

Report
of the
Advisory Panel on
Ambulatory Payment Classification
(APC) Groups

August 17–18, 2005

CENTERS FOR MEDICARE & MEDICAID SERVICES
(CMS)

7500 Security Boulevard, Auditorium
Baltimore, MD 21244-1850

PANEL MEMBERS PRESENT AT THIS MEETING:

Marilyn K. Bedell, M.S., R.N., O.C.N.
Gloryanne Bryant, B.S., R.H.I.A., R.H.I.T., C.C.S.
Albert B. Einstein, Jr., M.D., F.A.C.P.
Hazel Kimmel, R.N. C.C.S., C.P.C.
Sandra Metzler, M.B.A., R.H.I.A., C.P.H.Q.
Thomas M. Munger, M.D., F.A.C.C.
Frank G. Opelka, M.D., F.A.C.S.
Louis Potters, M.D., F.A.C.R.
James W. Rawson, M.D.
Lou Ann Schaffenberger, M.B.A., R.H.I.A., C.C.S.
Judie S. Snipes, M.B.A., R.N., C.N.A., C.P.C, C.H.E. C.P.H.Q., C.C.P.
Timothy Gene Tyler, Pharm.D.
Kim Allan Williams, M.D., F.A.C.C.
Robert Matthew Zwolak, M.D., Ph.D.

CMS STAFF PRESENT:

E. L. Hambrick, M.D., J.D., *Chair*
Shirl Ackerman-Ross, Designated Federal Official (DFO)

Thomas Gustafson, Ph.D., Director, Center for Medicare Management (CMM)
James Hart, Director, Division of Outpatient Care (DOC)
Joan Sanow, Deputy Director, DOC
Carol Bazell, M.D., Medical Officer, Hospital and Ambulatory Policy Group

Sabrina Ahmed, Staff, DOC
Dana Burley, Staff, DOC
Anita Heygster, Staff, DOC
Rebecca Kane, Staff, DOC
Barry Levi, Staff, DOC
Tamar Spolter, Staff, DOC

WELCOME AND CALL TO ORDER

E. L. Hambrick, M.D., J.D., Chair of the APC Panel, welcomed the members, CMS staff, and the public. (The proceedings of the meeting follow. The agenda appears in Appendix A; a listing of the recommendations appears in Appendix B.)

Dr. Hambrick briefly reviewed the Panel’s charter and explained the “two-times rule,” i.e., in a given ambulatory payment classification (APC) group, the highest median-cost item should be no more than two times the lowest median-cost item. Dr. Hambrick noted the recommendations from this meeting should relate primarily to preparation of the Notice of

Proposed Rulemaking for calendar year 2006, for which comments are due by September 16, 2005.

Thomas Gustafson, Ph.D., Deputy Director, CMM, welcomed the Panel on behalf of CMS leadership. He said the high caliber of technical advice the Panel provides to CMS sets a shining example for its other advisory bodies.

PROPOSED CHANGES TO THE HOSPITAL OUTPATIENT PROSPECTIVE PAYMENT SYSTEM (HOPPS) AND CALENDAR YEAR 2006 PAYMENT RATES

Overview of Proposed Changes

James Hart, Director, DOC, estimated hospitals would see an overall increase of 1.9 percent in APC payment rates in 2006. This figure includes a 3.2 percent update for inflation combined with other considerations. The Medicare Modernization Act (MMA) requires HOPPS to begin reimbursing hospital outpatient departments for drugs on the basis of hospital acquisition costs in 2006. The agency proposed using the average sales price (ASP) methodology, as reported by manufacturers and updated quarterly, plus 6 percent as a proxy for acquisition cost.

In addition, HOPPS proposed to reimburse hospitals for pharmacy overhead costs at 2 percent of ASP. Under this proposal, hospitals will be asked to report pharmacy overhead costs for three categories of drugs: oral drugs, cytotoxic injections and infusions, and noncytotoxic injections and infusions. The data collected beginning in 2006 from these categories will be used to adjust reimbursement rates beginning in 2008. The agency also proposed to reimburse hospitals for radiopharmaceuticals by adjusting the hospitals' charges to cost; CMS is particularly interested in comments on reporting and reimbursement for radiopharmaceuticals. Mr. Hart also described proposals to reduce payment in some cases when multiple diagnostic imaging procedures are performed in the same session and to provide rural sole community hospitals a 6.6 percent adjustment to offset their higher costs.

Overview of Data Issues

CMS Staffer Anita Heygster described the data and methodology used to set median payment rates. Approximately 81 million claims were used to determine rates. The supporting files are available to the public on the CMS web site.

Data Subcommittee's Report

Timothy Gene Tyler, Pharm.D., presented deliberations of the Data Subcommittee. The subcommittee felt the data were sufficient to support the rates for APCs 107 and 108 for the implantation of cardioverter defibrillators (ICD). The subcommittee will look further at APCs 81 and 229 regarding angioplasty and stenting for patterns related to multiple claims and at questions surrounding APCs 651 and 163 that provide payment for services associated with prostate brachytherapy. The subcommittee is concerned about a glut of Current Procedural

Terminology (CPT) add-on codes and their effect on CMS' ability to identify single claims for setting APC rates. Finally, the subcommittee asked that CMS reinforce that hospitals should strive to report claims data as thoroughly as possible, perhaps working with hospital associations to educate hospitals further on claims submission. The Panel accepted the report of the Data Subcommittee.

Observation Issues

Joan Sanow, Deputy Director, Division of Outpatient Care, described the history of reimbursement for observation under HOPPS. For 2006, the agency proposed replacing the existing G codes with a new G code for hourly outpatient observation, and a new G code for direct admission to observation. The Outpatient Code Editor would use claims data to determine whether observation services are separately payable or packaged.

Observation Subcommittee's Report

Judie Snipes, M.B.A., R.N. presented the recommendations and rationale of the Observation Subcommittee. The Panel accepted the report of the Observation Subcommittee and made the following recommendations:

The Panel recommends that the Centers for Medicare & Medicaid Services (CMS) reevaluate expanding the list of diagnoses eligible for separate payment for observation.

The Panel recommends that CMS further clarify the definition of observation end-time, specifically as it relates to the description of discharge time in the proposed rule published in the *Federal Register* on July 25, 2005.

The Panel recommends that CMS offer billing guidance on the new HCPCS G codes for observation in relation to the currently required evaluation and management visit codes.

The Panel recommends that CMS emphasize that observation status is typically assigned for 8-48 hours.

The Panel recommends that CMS clarify hospitals' ability to issue an advance beneficiary notice for those circumstances under which observation hours are not paid separately (i.e., observation for conditions other than congestive heart failure, chest pain, or asthma) or are not otherwise included in payments for other services.

The Panel recommends that CMS establish a mechanism to reimburse separately for observation services when specific HCPCS codes with status indicator T are also present on the claim for the same date of service.

Packaging Issues

CMS Staffer Tamar Spolter described the rationale behind packaging (or bundling) codes. She emphasized that HOPPS pays prospectively. In some cases, unbundling can create an incentive to use a device or do a procedure unnecessarily. Denise A. Merlino of the Society of Nuclear Medicine requested the Panel consider changing the status indicator of CPT 38792, sentinel node identification, from N to S and move CPT 38792 to APC 359, level III injections (Presentation 1). She noted that some patients receive the injection in the hospital's nuclear medicine department and then undergo procedures at an off-site facility. In such cases, because payment for CPT 38792 is generally packaged with the procedure that is performed outside the hospital, the hospital is never reimbursed for its injection services.

The Panel recommends no change to the 2005 status indicator of CPT code 38792 (N – packaged), sentinel node identification, but requests that CMS collect available hospital claims data on that code for further consideration by the Packaging Subcommittee by the next scheduled meeting.

Jill Rathbun of Galileo Consulting Group, representing SonoSite and Boston Scientific, said that bundling CPT code 76937, ultrasound guidance for vascular access, discourages use of the technology (Presentation 2). She requested the Panel consider changing the status indicator of CPT 76397 from N to S and moving CPT 76937 to APC 268.

In response to a Panel member's concern that paying separately for ultrasound guidance for vascular access would encourage unnecessary use of the technology, Pamela Kassing of the American College of Radiology said the detailed CPT code descriptor was intended to control utilization.

The Panel recommends no change to the 2005 status indicator of CPT code 76397 (N - packaged), ultrasound guidance for vascular access, but requests that CMS collect available hospital claims data on that code for further consideration by the Packaging Subcommittee by the next scheduled meeting.

Packaging Subcommittee's Report

Albert B. Einstein, Jr., M.D., said the Packaging Subcommittee continues to evaluate concerns about specific packaged codes. The Panel accepted the report of the Packaging Subcommittee and made the following recommendations:

The Panel recommends no change to the 2005 status indicator of CPT code 42550 (N – packaged), injection for salivary x-ray.

The Panel recommends that CMS collect additional data on CPT code 36500, venous catheterization for selective blood organ sampling, and the corresponding radiological supervision and interpretation code, 75893, including a list of other codes with which these codes are most frequently billed, for consideration by the Packaging Subcommittee.

The Panel recommends no change to the 2005 status indicator of CPT code 0069T (N – packaged), acoustic heart sound services.

The Panel recommends that CMS collect additional data on CPT 94762, overnight pulse oximetry, including a list of other codes with which this code is most frequently billed, for consideration by the Packaging Subcommittee.

Drugs, Drug Handling, and Drug Administration

CMS Staffer Sabrina Ahmed reiterated that MMA requires the CMS to reimburse for most drugs on the basis of acquisition cost beginning in 2006. Reimbursement for radiopharmaceuticals will be based on hospital charges converted to costs for one year, until ASP data are collected. Ms. Sanow said the proposed rule anticipates new CPT codes will correlate generally with CMS's G codes for drug administration that are being used in 2005 for physician office billing.

Stuart Langbein, representing MedImmune, Inc., asked the Panel to consider changing the status indicator of CPT 90660, intranasal influenza vaccine, to L and reimbursing for it on a reasonable cost basis (Presentation 3). Regarding administration of the intranasal influenza vaccine, he said the time and hospital resources required for patient intake and preparation and provider administration of the intranasal vaccine are comparable to those of the injectable influenza vaccine so OPPS payment rates should be the same regardless of the method of influenza vaccine administration.

The Panel recommends that CMS change the status indicator for CPT code 90660, intranasal influenza vaccine, to L, and that the code be reimbursed on a reasonable-cost basis.

The Panel recommends that CMS reimburse for administration of the intranasal influenza vaccine on par with the payment rates for other flu vaccine administration services proposed for assignment to APC 350 for 2006.

Michelle Vogel of the Immune Deficiency Foundation said Medicare beneficiaries' access to intravenous immune globulin (IVIG) has been sharply curtailed because of Medicare's 2005 reimbursement policies for physicians' offices (Presentation 4). She said access to IVIG would be further diminished

when similar cuts in reimbursement take effect under the HOPPS system. She asked the Panel to consider recommending that administration of IVIG be coded with chemotherapy administration codes and distinguishing individual preparations of IVIG for payment purposes. Ms. Vogel requested that the Secretary of the Department of Health and Human Services declare a public health emergency to allow CMS to address increasing reimbursement for IVIG.

Susan Goodin, Pharm.D., of the Hematology/Oncology Pharmacy Association, said the proposed formula of 2 percent of ASP to reimburse hospitals for pharmacy overhead costs is insufficient (Presentation 5). She requested the percentage be increased and that the formula be applied to both packaged drugs and those paid separately. Dr. Goodin also asked that CMS reconsider the proposal to use only three categories to capture pharmacy overhead costs.

Jugna Shah of Nimitt Consulting, representing the Alliance of Dedicated Cancer Centers, echoed Dr. Goodin's concerns and suggested the Panel consider a 15 percent "dampening" mechanism, i.e., drugs should be reimbursed at no less than 85 percent of 2005 reimbursement rates (Presentation 6). Ms. Shah also suggested delaying the implementation of the C codes for the three drug pharmacy overhead cost categories.

Ernest R. Anderson, Jr., of the Association of Community Cancer Centers also suggested the reimbursement be increased for pharmacy overhead costs and that the formula be applied to both packaged drugs and those paid separately (Presentation 7). He requested clear guidance from CMS on how to collect and submit data to capture pharmacy overhead costs.

Jayson Slotnik of the Biotechnology Industry Organization concurred with the statements of previous speakers (Presentation 8). He said the ASP plus 6 percent formula for drug reimbursement simplifies a complex system and eliminates some disparities but may not preserve patient access fully. He added that special consideration may be warranted for IVIG.

Wendalyn Andrews of the University Medical Center/Arizona Cancer Center said the proposed payment system does not adequately cover the costs for the second and subsequent hours of drug administration (Presentation 9). She requested that CMS work with stakeholders to create an appropriate payment methodology for radiopharmaceuticals beginning in 2007, taking into account significant variations in resources involved in preparing and administering different radiopharmaceutical therapies.

Judith Baker of The Resource Group asked the Panel to recommend that the description in the proposed drug handling category 3, "specialty IV or agents requiring special handling in order to preserve their therapeutic value," be further clarified by CMS (Presentation 10). The description should specify, for example,

inclusion of agents that require special storage conditions or have limited shelf-life after reconstitution.

Nelly Leon-Chisen of the American Hospital Association (AHA) added that CMS should keep any coding changes as simple as possible.

Danielle Kelly of D. J. Kelly and Associates noted that external data on drug administration services, including best practices, are available for the physicians' office setting.

The Panel recommends that CMS delay implementation of the proposed codes for drug handling cost categories until January 2007 so that further data and alternative solutions for making payments to hospitals for pharmacy overhead costs can be collected, analyzed by CMS, and presented to the Panel at its winter 2006 meeting.

The Panel recommends that CMS reconsider carefully the proposal to pay 2 percent of average sales price (ASP) for hospital pharmacy overhead costs to ensure that it is in line with hospital costs and that CMS take into account external data gathered during the comment period.

The Panel recommends that CMS pay for the pharmacy overhead costs of both packaged and separately paid drugs, employing a mechanism that adds only minimal additional administrative burden for hospitals.

The Panel recommends that CMS evaluate all the drug codes to be paid at ASP plus 6 percent and pay particular attention to those that drop or rise precipitously.

The Panel recommends that CMS evaluate data as it is gathered to assess the adequacy of payment for the second and subsequent hours of drug administration in the outpatient hospital setting.

Specific APC Issues

Overview of Magnetoencephalography (MEG) Reimbursement

Ms. Spolter described MEG and said CMS is proposing to move all three CPT codes used for MEG from New Technology APCs to APC 430, level IV Nerve and Muscle Tests, with a status indicator of T.

Michael E. Funke, M.D., Ph.D., of the University of Utah, said the proposal would result in dramatic reimbursement cuts that would prevent use of MEG (Presentation 11). He noted that the number of Medicare beneficiaries who receive MEG is small, but Medicare reimbursement policies set the standard for private

payers. Dr. Funke requested the Panel maintain or increase the current reimbursement rates for MEG services.

Steven Stufflebeam, M.D., of Massachusetts General Hospital said the claims data used by CMS to set the proposed rate for 2006 for MEG are inadequate and inconsistent with real costs (Presentation 12). He asked that the current reimbursement rates be maintained and further data collected.

Roland R. Lee, M.D., of the University of California at San Diego, explained the technique and its costs (Presentation 13). He said the American College of Radiology and the American Society of Neuroradiology also support maintaining the current reimbursement rates. Dr. Lee added that the T status indicator is not needed, because additional procedures are already billed with reduced charges.

The Panel reviewed written comments from the L. Dade Lunsford, M.D., of the University of Pittsburgh Medical Center and Mingxiong Huang, Ph.D., of the University of California at San Diego Medical Center echoing the statements of the presenters (Presentations 14, 15).

John McInnes, representing the manufacturer of a MEG unit, said CMS originally set the rates for MEG using external data and input from multiple hospitals and medical societies. He suggested CMS seek such data again.

The Panel recommends that CMS maintain CPT codes 95965, 95966, and 95967, magnetoencephalography (MEG), in their 2005 new technology APCs. The Panel also recommends that CMS collect more external hospital cost data and provide a detailed review of data for the Panel's consideration at its next meeting.

Overview of the GreenLight Laser System

Ms. Spolter said CMS proposes moving HCPCS code C9713, which describes a service using the GreenLight Laser System, to the new APC 429, Level V Cystourethroscopy and other Genitourinary Procedures.

Henry M. Garlich of Laserscope, Inc., said the number of single claims CMS used to determine the APC reimbursement for this procedure is insufficient to support moving it to APC 429 (Presentation 16). He asked the Panel to consider keeping it in a New Technology APC for one more year. If the procedure is moved, Mr. Garlich suggests the reimbursement be set at no less than 85 percent of 2005 levels.

Maria Stewart of Boston Scientific said her organization analyzed claims using 2004 data and found significant differences in costs and charges when revenue codes were inappropriately versus appropriately recorded, suggesting errors in reporting. She suggested the procedure remain in a New Technology APC for one more year to allow for collection of properly coded claims.

Ms. Leon-Chisen of the AHA noted that her organization is working to educate billing and coding personnel in the face of frequently changing requirements and parameters.

The Panel accepts CMS' proposed creation of APC 429 for 2006 and the inclusion of HCPCS C9713, which describes use of the GreenLight Laser System, in this APC.

Overview of Magnetic Resonance Guided Focused Ultrasound Ablation of Uterine Leiomyomata (MRgFUS)

CMS Staffer Dana Burley said CMS proposes to maintain the CPT codes for MRgFUS, 0071T and 0072T, in APC 193 for 2006, and the 2006 proposed payment rate for APC 193 is an increase over the 2005 rate.

Anthony Santangelo of InSightec asked the Panel to move the CPT codes for MRgFUS from APC 193 to a New Technology APC (Presentation 17). He said no claims data were available to CMS for CPT codes 0071T and 0072T, and they are not clinically similar or resource coherent with other services assigned to APC 193.

Rob Newman of InSightec offered to provide data and work with CMS as needed.

The Panel recommends that CMS work with stakeholders to assign CPT 0071T and 0072T, focused ultrasound ablation of uterine leiomyomata including magnetic resonance guidance, to an appropriate New Technology APC(s).

Overview of Intradiscal Annuloplasty

Ms. Burley said CMS proposes to maintain the codes for percutaneous intradiscal annuloplasty in APC 203, Level IV Nerve Injections.

Gail Daubert, representing Smith & Nephew, Inc., requested that CPT codes 0062T and 0063T be moved to either APC 50 (Level II Musculoskeletal Procedures Except Hand and Foot) or APC 51 (Level III Musculoskeletal Procedures Except Hand and Foot), where they would be more clinically similar and resource coherent with other services already assigned to those APCs (Presentation 18).

The Panel recommends that CMS place CPT 0062T and 0063T in either APC 50 or APC 51, as CMS determines appropriate, based upon cost data gathered.

Overview of Image-Guided Robotic Stereotactic Radiosurgery (SRS)

CMS Staffer Rebecca Kane said CMS proposes no changes to the APC placement of SRS treatment delivery codes and proposes discontinuing the G codes for SRS planning in favor of CPT codes.

Linda Winger, representing Georgetown University Hospital and several other clinical organizations, requested that G0339, image-guided robotic SRS, be placed permanently in APC 1528 (Presentation 19). She said the work and resources involved in SRS are the same regardless of whether the provider is administering the initial treatment or subsequent treatments. Therefore, G0340, which describes subsequent treatments with image-guided robotic SRS, should be eliminated and G0339 used for all such treatment.

The Panel reviewed written comments submitted by the American Society for Therapeutic Radiology and Oncology, which disagreed with proposals to treat planning for cobalt-based SRS differently than linear-accelerator-based SRS (Presentation 20).

Overview of Interstitial Brachytherapy

Ms. Heygster said the proposed 2006 payment rate for APC 651 (Complex Interstitial Radiation Source Application), is 46 percent less than the rate for 2005. She said CMS recognizes providers' concerns about the instability of median costs and is exploring the matter.

Wendy Smith Fuss of the Coalition for the Advancement of Brachytherapy said the claims used by CMS to set the median rate for APC 651 are miscoded and suggested CMS reconsider the rate using only correctly-coded claims that include C codes for brachytherapy sources before finalizing the rate for 2006 (Presentation 21). She also asked that CMS reimburse APC 651 at no less than 85 percent of the 2005 rate.

Ms. Shah of Nimitt Consulting added that the situation illustrates that single claims are not always accurate.

For APC 651, *The Panel recommends* that CMS evaluate the analysis proposed by the Coalition for the Advancement of Brachytherapy, using only the subset of claims that include brachytherapy source C codes to calculate median costs, in advance of finalizing the proposed rule.

Overview of the Stretta Procedure

Ms. Heygster said CMS proposes placing CPT code 43257, which describes a procedure using the Stretta System, in APC 422, Level II Upper Gastrointestinal (GI) Procedures. CMS will use both single and multiple claims for the Stretta

System and a single endoscopy service to calculate the contribution of Stretta to the median cost for APC 422.

Mr. Langbein, representing Curon Medical, Inc., said the median payment rate for APC 422 undervalues the cost of the Stretta service, because it does not take into account the fact that the new CPT code for Stretta now includes several endoscopy services (Presentation 22). He proposed moving CPT 43257 to a new APC for Level III Upper GI Procedures.

Larry Heaton of Curon Medical, Inc., said the addition of multiple endoscopy procedures to a claim including the Stretta procedure would not dramatically increase the cost for the full service described by CPT code 43257. However, such claims should not be excluded from analysis.

Overview of Extracorporeal Shock Wave Therapy (ESWT)

CMS Staffer Barry Levi provided background on ESWT, saying that CMS created two codes for high energy ESWT, C9720 (for chronic lateral epicondylitis or tennis elbow) and C9721 (for chronic plantar fasciitis), and placed these high energy ESWT services into APC 1547 as of January 1, 2005, both with a status indicator of T. CMS has received several comments to these interim final code placements for 2005, to which it expects to respond in the final rule for 2006 rates.

The Panel reviewed written comments from AKSM/ORTHO requesting that ESWT be moved to New Technology APC 1559, which has a higher payment rate (Presentation 23).

Overview of Intravascular and Intracardiac Ultrasound

Ms. Heygster said CMS proposes no changes to the placement of CPT 37250, noncoronary intravascular ultrasound, in APC 416 (Level I Intravascular and Intracardiac Ultrasound and Flow Reserve) but will continue to monitor the resource-coherence of this APC.

Deb Lorenz of Boston Scientific said CPT 37250 should be placed in a device-dependent APCs and be subject to device code edits because a specialized catheter is always involved (Presentation 24). She asked the Panel to move CPT 37250 to APC 670. Ms. Lorenz also asked that CMS develop an alternative methodology for calculating costs with multiple procedure add-on claims.

The Panel recommends that CMS make CPT 37250, for noncoronary intravascular ultrasound, subject to Outpatient Prospective Payment System (OPPS) device code edits, and that the code remain in APC 416 for 2006 as recommended by CMS.

Blood and Blood Products

Ms. Kane explained the history of CMS's policy regarding reimbursement for blood and blood products. In 2005, CMS established individual APCs for each

blood product and applied a special blood-specific cost-to-charge ratio methodology. In addition, CMS provided detailed blood billing guidance in the spring of 2005, which should help hospitals provide more accurate and complete charge data.

Jerry Squires, M.D., of the American Red Cross requested that for 2006, the payment rates for leukocyte-reduced red blood cells and certain low-volume blood products be frozen at 2005 levels (Presentation 25). He said leukocyte-reduced red blood cells are the most frequently used blood product by hospitals, and the proposed rate would cover only 75 percent of the acquisition cost.

Theresa Wiegmann of AABB described the many factors that contribute to the rising costs of blood and blood products (Presentation 26). She asked that CMS use its 2005 payment rates as the floor for payment rates for all blood and blood products for 2006; specifically, CMS should pay the greater of 1) the median as determined by 2004 data or 2) the 2005 payment median.

John Carlsen of Covance Market Access Services said CMS should provide comprehensive guidance on billing for blood and blood products, as it did in March 2005, on an annual basis.

The Panel recommends that CMS use its 2005 payment rates as the floor for payment rates for all blood and blood products for 2006; specifically, CMS should pay the greater of 1) the simulated median as determined by 2004 data or 2) the 2005 payment median.

Overview of Device-Related APC Issues

Ms. Heygster asked whether CMS should adjust the claims-based medians for device-related APCs and if so, how? She said device reporting is uneven, although the requirement to use C codes and editing for device codes should improve the quality of the data. For 2006, CMS proposes payment rates for device-related APCs be set at whichever is higher: the claims-based median or 85 percent of the 2005 adjusted median.

Jane Hyatt Thorpe of AdvaMed requested that CMS 1) accelerate its efforts to educate hospitals on the importance of accurate coding for devices, 2) use external data for setting 2006 rates, 3) adopt proxy methodologies to estimate the costs of devices used in adjunct procedures, and 4) set a floor for 2006 payment rates at no less than 2005 rates for device-dependent APCs (Presentation 27). She expressed concerns about new technology services using costly devices moving to lower-paying APCs.

Ms. Leon-Chisen of the AHA added that the proliferation of codes that would be caused by a glut of new CPT codes for new technology services would likely create additional technical problems for all involved.

Bob Thompson of Medtronic said devices used for services described by Category III CPT codes are considered experimental and, therefore, not reimbursed by third-party payers, whereas devices used in services reported via unlisted codes may be reimbursed.

Gerald V. Naccarelli, M.D., of Penn State College of Medicine said the proposed payment rates for APCs 107 and 108 for implantation of ICDs represent a 16 percent decrease since 2004 and are insufficient to cover the costs of the devices (Presentation 28). He requested that the rates be set at 2005 rates plus the 3.2 percent update.

Bob Thompson, representing Medtronic, Guidant, and St. Jude Medical, said external data should be used to set payment rates for APCs 107 and 108 or at least as a comparison to assess the accuracy of claims-based medians (Presentation 29). He also asked that CMS address charge compression issues before setting 2007 rates.

David Zechman of Jewish Hospital HealthCare Services said the underpayment for APCs 107 and 108 means providers have to decide whether to decrease the use of ICDs, even among patients who would benefit greatly, or cut other services or staff to offset the costs (Presentation 30). He requested that the rates be set at 2005 rates plus the 3.2 percent update. He also asked that CMS establish a methodology that better accounts for real hospital costs.

The Panel recommends that for 2006, CMS base the payment rates for APCs 107 and 108, which provide payments for cardioverter defibrillator implantations, on their 2005 payment rates plus 3.2 percent.

Maria Stewart of Boston Scientific said the proposed payment rate for APC 384 (GI Procedures with Stents) underestimates the costs associated with performing the procedures (Presentation 31). She asked that CMS use only claims that include a HCPCS device code to accurately identify the true costs of the procedures in APC 384. Alternatively, she suggested that CMS set the 2006 payment rate at 95 percent of the 2005 rate.

For determining 2006 payment rates for APC 384, which provides payment for services to place gastrointestinal stents, *the Panel recommends* that CMS use only those claims containing a device HCPCS code to calculate the median cost for APC 384.

The Panel recommends that for APC 384, CMS move CPT codes 43269 and 43268 for endoscopic retrograde cholangiopancreatography services into a new APC to distinguish them from gastrointestinal stent placement services that do not require fluoroscopy which should remain in APC 384.

David Charles, M.D., representing Medtronic, said the proposed payment rate for APC 227 (Implantation of Drug Infusion Device) is more than \$1,600 below the average acquisition cost of the device (Presentation 32). He asked that CMS use external data to establish the costs of devices while using claims data to set the rates for the procedural component of the APC.

Richard B. North, M.D., representing Advanced Bionics Corporation, said the proposed structure of APCs 040 and 225 for neurostimulator electrode implantation inappropriately combines procedures that require substantially different resources (Presentation 33). He proposed a reconfiguration scheme that would distinguish percutaneous implantations from those requiring an incision or laminectomy and from cranial procedures.

Bonnie Handke of Medtronic echoed Dr. North's comments and proposed a reconfiguration of APCs 040 and 225 that requires creating a new third level APC for neurostimulator electrode implantation services.

The Panel recommends that CMS adopt the proposed reconfiguration of APCs 040 and 225 for neurostimulator electrode implantation as submitted by Medtronic, creating three APCs that are clinically homogenous and coherent in use of resources. As proposed, APC 040 would include CPT codes 63650, 64555, 64560, and 64561; APC 225 would include CPT codes 64553 and 64573; and a new APC would include CPT codes 64577, 64580, 64575, 64581, and 63655.

The Panel reviewed the written comments of the American Society of Interventional Pain Physicians requesting reevaluation of the payment rate for APC 222 (Implantation of Neurological Device) (Presentation 35).

Jori Frahler of the Medical Device Manufacturers Association said the volatility of payment rates for device-related APCs from year to year is devastating for manufacturers (Presentation 36). She suggested that a dampening mechanism be applied to all device-related APCs so that rates are set at no less than 95 percent of the previous year's rates. She asked that external data be used to supplement internal data for rate setting.

Overview of Multiple Diagnostic Imaging Procedures

Ms. Burley explained the CMS proposal to apply a 50 percent reduction to the second and subsequent imaging procedures in the same family performed in the same session. The proposal identifies 11 families of imaging procedures that would be subject to the reduction. Ms. Burley said private payers apply such reductions, and the model for the CMS proposal is based on a comparable reimbursement structure proposed for the 2006 Physician Fee Schedule.

John Patti, M.D., of the American College of Radiology said his organization does not agree with the assumption that a provider always realizes some economic efficiency when multiple imaging procedures are performed (Presentation 37). He asked CMS to clarify the term “in the same session.” Dr. Patti said the hospital charge data which is converted to costs through application of cost-to-charge ratios already accounts for any economic efficiencies as costs are reduced, so further reductions in reimbursement are not warranted. He requested that the proposal be delayed for one year to allow for further study.

The Panel recommends that CMS postpone implementing the proposal to reduce payment for the second and subsequent imaging services when multiple diagnostic imaging procedures are performed in one session for 1 year to gather more data on the implications for hospitals of the changes. The Panel further recommends that CMS work with the American College of Radiology and other stakeholders in this process.

OTHER ISSUES

A Panel member questioned whether single-level laminectomy services should remain on the inpatient-only list.

The Panel recommends that CMS review site of service data on single-level laminectomy services, which currently have status indicator C and are on the inpatient-only list, to determine whether the procedures are being performed in the hospital outpatient setting with enough frequency to be assigned to APCs for payment under the OPSS.

ADMINISTRATIVE BUSINESS

The Panel members considered whether the subcommittees should continue to meet.

The Panel recommends that CMS continue the work of the Packaging, Data, and Observation Subcommittees.

CLOSING

The Panel reviewed the recommendations from the meeting. Dr. Hambrick thanked the Panel members for their service and the CMS and support staff, especially Shirl Ackerman-Ross, for their hard work.

Dr. Hambrick adjourned the meeting at 5:10 p.m. on Thursday, August 18, 2005.

Appendix A



AGENDA

August 17 and 18, 2005¹

ADVISORY PANEL ON AMBULATORY PAYMENT CLASSIFICATION (APC) GROUPS' MEETING

DAY 1 - Wednesday, August 17, 2005

Public registrants may enter the CMS Central Office Building after 12:15 p.m.

TAB

01:00 Opening - Day 1

Welcome, Call to Order, Introduction of New Members, and Opening Remarks
Thomas Gustafson, Ph.D., Deputy Director, Center for Medicare Management

01:20 Panel Organization and Housekeeping Issues

E. L. Hambrick, M.D., Chair, APC Panel

01:30² **CMS-1501-P:** Medicare Program; Proposed Changes to the
Hospital Outpatient Prospective Payment System and Calendar Year 2006
Payment Rates, **Federal Register**, July 25, 2005

A

1. Overview

- a. James Hart, Director, Division of Outpatient Care (DOC)
- b. Discussion
- c. Panel's Comments/Recommendations

¹We anticipate that there will be no meeting on August 19, 2005. However, if the business of the Panel does not conclude on August 18, 2005, the Panel will meet on August 19, 2005.

²The times listed for presentations are approximate times.

- 01:45 **Data Issues** **B**
1. **Overview**
 - Anita Heygster, CMS Staff
 2. **Data Subcommittee's Report**
 - a. Discussion
 - b. Panel's Recommendations
- 02:15 **Observation Issues** **C**
1. **Overview**
 - Joan Sanow, Deputy Director, DOC
 2. **Observation Subcommittee's Report**
 - a. Discussion
 - b. Panel's Recommendations
- 02:30 **Packaging Issues** **D**
1. **Overview**
 - Tamar Spolter, CMS Staff
 2. **SonoSite Inc.'s Presentation - Ultrasound for Vascular Access - Packaging**
 - Irene Plenefisch, Director, Payer & External Relations, SonoSite, Inc.
 - Jill Rathbun, Managing Partner, Galileo Consulting Group
 - Thomas W. Byrne, Director, Reimburse. & Outcomes Plan., Boston Scientific
 3. **Society of Nuclear Medicine's (SNM) Presentation – APC 0359, Level III Injections**
 - Denise A. Merlino, M.B.A., C.P.C., Coding Advisor, SNM
 4. **Packaging Subcommittee's Report**
 - a. Discussion
 - b. Panel's Recommendations
- 03:15 *Break*
- 03:30 **Drugs, Drug Handling, and Drug Administration** **F**
(Section E is vacant)
1. **Overview**
 - Sabrina Ahmed, CMS Staff
 - Rebecca Kane, CMS Staff
 2. **MedImmune, Inc.'s Presentation – Intranasal Flu Vaccine & Vaccine Admin.**
 - a. Stuart Langbein, Outside Counsel to MedImmune, Inc.
 - b. Discussion
 - c. Panel's Recommendations

- 3. Immune Deficiency Foundation’s Presentation – IVIG Reimbursement** F (cont’d)
- a. Michelle Vogel, Vice President, Immune Deficiency Foundation
 - b. Discussion
 - c. Panel’s Recommendations
- 4. Hematology/Oncology Pharm. Assoc.’s Presentation – Pharmacy Handling Costs**
- a. Susan Goodin, Pharm. D., Director, Div. of Pharm. Sciences, The Cancer Institute of New Jersey
 - b. Discussion
 - c. Panel’s Recommendations
- 5. Alliance of Dedicated Cancer Centers’ Presentation – Drug Handling Payments**
- a. Jugna Shah, M.P.H., Consultant, Nimit Consulting, Inc.
 - b. Discussion
 - c. Panel’s Recommendations
- 6. Assoc. of Community Cancer Center’s Presentation – Reimbursement for Drugs, Pharmaceutical Services & Handling Costs**
- a. Ernest R. Anderson, Jr., Chair, OPEN Advisory Board (OAB)
 - b. Paul W. Bush, Pharm.D., M.B.A., FASHP, ACCC OAB
 - c. Discussion
 - d. Panel’s Recommendations
- 7. Biotechnology Industry Organization’s (BIO) Presentation – Drug & Biological APCs**
- a. Jayson Slotnik, Director, Medicare Reimbursement & Economic Policy, BIO
 - b. Discussion
 - c. Panel’s Recommendations
- 8. University Medical Center/Arizona Cancer Center’s Present. – Drug Admin. Codes**
- a. Wendalyn Andrews, Director, Oncology Services
 - b. Discussion
 - c. Panel’s Recommendations
- 9. The Resource Group’s Presentation – Proposed C Codes for Drug Handling**
- a. Judith Baker, Partner/Exec. Director, The Resource Group
 - b. Discussion
 - c. Panel’s Recommendations

05:00 Adjourn



AGENDA

August 17 and 18, 2005

ADVISORY PANEL ON AMBULATORY PAYMENT CLASSIFICATION (APC) GROUPS' MEETING

DAY 2 - Thursday, August 18, 2005

Public registrants may enter the CMS Central Office Building after 7:45 a.m.

TAB

08:30 Opening - Day 2

Welcome and Call to Order

E. L. Hambrick, M.D., Chair, APC Panel

08:40 **Specific APC Issues**

G

1. Overview – Magnetoencephalography (MEG) Reimbursement

- Tamar Spolter, CMS Staff

2. University of Utah's Presentation – Clinical MEG

- Michael E. Funke, M.D., Ph.D., University of Utah

3. Massachusetts General Hospital's Presentation - MEG

- Steven Stufflebeam, Director, Clinical MEG, MGH

4. University of California at San Diego's (UCSD) Presentation – MEG

- Roland R. Lee, M.D.

5. University of Pittsburgh Medical Center's Comments – MEG

6. UCSD Medical Center's Comments - MEG Reimbursement

a. Discussion

b. Panel's Recommendations

7. Overview – GreenLight Laser System

- Tamar Spolter, CMS Staff

8. Laserscope, Inc.'s Presentation – GreenLight Laser System

a. Henry M. Garlich, Director, Health Economics Research & Reimbursement

b. Discussion

c. Panel's Recommendations

9. Overview – Focused Ultrasound Ablation of Uterine Leiomyomata, including MR Guidance (MRgFUS)

- Dana Burley, CMS Staff

10. InSightec's Presentation - MRgFUS

a. Anthony Santangelo, Manager, Govt. Revenue, Partners Healthcare System, BWH

b. Discussion

c. Panel's Recommendations

11. Overview - Intradiscal Annuloplasty

- Dana Burley, CMS Staff

12. Smith & Nephew, Inc.'s Presentation – Intradiscal Annuloplasty

- a. Douglas Fenton, M.D., Mayo Clinic
- b. Discussion
- c. Panel's Recommendations

10:15 *Break*

10:30 **Specific APC Issues** (*continued*)

13. Overview – Interstitial Brachytherapy

- Anita Heygster, CMS Staff

14. Coalition for the Advancement of Brachytherapy – Interstitial Brachytherapy

- a. Wendy Smith Fuss, Consultant, Coalition for the Advance. of Brachytherapy
- b. Discussion
- c. Panel's Recommendations

15. Overview – Stretta Procedure

- Anita Heygster, CMS Staff

16. Curon Medical, Inc.'s Presentation – Stretta Procedure

- a. Stuart Langbein, Attorney & Consultant for Curon Medical, Inc.
- b. Discussion
- c. Panel's Recommendations

17. Overview – Extracorporeal Shock Wave Therapy (ESWT)

- Barry Levi, CMS Staff

18. AKSM/ORTHO's Presentation – High Energy ESWT

- a. John Furia, M.D., Medical Director, AKSM/ORTHO
- b. Discussion
- c. Panel's Recommendations

19. Overview – Intravascular and Intracardiac Ultrasound

- Anita Heygster, CMS Staff

20. Boston Scientific's Presentation – APC 0416 – Level I Intravascular & Intracardiac Ultrasound and Flow Reserve

- a. Deb Lorenz, Manager, Reimbursement & Outcomes Planning, Boston Scientific
- b. Discussion
- c. Panel's Recommendations

21. Overview – Image-Guided Robotic Stereotactic Radiosurgery

- Rebecca Kane, CMS Staff

22. Georgetown U. Hospital's Presentation – Image-Guided Robotic Stereotactic Radiosurgery

- Linda Winger, Vice President, Georgetown University Hospital

23. American Society for Therapeutic Radiology & Oncology's Comments – Radiation Therapy Issues

- a. Discussion
- b. Panel's Recommendations

12:00 *Lunch*

NOTE: *The afternoon break(s) will be given at the discretion of the Chair.*

01:00 **Blood & Blood Products**

H

1. Overview

Rebecca Kane, CMS Staff

2. American Red Cross's Presentation - Reimbursement for Blood/Blood Products

- Jerry Squires, M.D., VP & Chief Scientific Officer

3. American Association of Blood Bank's Present. – Reimburse. For Blood/Blood Products

a. Theresa Wiegmann, J.D., Director, Public Policy

b. Discussion

c. Panel's Recommendations

01:30 **Device-Related APC Issues**

I

1. Overview

- Anita Heygster, CMS Staff

2. AdvaMed's Presentation - Device Costs Associated with Selected APCs

a. Jane Hyatt Thorpe, Assoc. VP

b. Discussion

c. Panel's Recommendations

3. Penn State College of Medicine's Presentation – APCs 107 & 108 – ICD Implantation

- Gerald V. Naccarelli, M.D., F.A.C.C., Chief, Cardiology, Penn State College of Med.

4. Medtronic's Presentation – APCs 107 & 108 – ICD Implantation

- Bob Thompson, Director, Reimbursement, Economics & Health Policy, Medtronic CRM

5. Jewish Hospital HealthCare Services' Presentation -APCs 107/108-Defibrillator Payments

a. David Zechman, President & CEO, Heart & Lung Institute of Jewish Hosp. HC Serv.

b. Discussion

c. Panel's Recommendations

02:30 *Break*

02:45 **6. Boston Scientific's Presentation – APC 384, GI Stenting**

a. Maria Stewart, Senior Manager, Boston Scientific

b. Discussion

c. Panel's Recommendations

7. Medtronic's Presentation – APC 0227, Drug Infusion Pump Implantation

a. Dr. David Charles, Vice Chair, Dept. of Neurology, Vanderbilt University,
Consultant to Medtronic

b. Discussion

c. Panel's Recommendations

- 8. Advanced Bionics Corp.’s Presentation – APCs 0040 & 0225, Neurostimulator Electrode Implantation** I (cont’d)
- Richard B. North, M.D., Prof. of Neurosurgery, Johns Hopkins School of Medicine
- 9. Medtronic, Inc.’s Presentation – APCs 0040 & 0225, Neurostimulator Electrode Implantation**
- Bonnie Handke, R.N., Sr. Manager, Health Policy & Payment, Medtronic, Inc.
- 10. American Society of Intervent. Pain Physicians’ Comments – Neurostimulator Implantation**
 - a. Discussion
 - b. Panel’s Recommendations

- 11. Medical Device Manufacturers Association’s (MDMA) Presentation – Medicare Payment Rates**
 - a. Jori Frahler, Policy Director, MDMA
 - b. Discussion
 - c. Panel’s Recommendations

03:45 **Multiple Diagnostic Imaging Procedures** J

- 1. Overview**
- Dana Burley, CMS Staff
- 2. American College of Radiology’s (ACR) Presentation - Multiple Diagnostic Imaging Procedures**
 - a. John Patti, M.D., Chair, Commission on Economics, ACR
 - b. Discussion
 - c. Panel’s Recommendations

04:15 **Closing**

- a. **Summary of the Panel’s Recommendations for 2006** K
- b. Discussion
- c. Final Remarks

05:00 Adjourn

Appendix B

APC PANEL'S RECOMMENDATIONS

Observation

The Panel recommends that the Centers for Medicare & Medicaid Services (CMS) reevaluate expanding the list of diagnoses eligible for separate payment for observation.

The Panel recommends that CMS further clarify the definition of observation end-time, specifically as it relates to the description of discharge time in the proposed rule published in the *Federal Register* on July 25, 2005.

The Panel recommends that CMS offer billing guidance on the new HCPCS G codes for observation in relation to the currently required evaluation and management visit codes.

The Panel recommends that CMS emphasize that observation status is typically assigned for 8-48 hours.

The Panel recommends that CMS clarify hospitals' ability to issue an advance beneficiary notice for those circumstances under which observation hours are not paid separately (i.e., observation for conditions other than congestive heart failure, chest pain, or asthma) or are not otherwise included in payments for other services.

The Panel recommends that CMS establish a mechanism to reimburse separately for observation services when specific HCPCS codes with status indicator T are also present on the claim for the same date of service.

Packaging

The Panel recommends no change to the 2005 status indicator of CPT code 76397 (N - packaged), ultrasound guidance for vascular access, but requests that CMS collect available hospital claims data on that code for further consideration by the Packaging Subcommittee by the next scheduled meeting.

The Panel recommends no change to the 2005 status indicator of CPT code 38792 (N - packaged), sentinel node identification, but requests that CMS collect available hospital claims data on that code for further consideration by the Packaging Subcommittee by the next scheduled meeting.

The Panel recommends no change to the 2005 status indicator of CPT code 42550 (N - packaged), injection for salivary x-ray.

The Panel recommends that CMS collect additional data on CPT code 36500, venous catheterization for selective blood organ sampling, and the corresponding radiological supervision and interpretation code, 75893, including a list of other codes with which these codes are most frequently billed, for consideration by the Packaging Subcommittee.

The Panel recommends no change to the 2005 status indicator of CPT code 0069T (N – packaged), acoustic heart sound services.

The Panel recommends that CMS collect additional data on CPT 94762, overnight pulse oximetry, including a list of other codes with which this code is most frequently billed, for consideration by the Packaging Subcommittee.

Drugs, Drug Handling, and Drug Administration

The Panel recommends that CMS change the status indicator for CPT code 90660, intranasal influenza vaccine, to L, and that the code be reimbursed on a reasonable- cost basis.

The Panel recommends that CMS reimburse for administration of the intranasal influenza vaccine on a par with the payment rates for other flu vaccine administration services proposed for assignment to APC 350 for 2006.

The Panel recommends that CMS delay the implementation of the proposed codes for drug handling cost categories until January 2007 so that further data and alternative solutions for making payments to hospitals for pharmacy overhead costs can be collected, analyzed by CMS, and presented to the Panel at its winter 2006 meeting.

The Panel recommends that CMS reconsider carefully the proposal to pay 2 percent of average sales price (ASP) for hospital pharmacy overhead costs to ensure that it is in line with hospital costs and that CMS take into account external data gathered during the comment period.

The Panel recommends that CMS pay for the pharmacy overhead costs of both packaged and separately paid drugs, employing a mechanism that adds only minimal additional administrative burden for hospitals.

The Panel recommends that CMS evaluate all the drug codes to be paid at ASP plus 6 percent and pay particular attention to those that drop or rise precipitously.

The Panel recommends that CMS evaluate data as it is gathered to assess the adequacy of payment for the second and subsequent hours of drug administration in the outpatient hospital setting.

Specific APCs

The Panel recommends that CMS maintain CPT codes 95965, 95966, and 95967, magnetoencephalography (MEG), in their 2005 new technology APCs. The Panel also recommends that CMS collect more external hospital cost data and provide a detailed review of data for the Panel's consideration at its next meeting.

The Panel accepts CMS's proposed creation of APC 429 for 2006 and the inclusion of HCPCS C9713, which describes use of the GreenLight Laser System, in this APC.

The Panel recommends that CMS work with stakeholders to assign CPT 0071T and 0072T, focused ultrasound ablation of uterine leiomyomata including magnetic resonance guidance, to an appropriate New Technology APC(s).

The Panel recommends that CMS place CPT 0062T and 0063T in either APC 50 or APC 51, as CMS determines appropriate, based upon cost data gathered.

For APC 651, *The Panel recommends* that CMS evaluate the analysis proposed by the Coalition for the Advancement of Brachytherapy, using only the subset of claims that include brachytherapy source C codes to calculate median costs, in advance of finalizing the proposed rule.

The Panel recommends that CMS make CPT 37250, for noncoronary intravascular ultrasound, subject to Outpatient Prospective Payment System (OPPS) device code edits, and that the code remain in APC 416 for 2006 as recommended by CMS.

Blood and Blood Products

The Panel recommends that CMS use its 2005 payment rates as the floor for payment rates for all blood and blood products for 2006; specifically, CMS should pay the greater of 1) the simulated median as determined by 2004 data or 2) the 2005 payment median.

Device-Related APCs

The Panel recommends that for 2006, CMS base the payment rates for APCs 107 and 108, which provide payments for cardioverter defibrillator implantations, on their 2005 payment rates plus 3.2 percent.

For determining 2006 payment rates for APC 384, which provides payment for services to place gastrointestinal stents, *The Panel recommends* that CMS use only those claims containing a device HCPCS code to calculate the median cost for APC 384.

The Panel recommends that for APC 384, CMS move CPT codes 43269 and 43268 for endoscopic retrograde cholangiopancreatography services into a new APC to distinguish them from gastrointestinal stent placement services that do not require fluoroscopy which should remain in APC 384.

The Panel recommends that CMS adopt the proposed reconfiguration of APCs 040 and 225 for neurostimulator electrode implantation as submitted by Medtronic, creating three APCs that are clinically homogenous and coherent in use of resources. As proposed, APC 040 would include CPT codes 63650, 64555, 64560, and 64561; APC 225 would include CPT codes 64553 and 64573; and a new APC would include CPT codes 64577, 64580, 64575, 64581, and 63655.

Multiple Diagnostic Imaging Procedures

The Panel recommends that CMS postpone implementing the proposal to reduce payment for the second and subsequent imaging services when multiple diagnostic imaging procedures are performed in one session for 1 year to gather more data on the implications for hospitals of the changes. The Panel further *recommends* that CMS work with the American College of Radiology and other stakeholders in this process.

Administrative Business

The Panel recommends that CMS continue the work of the Packaging, Data, and Observation Subcommittees.

Other Issues

The Panel recommends that CMS review site of service data on single-level laminectomy services, which currently have status indicator C and are on the inpatient-only list, to determine whether the procedures are being performed in the hospital outpatient setting with enough frequency to be assigned to APCs for payment under the OPPS.

Appendix C Presentations

The following documents were presented at or submitted for the Advisory Panel on APCs meeting August 17–18, 2005, and are appended here for the record:

- Presentation 1: Society of Nuclear Medicine
- Presentation 2: SonoSite and Boston Scientific
- Presentation 3: MedImmune, Inc.
- Presentation 4: Immune Deficiency Foundation
- Presentation 5: Hematology/Oncology Pharmacy Association
- Presentation 6: Alliance of Dedicated Cancer Centers
- Presentation 7: Association of Community Cancer Centers
- Presentation 8: Biotechnology Industry Organization
- Presentation 9: University Medical Center/Arizona Cancer Center
- Presentation 10: The Resource Group
- Presentation 11: University of Utah
- Presentation 12: Massachusetts General Hospital/Harvard Medical School
- Presentation 13: University of California at San Diego
- Presentation 14: University of Pittsburgh Medical Center
- Presentation 15: University of California at San Diego
- Presentation 16: Laserscope, Inc.
- Presentation 17: InSightec
- Presentation 18: Smith & Nephew, Inc.
- Presentation 19: Georgetown University Hospital
- Presentation 20: American Society for Therapeutic Radiation and Oncology
- Presentation 21: Coalition for the Advancement of Brachytherapy
- Presentation 22: Curon Medical, Inc.
- Presentation 23: AKSM/ORTHO
- Presentation 24: Boston Scientific, Inc.
- Presentation 25: American Red Cross
- Presentation 26: AABB
- Presentation 27: Advanced Medical Technology Association (AdvaMed)
- Presentation 28: Penn State College of Medicine
- Presentation 29: Medtronic
- Presentation 30: Jewish Hospital HealthCare Services
- Presentation 31: Boston Scientific, Inc.
- Presentation 32: Medtronic
- Presentation 33: Advanced Bionics Corporation
- Presentation 34: Medtronic
- Presentation 35: American Society of Interventional Pain Physicians
- Presentation 36: Medical Device Manufacturers Association
- Presentation 37: American College of Radiology