

**APCs 2002: Charting your Course and
Understanding the Implications**
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Introduction

In April 2002, the new 2002 APC payment rates will go into effect after a delay of three months. The impact the new payment rates have on providers will be mixed depending on hospital location (region), hospital type (rural or urban), hospital size (number of beds), and hospital procedure volume

Under federal statute, updates to the conversion factor and the wage index adjustment must occur on an annual basis. Updates to the payment rates are mandated to take into account changes in medical practice, changes in technology, new service offerings and new information about costs and other relevant data. In accordance to the regulations, the CMS has updated the conversion factor for APC payments to \$50.904. CMS also updated the wage index adjustment for hospital outpatient services. In addition, outlier payments will be calculated on an APC-specific basis versus on a claim basis using a hospital-specific versus department-specific cost-to-charge ratio.

Changes in 2002

New APC groups have been developed for 2002. Assigning specific procedures to new APC groups involves many issues to include examining cost data for the specific procedure, the complexity of the procedure, and/ or whether contrast imaging material is used. CMS split APC 0102, which includes neurological procedures such as implantation of neurostimulators and cardiac procedures such as electronic analysis of cardioverter-defibrillator, into four groups. Due to the differences in complexity and cost between the neuro and cardio procedures associated with this APC group, CMS developed four APC groups, APC 0689 to APC 0692, which separates the neuro procedures from the cardio procedures.

New APC groups have also been developed for echocardiography procedures. APC 0270: Transesophageal Echocardiogram was left intact. APC 0269: Echocardiogram except Transesophageal was split into two APC groups:

- APC 0269: Level I Echocardiogram except Transesophageal which includes comprehensive echocardiograms
- APC 0697: Level II Echocardiogram except Transesophageal which includes limited/follow-up echocardiograms and Doppler add-on procedures.

Under the legislation, CMS was required to develop new APC groups to classify procedures that utilize contrast agents separately from those that do not use contrast agents. Five (5) new APC groups were created for the procedures that were removed from APC groups 0282-0284. The APC groups that were reconfigured to separate imaging procedures that use contrast material from those that do not are listed below:

- APC 0282: Miscellaneous CAT
- APC 0283: CAT with contrast
- APC 0284: MRI and Angiography with contrast
- APC 0332: CAT w/o contrast
- APC 0333: CT Angio and CAT w/o contrast followed by contrast
- APC 0335: MRI, TMJ
- APC 0336: MRA and Imaging w/o contrast
- APC 0337: MRI and Angiography w/o contrast followed by with contrast

In 2002, CMS has established a new APC group (APC 0339) for observation of patients with chest pain, asthma and congestive heart failure. CMS has placed very specific requirements that must be met in order to utilize APC 0339. For example, for chest pain, at least two sets of cardiac enzymes and two sequential electrocardiograms must be performed while in observation. To bill for APC 0339, an emergency department or clinic visit must also be billed. Under APC 0339, observation is billed hourly for a minimum of 8 hours up to a maximum of 48 hours; however, all costs beyond 24 hours are packaged into the APC payment. Specific time requirements regarding initiation and termination of observation must be documented with patient progress notes recorded.

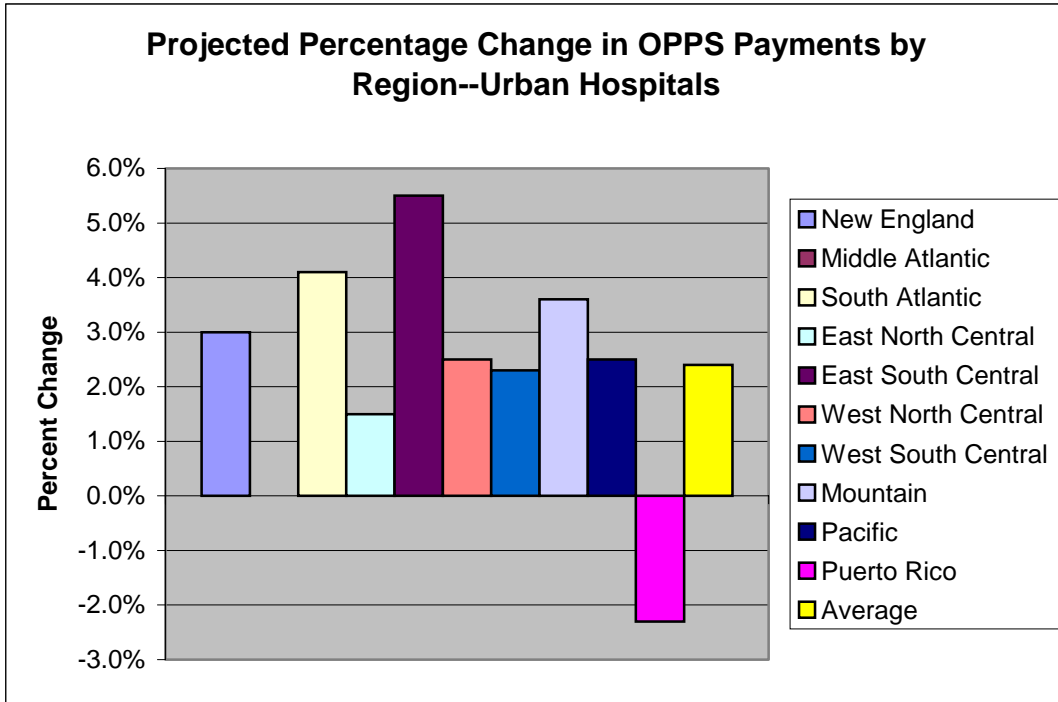
Another change for 2002 is the development of 16 APC groups, APC 0706 through APC 0721, for new technology. These APC groups parallel APC groups 0970-0985. The purpose of the parallel APC groups is to distinguish those new technology services that should be designated for multiple procedure payment reduction (status "T") and those that should not be discounted (status "S"). Each of these sets of APCs has similar group titles, payment rates and minimum unadjusted co-payments. The only difference is a difference in status indicator. APC groups 0970-0985 are designated as status "T" which is subject to multiple procedure discounting. To read about all of the changes for 2002, please see the Federal Register, November 30, 2001.

Effect of Changes in 2002

The aggregate effect of implementing the changes as mandated by law is projected to increase payments to hospitals by 2.3 percent in 2002. In the aggregate, urban hospitals are projected to experience an increase of 2.4 percent with rural hospitals experiencing an increase of 1.9 percent. Large urban hospitals, i.e., hospitals serving areas of greater than 1 million persons, have been projected to experience an increase of 1.9 percent. Other urban hospitals are projected to experience an increase of 3.1 percent in the aggregate. Urban hospitals in the East South Central region are projected to realize the highest percent increase in payments at 5.5 percent. Urban hospitals in the South and Mountain regions are also projected to experience an increase of greater than 3.5 percent for 2002. In total for urban hospitals, 60 percent of the regions are projected to experience an increase in payments above the average of 2.3 percent. The regions projected to experience less than the average percentage increase in OPSS payments are Middle Atlantic, East North Central, West South Central and Puerto Rico.

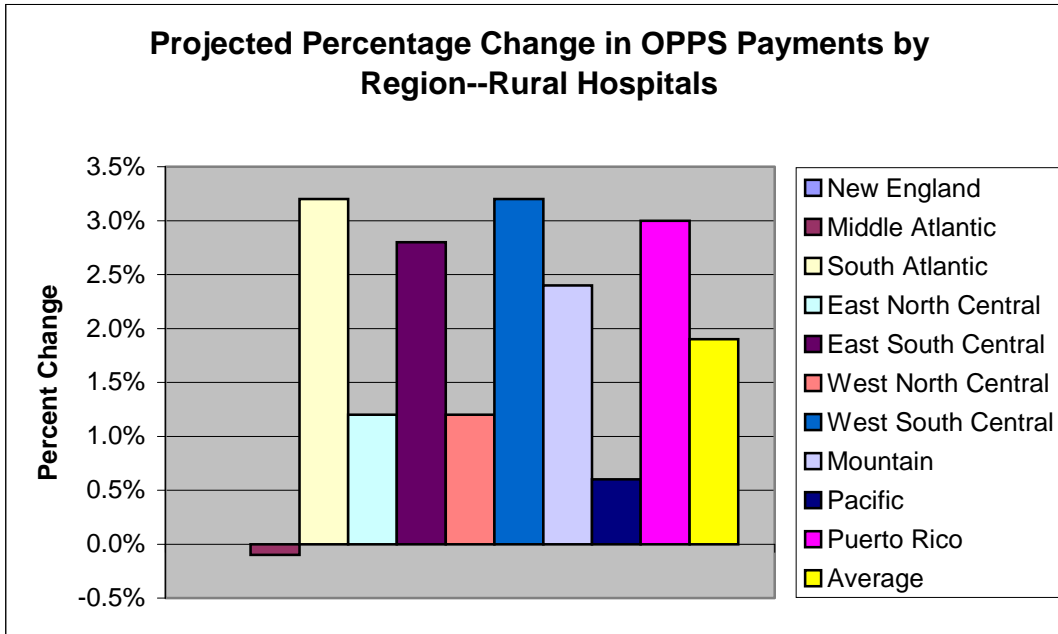
The aggregate effect of the OPSS changes on urban hospitals by region is presented in Figure 1.

Figure 1: Projected Change in OPPS by Region for Urban Hospitals



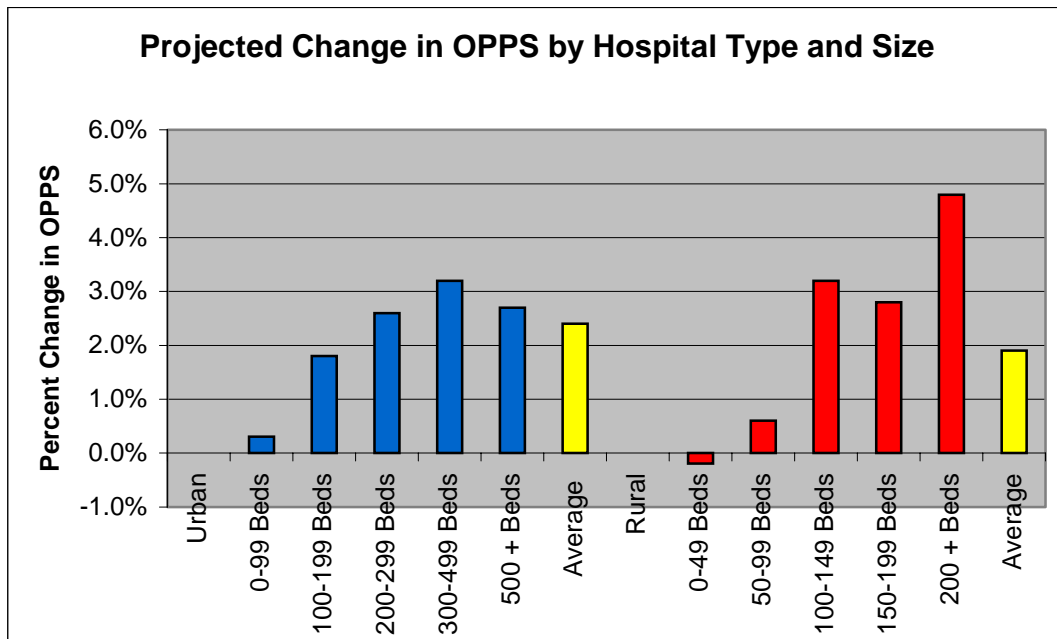
Rural hospitals in the Middle Atlantic region are projected to experience a –0.1 percent decrease in OPPS payments. Rural hospitals in New England and the Pacific regions are projected to experience no change and 0.6 percent increase in 2002 OPPS payments respectively. The projected effect on rural hospitals by region is presented in Figure 2.

Figure 2: Projected Change in OPPS by Region for Rural Hospitals



The projected impact of the 2002 OPPS payments is generally positive for both urban and rural hospitals as the hospital size increases. The payment increase trends upwards for urban hospitals in each successively higher bed category with the exception of hospitals with over 500 beds. Hospitals in this category will experience a 2.7 percent increase in OPPS payments, down from the high of 3.2 percent for the immediately preceding size category of 300 – 499 beds. The same trend holds true for rural hospitals in that each successively larger bed number category will experience an increase in OPPS payments with the exception of the 2nd highest category of 150-199 beds. This hospital size category is projected to experience a 2.8 percent increase with is less than both the immediately preceding and immediately following hospital size categories. This analysis is shown in Figure 3.

Figure 3: Projected Change in OPPS Payments by Hospital Size and Size



Higher volume hospitals, both urban and rural, are projected to experience larger increases in payments compared to the lower volume hospitals. The major components of the APC payment that will adversely affect lower volume hospitals are 1) the APC changes regarding procedure assignment for the specific APC and the corresponding payment amounts and 2) the change in outlier methodology for calculating the payments.

Cardiovascular-related APC Changes

Although the aggregate OPPS effect is projected to be positive, the actual effects of the new PPS payments will impact most of the cardiovascular related services negatively. Therefore, providers must understand the impact the APC payment rates will have on their specific programs to effectively plan for the future. Utilizing the updated conversion factor and wage indices, the following formula can be applied to calculate the CY 2002 PPS payments:

$$\text{CY 2002 PPS payment} = \{\text{discounted service mix} * \text{total units} * [(\text{2002 CF} * 0.40) + (\text{2002 CF} * 0.60 * \text{wage index})]\} + \text{outlier payment}$$

The majority of the APCs utilized in providing cardiovascular services will experience a decrease, with many experiencing double digit percentage decreases in 2002 from the 2001 payment levels; however, there are some cardiovascular-related APC groups that will experience an increase in payment amounts. Examining a selection of the APC groups that correspond to cardiovascular services that will experience an increase in payments in 2002 compared with the 2001 payment schedule is presented in the Table 1.

Table 1: Cardiovascular APCs with Projected Increases in Payment for 2002

APC	Description	% Change 2001-2002
0369	Level III Pulmonary Tests	51.1%
0091	Level I Vascular Ligation	39.3%
0094	Resuscitation and Cardioversion	36.6%
0285	Positron Emission Tomography (PET)	25.9%
0103	Miscellaneous Vascular Procedures	23.5%
0297	Level II Therapeutic Radiologic Procedures	16.9%
0291	Level I Diagnostic Nuclear Medicine Excluding Myocardial Scans	12.6%
0080	Diagnostic Cardiac Catheterization	11.5%
0081	Non-Coronary Angioplasty or Atherectomy	2.8%

The average percentage increase for the above APC groups is 24.5 percent. Part of the increase in the APC groups in 2002 may be related to the inclusion of drug and device costs into the APC payment that would have been billed as a transitional pass-through item previously. As an administrative action, CMS has included 75 percent of the estimated cost of the pass-through devices into the base APC rates.

Depending on the service mix, the new APC payment rates may have positive or detrimental effects. Table 2 contains some of the cardiovascular related APC categories that are projected to experience a decrease in OPPS payments in 2002. As shown, many of these APCs contain the noninvasive and diagnostic procedures typically performed on cardiovascular patients. Therefore, if the hospital's service mix contains more of the APCs listed below, the overall effect of the new payment rates will be negative to the program.

Table 2: Cardiovascular APCs with Projected Decreases in Payment for 2002

APC	Description	% Change 2001-2002
0272	Level I Fluoroscopy	-0.1%
0092	Level II Vascular Ligation	-0.2%
0294	Level I Therapeutic Nuclear Medicine	-1.1%
0264	Level II Miscellaneous Radiology Procedures	-1.9%
0292	Level II Diagnostic Nuclear Medicine Excluding Myocardial Scans	-2.4%
0263	Level I Miscellaneous Radiology Procedures	-2.9%
0270	Transesophageal Echocardiogram	-3.2%
0095	Cardiac Rehabilitation	-3.4%
0296	Level I Therapeutic Radiologic Procedures	-3.8%
0099	Electrocardiograms	-6.7%
0283	Computerized Axial Tomography with Contrast Material	-7.2%
0280	Level II Angiography and Venography except Extremity	-8.4%
0284	MRI and Magnetic Resonance Angiography with Contrast Material	-9.7%
0368	Level II Pulmonary Tests	-10.3%
0269	Level I Echocardiogram Except Transesophageal	-11.3%
0100	Stress Tests and Continuous ECG	-12.4%
0266	Level II Diagnostic Ultrasound Except Vascular	-12.8%
0267	Vascular Ultrasound	-13.2%
0367	Level I Pulmonary Test	-14.6%
0101	Tilt Table Evaluation	-15.2%
0096	Non-Invasive Vascular Studies	-15.9%
0265	Level I Diagnostic Ultrasound Except Vascular	-17.7%
0286	Myocardial Scans	-24.7%
0295	Level II Therapeutic Nuclear Medicine	-38.2%
0097	Cardiac Monitoring for 30 days	-47.5%

Summary

CMS has implemented many changes to the OPSS for 2002 as required by legislation. Many of these changes will affect cardiovascular programs more acutely than projected on an aggregate basis. The overall effect of implementing the 2002 OPSS rates is an increase in payments of 2.4 percent for all hospitals, in the aggregate. However, urban hospitals are projected to experience a larger share of the projected increase in payments compared with rural hospitals. In addition, hospitals in specific regions of the country will be affected depending on the wage index adjustments, whether positive or negative, that occurred in updating the OPSS for 2002. Cardiovascular services will be negatively affected as a result of the development of the new APC groups that contain cardiovascular services have lower payment for the services compared with 2001 payment rates. In addition, some of the more common, high volume procedures have experienced a decrease in OPS payment rates for 2002 as shown in Table 2. We

recommend that each cardiovascular program develop an OPPS Impact Study to assess the effect the new APC payment rates will have on the program. This can easily be performed using the formula presented in this article and applying program specific data. Should you need assistance with performing the OPPS Impact Study or to request a copy of the full listing of the new APCs with relative weights, payment rates and co-payment amounts with a listing of the corresponding HCPCS codes for each APC group and the change from 2001, please call ACVP at 757-497-1225 or Richard Beveridge & Associates, Inc. at 801-565-0909.