many physicians. I understand that APEX accreditation and participation in RO-ILS will help physician’s meet MIPS requirements, can you explain that?

**ANSWER:** Yes, that’s right, APEX and RO-ILS are two arrows in the ASTRO quiver ready to help members take aim at MIPS compliance. As I mentioned earlier, there are four MIPS categories: Quality, Resource Use, Advancing Care Information, and Clinical Practice Improvement Activities or CPIAs. The CPIA category relies on programs developed by specialty societies, including ASTRO. CMS has proposed over 90 activities that are considered either medium (10 points) or high (20 points) weighted. We have the option to select any combination of activities to achieve a total of 60 points. The easiest way to knock out this category is by participating in ASTRO’s RO-ILS and APEX accreditation programs. One of the activities in the CPIA list is participation in a patient safety organization (PSO). ASTRO and the American Association of Physicists in Medicine (AAPM) cosponsor RO-ILS: Radiation Oncology-Incident Learning System®. The mission of RO-ILS is to facilitate safer and higher quality care in radiation oncology by providing a mechanism for shared learning in a secure and non-punitive environment. RO-ILS is the only medical specialty society-sponsored radiation oncology incident learning system, allowing providers to learn from actual and potential adverse events that could occur in radiation therapy and improve the quality and safety of patient care.

ASTRO’s Accreditation Program for Excellence (APEX) is organized around five pillars: the process of care; the radiation oncology team; safety; quality management; and patient-centered care. This underlying focus on a culture of quality and safety, as well as patient-centered care, aligns with the CMS goal for this category of using a patient-centered approach to program development that leads to better, smarter, and healthier care. APEX accredited facilities have in place the systems, personnel, policies and procedures necessary to provide high quality and safe patient care.
Is participation in these categories and MIPS at the individual level or group level?

You can participate in MIPS either individually, or as part of a group. However, the same participation level must be used for all four categories. It’s not possible to participate as a group for the CPIA category and as an individual for the Quality, Advancing Care Information, and Resource Use categories; I would have to participate either as an individual or as part of a group for all four categories.

How is the data reported for each of the categories?

As I mentioned earlier, radiation oncologists don’t have to worry about submitting data for the Resource Use category; this will be based on our administrative claims data. For the other categories, the data can be submitted using claims, qualified clinical data registries (QCDRs), or electronic health records systems (EHRs). Unlike the participation level, here, different submission methods can be used for the different categories. For example, I can use a QC3R for the Quality category, an EHR for the Advancing Care Information category, and just attest to the CPIA category; that’s allowed. ASTRO is working to develop tools to make reporting as easy as possible.

Should radiation oncologists still participate in PQRS, Meaningful Use, and the Value-Based Payment Modifier for 2016?

Yes, absolutely. The penalties for the current programs do not sunset until the end of 2018. Those who fail to participate in these programs this year, in 2016, will be subject to each of the programs’ respective penalties in 2018. The Oncology Measures Group option is still available for the 2016 PQRS program. I recommend participating in PQRS using the Oncology Measures Group using the ASTRO PQRSwizard, which is available at www.astro.pqrswizard.com.

While I understand that the program requirements are still being finalized, is there anything radiation oncology practices can do right now to prepare for MACRA?

Getting ready right away could make all the difference for many practices. ASTRO will be putting out more information once the requirements are set, but in the meantime, here’s some advice to get ready. First, learn everything you can about MACRA. Look at ASTRO.org, ASTROgrams, and other resources for news and tools to help you succeed. Next, figure out if you are exempt based on the low-volume thresholds. If you’re not exempt, develop a strategy for your practice to prepare and succeed. Review your experience participating, or not, in the PQRS or Meaningful Use. Check out your Medicare quality and resource use reports. Review the list of Clinical Practice Improvement Activities and strongly consider signing up for APEX and RO-ILS. I’d also recommend reaching out to your local health systems and referring physicians to see how they are preparing and whether there are opportunities to collaborate.

MACRA represents a tremendous challenge to radiation oncology and all physicians. We’ve said for years that the quality and efficiency of radiation oncology care gives patients and payers tremendous value for their health care dollar. If MACRA can achieve its lofty goals, we now have the chance to prove it.

Applying for practice accreditation is “doing something about safety and quality”

Learn more about APEX, ASTRO’s Accreditation Program for Excellence®

ASTRO continues to build upon and advance the Society’s quality improvement initiatives with the implementation of an independent practice accreditation program. The ASTRO Accreditation Program for Excellence (APEX) demonstrates ASTRO’s dedication to promoting the highest standards in radiation oncology care.

APEX, which was launched in February 2015, was created to increase accountability in radiation oncology practices. The APEX mission is to “recognize facilities by objectively assessing the radiation oncology care team, policies and procedures, and the facility.” The program provides an objective review by qualified colleagues in radiation oncology of essential functions and processes of radiation oncology practices, using transparent, measurable standards that emphasize a commitment to safety and quality. The program is organized around five pillars: 1) patient-centered care, 2) the process of care, 3) the radiation oncology team, 4) safety and 5) quality management.

“When it comes to quality and safety, sometimes knowing you should do something and actually doing something are two different things,” said James A. Hayman, MD, MBA, Clinical Affairs and Quality Council Vice-chair. “Going through practice accreditation provides the impetus to make changes to improve quality of care and ultimately makes treatment better for patients.”

Radiation oncology practices based in the United States may apply for ASTRO accreditation, which is granted on a four-year cycle. All practice types including freestanding, single- or multi-facility organizations or those that are part of a hospital facility are encouraged to apply. The accreditation process is divided into five phases: Phase I – Application; Phase II – Self-assessment; Phase III – Facility Visit Preparation; Phase IV – On-site Facility Visit; and Phase V – Determination. “Applying for accreditation can help practices improve some of their processes,” said Dr. Hayman. “It allows practices to examine processes as they move through the self-assessment survey and prepare for the on-site facility visit. With APEX, the program will not only accredit the practice, but will give useful feedback in a manner that practices can use to constantly improve.” Experiencing the accreditation process can also help radiation oncology practices develop metrics to assess and continually improve patient safety and quality of care.

To learn more about quality improvement and accreditation, attend:

How to Prepare For APEX A Multi-Disciplinary Team Approach (EDU 24)

Date: 9/27/2016
Time: 7:45 a.m. - 9:00 a.m.
Room Number: 257 A/B

RO-ILS and APEX: Instruments for Quality Improvement (Panel 14)

Date: 9/27/2016
Time: 2:45 p.m. - 4:15 p.m.
Room Number: 107 A/B/C

Three new patient education videos released at Annual Meeting

In May of this year, ASTRO staff travelled to Willis-Knighton Cancer Center in Shreveport, Louisiana, to shoot three new patient education videos: Radiation Therapy for Breast Cancer, Radiation Therapy for Gynecologic Cancers and Radiation Therapy for Head and Neck Cancer. Footage recorded during the three-day shoot includes interviews with radiation oncologists and other members of the radiation therapy treatment team, patient consultations and patient interviews. Additionally, the patients at Willis-Knighton allowed the crew to follow them through moments of their treatment, including simulation for head and neck cancer and brain tumors, a six-month follow-up from completion of head and neck cancer, a final proton treatment for a recurrence of a brain tumor and the gynecologic brachytherapy process from consultation through actual treatment.

These videos are available at the Annual Meeting. ASTRO has an extensive array of patient information. In addition to these three new topics, our patient video collection includes a 17-minute Introduction to Radiation Therapy and three nine-minute videos, Radiation Therapy for Breast Cancer, Radiation Therapy for Lung Cancer and Radiation Therapy for Prostate Cancer. The videos are available to view on ASTRO’s patient information website, www.rtwasers.org. Members who wish to offer these videos on their own website can pick up the embed code for each video on www.astro.org. A third option is to purchase the videos on a thumb drive. Members can stop by the Ask ASTRO booth in the North Lobby to pick up a free thumb drive. Quantities are limited. ASTRO also offers a full library of disease-specific patient brochures which are also available for download on www.rtwasers.org or for purchase at www.astro.org/productcatalog. Sample brochures are also available at the Ask ASTRO booth in the North Lobby. Patient materials are the product of the extensive volunteer work of the ASTRO Communications Committee. Our goal in providing these resources is to give patients and caregivers information about what to expect when they discover they need to receive radiation therapy as part of their cancer treatment. The videos have newly updated brochures to complement them and will be available on the ASTRO website at www.astro.org/productcatalog.
Innovators in Radiation Oncology Honored with ASTRO Gold Medal Awards

Three leaders in radiation oncology have been named recipients of the American Society for Radiation Oncology (ASTRO) Gold Medal, the highest honor bestowed upon ASTRO members. Benedick A. Fraass, PhD, FASTRO, Christopher G. Willett, MD, FASTRO, and Anthony L. Zietman, MD, FASTRO, will be recognized today at the Awards Ceremony from 10:15 a.m. to 11:30 a.m. in the Grand Ballroom of the Boston Convention and Exhibition Center.

Dr. Fraass currently serves as Vice Chair for research as well as professor and director of medical physics in the department of radiation oncology at Cedars-Sinai Medical Center in Los Angeles. He also holds an appointment as a clinical professor in the Department of Radiation Oncology at the University of California Los Angeles. Before moving to the West Coast, Dr. Fraass spent 27 years at the University of Michigan, where he led the radiation oncology department's physics group and helped elevate the program to national prominence. Dr. Fraass was named the inaugural Allen S. Lichter Professor of Radiation Oncology at Michigan and remains an emeritus professor with the program.

Dr. Fraass' work has enhanced the accuracy and effectiveness of radiation therapy (RT) for scores of patients facing a number of cancer types, including diseases in sites that may be difficult to treat, such as the liver and lungs.

Christopher G. Willett, MD, FASTRO, has improved the lives of gastrointestinal and other cancer patients through a career that has brought achievements in a number of areas.

Dr. Willett is the current Chair and a professor of radiation oncology for the Duke Medical Center in Durham, North Carolina. He also serves as medical director of oncology for the Duke University Medical Center and has held multiple leadership roles with the Duke Cancer Institute. During his tenure at Duke, Dr. Willett has grown the department's faculty from 14 to 27 radiation oncologists, increased the number of linear accelerators in the program from five to eight and doubled the number of satellite treatment facilities. He also established a department-supported clinical trial recruitment program that matches 150 to 180 patients each year to investigator-initiated trials. Before his move to North Carolina, Dr. Willett rose from assistant to full professor of radiation oncology at the Harvard Medical School in Boston in just over a decade. While at Harvard, Dr. Willett also served as director of the gastrointestinal cancer center and clinical director of radiation oncology at Massachusetts General Hospital and began his extensive involvement with the Radiation Therapy Oncology Group (RTOG).

Dr. Willett's contributions to clinical and translational research are many, whether pioneering intraoperative radiation therapy (IORT) to treat rectal and pancreatic cancers or demonstrating the potential of RT combined with anti-angiogenic therapy to fight a range of cancers types.

Anthony L. Zietman, MD, FASTRO, has contributed to the science and practice of radiation oncology through decades of innovative and influential research on genitourinary (GU) cancers, active mentorship of future practitioners and faculty members and thoughtful leadership at the helm of scientific journals and meetings in oncology.

In 1986, Dr. Zietman joined Harvard Medical School as a research fellow; thirty years later, he is Harvard’s Jenot and William Shipley Professor of Radiation Oncology and director of the school’s Radiation Oncology Residency Program. He has treated patients as a radiation oncologist at Massachusetts General Hospital Cancer Center since 1991.

Dr. Zietman was named editor-in-chief of ASTRO’s official journal, the International Journal of Radiation Oncology • Biology • Physics in 2011. His leadership with the Red Journal has proved a natural continuation of his service to ASTRO. After leading the program committee for ASTRO’s Annual Meeting and leading ASTRO’s Educational Council for four years, he was elected President and Chair of the society by its membership.

Dr. Zietman’s dedication to improving patient care can be seen in the ways he integrates research with service. When the NCI initiated its GU Protocol Steering Committee, he was named its Co-chair for Radiation Oncology, a role he continues today as he and the committee help coordinate NCI’s clinical trials effort for GU cancers. He also helped establish the Multidisciplinary GU Cancer Symposium and has been integral in helping write national guidelines for prostate and bladder cancer treatment and editorials to give perspective on treatments new and old.
Joint session to review effect of radiation therapy in combination with immunotherapy

Immunotherapy is emerging as a widely-used treatment for many cancers, but what does this mean for radiation oncology? The joint session titled, “Radiation as Adjutant to Immunotherapy: Optimizing Regimens and Sites” will address this question today from 4:45 p.m. to 6:15 p.m. in room 153 A/B/C. The panel will offer input on the subject from experts in the field of immunology and radiation therapy. This panel, cosponsored by the Society for Immunotherapy of Cancer (SITC) and moderated by Dr. Silvia Formenti, will focus on the use of radiation to enhance the immune response of the body against cancer cells targeted by immunotherapy.

Moderator Silvia Formenti, MD, FASTRO, is Chair of the Department of Radiation Oncology at Weill Cornell Medical College and Radiation Oncologist-in-Chief at New York-Presbyterian/Weill Cornell Medical Center. Dr. Formenti’s preclinical work on the role of ionizing radiation in the immune response has been translated to clinical trials of treatments for several forms of cancer, leading to a new field of application for radiotherapy.

Panelists include:

William McBride, DSc, PhD, Professor of Radiation Oncology at UCLA’s Division of Molecular and Cellular Oncology. His research focuses on the effects of radiation on degradation of proteins and the effect this has on the development of tumor immunity.

Sandra Demaria, MD, Professor of Pathology and Radiation Oncology at NYU School of Medicine, who works closely with Dr. Formenti on research topics such as blocking multiple immune inhibitory targets in combination with radiation therapy in laboratory models. She serves as co-leader of the Cancer Immunology program of NYU Cancer Institute, and is the Scientific Director of the Immune Monitoring Core.

James Welsh, MD, Associate Professor of Radiation Oncology at the University of Texas MD Anderson Cancer Center, where his research focuses on enhancing the effects of immunotherapy through its rational combination with radiation, including running some of the first trials of immunotherapies, such as anti-CLTA4 and anti-PD1 antibodies, in combination with radiation therapy.

The topics discussed during this panel will be greatly expanded upon at an Immunotherapy Workshop co-sponsored by NCI, ASTRO, and SITC on June 15-16, 2017 at the NIH main campus in Bethesda, MD. Visit the ASTRO website for more details on this exciting workshop.

ASTRO updates Medicare supervision requirement paper

In response to numerous questions seeking clarity on Medicare’s physician supervision requirements and ASTRO’s interpretation of those rules, ASTRO’s Board of Directors Friday approved an updated guidance document to help radiation oncology practices. As a condition of payment under the Medicare program, the Centers for Medicare and Medicaid Services (CMS) has established physician supervision requirements that apply to specified services furnished in the hospital outpatient department and freestanding physician office settings. These requirements differ according to the type of service and the practice setting where the service is rendered, as defined by the various benefit categories under federal law. ASTRO published a “White Paper” in 2011 that summarized Medicare’s supervision requirements for radiation therapy across care settings and provided ASTRO’s interpretation of those requirements. The updated supervision guidance clarifies ASTRO’s opinion that a board-certified radiation oncologist is the clinically appropriate physician to supervise radiation therapy services. Physician supervision requirements will be among the important health policy issues discussed during the Radiation Oncology Coding and Reimbursement Update Tuesday at 4:45pm (Room 156 A/B/C), and the updated guidance document will be posted to www.ASTRO.org in October.

Luncheon Event Encourages Nurses to Submit Abstracts

During a luncheon event for nurses, Lorraine Drapek, NP, a nurse practitioner of radiation oncology at Massachusetts General Hospital, gave a lecture on how to prepare an abstract, urging nurses to get their voices and perspectives heard.

After recognizing the two ASTRO nurse abstract award winners, Ms. Drapek detailed how to put together an abstract for nurses who are interested in submitting an abstract or nursing session for next year’s ASTRO Annual Meeting in San Diego. “An abstract is a chance to speak to the wider academic community [and] get others to recognize the work you do every day,” she said.

Some important factors to consider when putting together an abstract are the theme of the conference, parameters of the event, and the cost of the conference location. Make sure that the conference theme aligns with your interests and research in order to better your chances of getting the abstract accepted.

The title is also important, it needs to grab attention but also make sense even to non-specialists, while of course correlating with the content. The abstract itself should be no more than 200 to 300 words, which is “a lot easier said than done,” noted Ms. Drapek.

The abstract should consist of four main sections:

1. Overview or identification of the problem, which includes the goal and/or the gap in literature.
2. Central argument, including a clear outline of what are you going to present. “This is the ‘why.’ Why should I read this?” said Ms. Drapek.
3. Methodologies and sources, which includes data sets, surveys, experiments, etc.
4. Conclusion, which should be kept positive and brief to sum up the findings. “This explains the ‘so what?’ Why should people care about your research/proj ect?” said Ms. Drapek.

“Nursing needs a voice, and to do that we need nurses to submit abstracts,” concluded Ms. Drapek. “We have important messages to get across that physicians do not have. Where we shine is symptom management, survivorship, [and] long-term care. I’m asking you to please submit abstracts.”
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