September 9, 2024

Submitted electronically via: http://www.regulations.gov

The Honorable Chiquita Brooks-LaSure
Administrator
Centers for Medicare and Medicaid Services
Attention: CMS–1807–P
7500 Security Boulevard
P.O. Box 8016
Baltimore, MD 21244-8016

Re: CY 2025 Physician Fee Schedule Proposed Rule

Dear Administrator Brooks-LaSure:

The Dialysis Vascular Access Coalition (DVAC) appreciates the opportunity to offer its comments to the Centers for Medicare and Medicaid Services (CMS) on the proposed rule for the CY 2025 Physician Fee Schedule (CMS-1807-P).[1] DVAC is a coalition of entities that provide vascular access services to individuals with advanced kidney disease and End-Stage Renal Disease (ESRD). DVAC represents societies and patient groups, including the American Society of Nephrology, American Society of Diagnostic and Interventional Nephrology (ASDIN), Home Dialyzors United, and the Renal Physicians Association (RPA); as well as provider organizations, including Arizona Kidney Disease and Hypertension Centers, Austin Kidney Associates, Azura Vascular Care, Balboa Nephrology Medical Group, Dallas Nephrology Associates, Dialysis Access Specialists, Lifeline Vascular Care, Nephrology Associates of Delaware, Nephrology Associates of Northern Illinois and Indiana, and Northwest Renal Clinic. DVAC represents the majority of the non-hospital vascular access sector.[2]

In the 2025 PFS Proposed Rule, CMS notes, "[I]*nterested parties have presented us with high-level information suggesting that Medicare payment policies are directly responsible for consolidating privately owned physician practices and freestanding supplier facilities into larger health systems.* As discussed in further detail below, DVAC states at the outset that the 2025 PFS continues the trend of reimbursement cuts to interventional care in the office-based setting.

[1] Federal Register, 89 FR 61596 (July 31, 2024)
[2] For more information about DVAC, please see https://www.dialysisvascularaccess.org/about

As such, DVAC will providing comments relating to the following:

- Background on Non-Hospital Dialysis Vascular Access
- Medicare Physician Fee Schedule Reimbursement for Office-Based Interventional Services is Increasingly Unsustainable
    - MPFS Reimbursement for 300 Office-Based Services is Less Than Direct Costs

- Dialysis Vascular Access Provider Deserts
- Removing Certain High-Cost Supplies and Equipment from the PFS is Key to PFS Reform

I. BACKGROUND ON NON-HOSPITAL DIALYSIS VASCULAR ACCESS

Non-hospital vascular access centers (VACs) provide a wide variety of lifesaving, critical vascular access services for ESRD patients on dialysis. In order to access the patient's bloodstream, different vascular access options exist, including surgical and percutaneous creation of fistulas (connection of an artery to a vein) or less preferred approaches such as the insertion of a central line catheter (an external tube) or arteriovenous grafts (AVG) (connecting an artery to a vein with a tube). In addition, vascular access centers provide placement services for peritoneal dialysis (PD) catheters (special tubes inserted in a patient's abdominal cavity to allow for home dialysis) and perform interventions to help mature and maintain fistulas.

Studies have shown that dedicated access centers like those operated by DVAC members provide higher quality care to Medicare beneficiaries at a lower than hospital outpatient departments. A 2017 study of vascular access care across sites found, by comparison to patients treated in hospital outpatient departments (HOPDs), patients treated in freestanding office-based vascular access centers were found to have lower all-cause mortality and fewer infections.[3] DVAC has recently updated its site-of-service analysis to include both office-based vascular access centers and ambulatory surgical centers (collectively freestanding outpatient centers, or FOCs) during the pandemic years period.

The COVID-19 pandemic impacted patients on dialysis more significantly than any other chronic disease, with mortality after COVID-19 diagnosis for patients with end stage renal disease (ESRD) reaching 40.5% in 2020 for patients on dialysis. Due to the increase in mortality rate among patients with ESRD attributable to the pandemic and its effects, the rate of prevalent ESRD decreased by almost 2% in 2020. In 2020, the mix of vascular access types in use was worse than at any time during the previous decade.

DVAC's updated study used propensity score matching to analyze data from the United States Renal Data System (USRDS) on Medicare beneficiaries for 2019 and 2020. A total of 82,498 patients who received ≥80% of their access-related care at a FOC were individually matched to 66,188 patients who received ≥80% of their access-related care at a HOPD. The study reviewed 930,803 patient encounters for vascular access repair and maintenance during the 2-year period.

[3] El-Gamil, Audrey et al., *What is the best setting for receiving dialysis vascular access repair and maintenance services?*, September 2, 2017

Annual mortality was significantly lower in those treated at a FOC than in those treated at a HOPD (16.55 versus 18.11%; difference = -1.55%; $p<0.001$). Those treated at a FOC also experienced fewer infections (0.33 versus 0.89 per person-year; difference = -0.57; $p<0001$). Access type varied by the site of service as well with patients treated at a FOC having more AV Fistulas (71.0% versus 62.9% per person-year; difference = +7.9%; $p<0.001$) and 9.8% fewer Central Venous Catheters in the FOC (10.3%) compared with HOPD (20.2%) which was significant. Monthly costs for those treated at a FOC were $835.55 lower than those treated at a HOPD (7,081.75 versus 7,917.30, respectively; $p<0.001$) for annual savings in the FOC setting of $10,020 when compared with the HOPD setting.

In summary, patients receiving access-related care predominantly at a FOC had greater AVF use with a lower use of CVCs, fewer infections, and a lower mortality rate than those receiving care at a HOPD. These outcomes were achieved at substantially lower cost. The study is being prepared for publication and provides additional evidence of the value of non-hospital based vascular access for (1) patients on dialysis and (2) the Medicare program as a whole.

II. MEDICARE PHYSICIAN FEE SCHEDULE REIMBURSEMENT FOR OFFICE-BASED VASCULAR ACCESS SERVICES IS INCREASINGLY UNSUSTAINABLE

The 2025 Medicare Physician Fee Schedule (PFS) Proposed Rule would impose yet another round of significant cuts to office-based interventionalists. Key drivers of these cuts within the 2025 PFS Proposed Rule include:

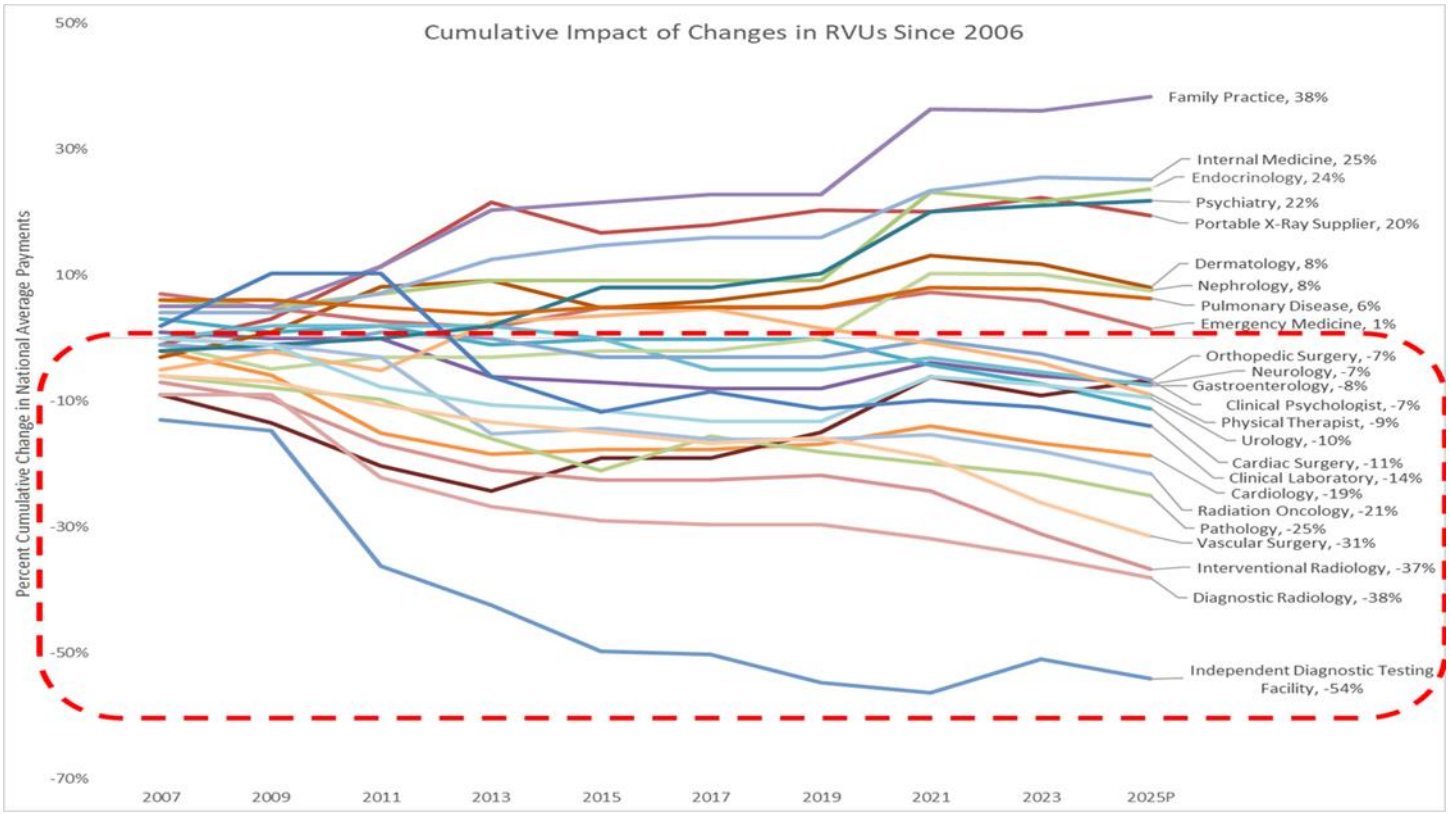
- **Conversion Factor Cut.** A carry-over 2.8% cut to the conversion factor from the 2021 PFS E/M policy (which has been phased by Congress since the policy was implemented). *When finally phased-in, the 2025 conversion factor is projected to be $32.3433, a cut of more than 10% from the $36.09 conversion factor in 2020.*
- **Clinical Labor Cuts.** The fourth year of clinical labor cuts to office-based intervention relative value units (RVUs) stemming from the phase-in through 2025 of the 2022 PFS clinical labor policy that cuts some interventional codes by another 4% in 2025.

*PFS physician payments equal conversion factor * RVUs.* As a result, key dialysis vascular access services will again be cut by another 5-7% in 2025 alone (see chart below). These year-over-year cuts are being implemented without regard to patient outcomes, actual PFS provider resource needs, or any other rationale policy.

		2024 Final Physician Fee Schedule	2024 Final Physician Fee Schedule	2025 Proposed Physician Fee Schedule	2025 Proposed Physician Fee Schedule	2025 Proposed RVU Difference	2025 Proposed Payment Difference
CF			$33.29		$32.36		
CPT	Procedure Description	2024 Non-Facility Total RVU/Unit **(Final)**	2024 Non-Facility Total Payments **(Final)**	2025 Non-Facility Total RVU/Unit **(Proposed)**	2025 Non-Facility Total Payments **(Proposed)**		
36901	Intro cath dialysis circuit	21	$692	20	$656	-3%	-5%
36902	Intro cath dialysis circuit	36	$1,183	34	$1,116	-3%	-6%
36903	Intro cath dialysis circuit	125	$4,145	119	$3,856	-4%	-7%
36904	Thrmbc/nfs dialysis circuit	53	$1,770	52	$1,671	-3%	-6%
36905	Thrmbc/nfs dialysis circuit	67	$2,225	65	$2,093	-3%	-6%
36906	Thrmbc/nfs dialysis circuit	158	$5,275	152	$4,921	-4%	-7%
36907	Balo angiop ctr dialysis seg	17	$577	17	$547	-2%	-5%
36908	Stent plmt ctr dialysis seg	42	$1,382	40	$1,302	-3%	-6%
36909	Dialysis circuit embolj	56	$1,849	53	$1,725	-4%	-7%

Moreover, it is critical to understand that for many office-based interventionalists, these cuts in the 2025 PFS Proposed Rule come on top of significant cumulative cuts since 2006 (see Figure 1[4].)

Figure 1

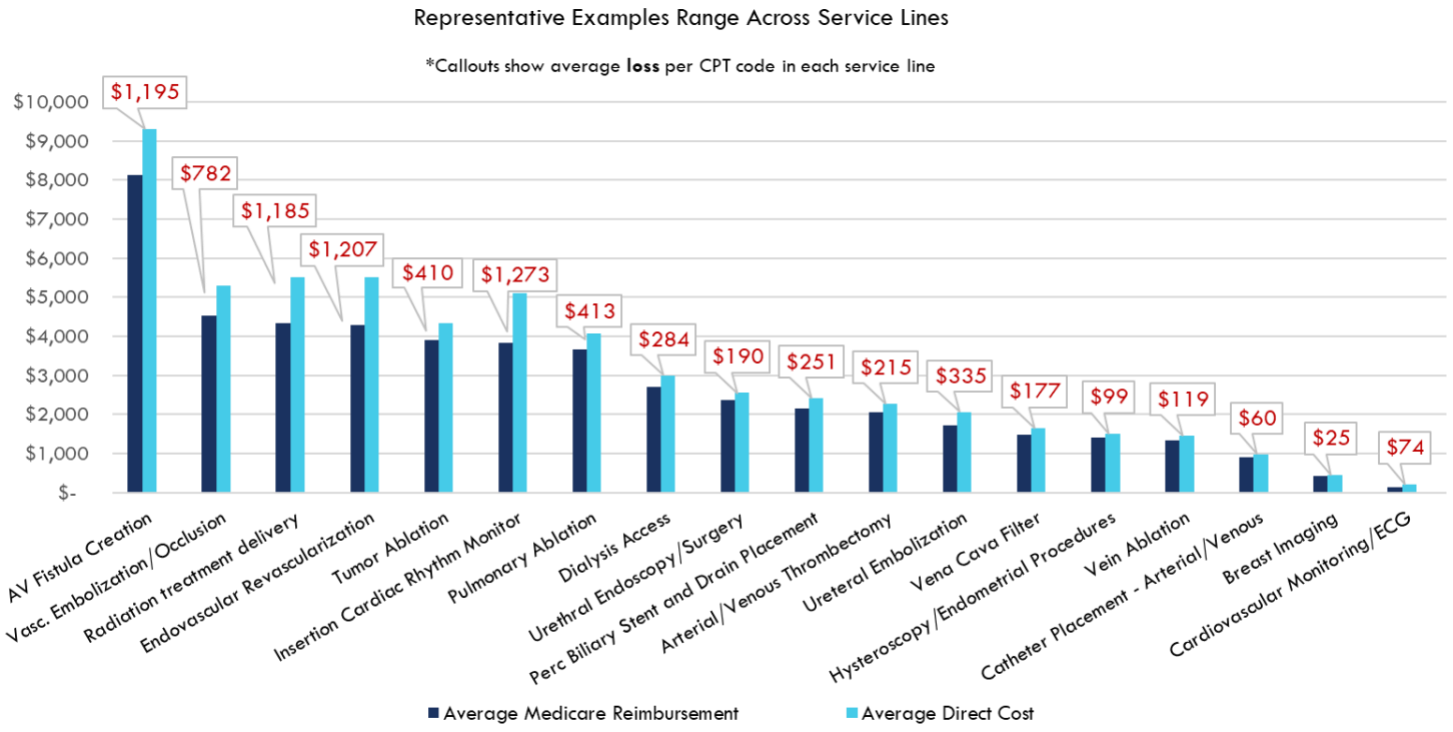


[4] HMA analysis 2007-2025P Medicare Physician Fee Schedule Impact Tables. The values presented for 2021-2025P are adjusted to reflect the effects of the CAA, 2021, 2022, 2023, 2024.

MPFS Reimbursement for 300 Office-Based Services is Less Than Direct Costs

Cuts to office-based interventionalists have become so severe that, in 2024, there are 195 procedures across service lines that are paid at rates less than the direct costs associated with those procedures – as calculated by CMS itself. In the 2025 PFS Proposed Rule released in July, this number would grow to 300, a 50% increase. *In other words, for 300 services, CMS will not pay clinicians in private practice enough to cover the direct expenses of those services before even considering other costs like physician work and indirect costs (see Figure 2*[5][6]*).* It is important to underscore that all of these services are procedures performed outside of the hospital in the patient-preferred, community-based setting and that these services typically are the lowest cost option available to Medicare beneficiaries. Most of these services also utilize high-technology, high-cost supplies and equipment, the reimbursement for which under the PFS has been significantly eroded by the "direct cost adjustment" since 2007. In other words, since 2007, under the PFS, the immediate discount off total direct costs has increased from 33 percent to 56 percent. Since, according to the Medicare Payment Advisory Commission (MedPAC), direct costs only represent one-third of total practice costs, it is reasonable to assume that when indirect costs (i.e. overhead) are included, the number of office-based services under the PFS for which reimbursement is less than total practice costs is significantly higher than 300.[7]

Figure 2



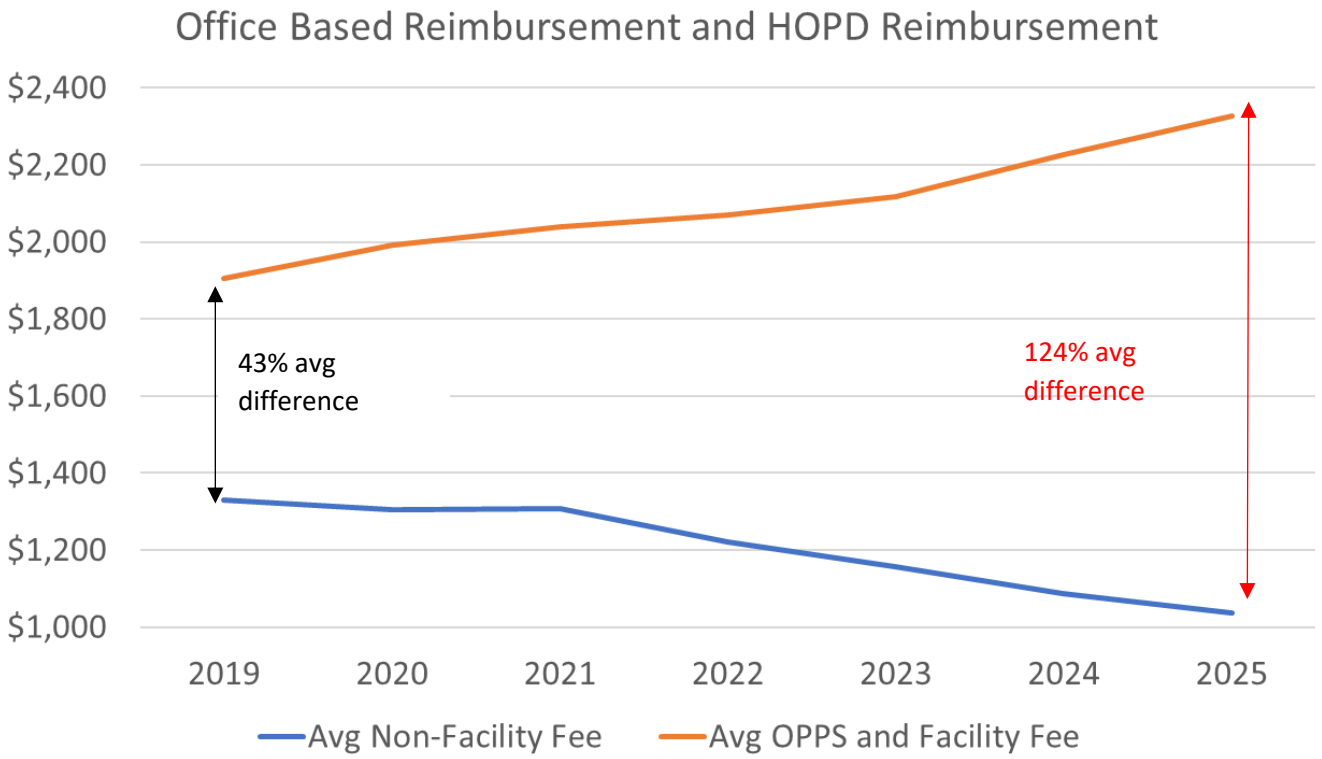
[5] Data is based on 2025 Physician Fee Schedule Proposed Rule Total Non-Facility Reimbursement and Total Direct Costs. Radiation Treatment Delivery data assumes 25 fractions for typical prostate cancer patient https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9441303/ .

[6] For a full list of the 300 codes, please see Appendix I.

[7] Medicare Payment Advisory Commission, Report to the Congress: Promoting Greater Efficiency in Medicare, June 2007, page 225

This underfunding by the Medicare PFS of critical office-based services is a key catalyst for the growing site-of-service differentials between the hospital outpatient and office-based setting (see Figure 3[89]). In 2019, the average payment for these same 300 codes reimbursed 43% more when performed in an outpatient hospital setting compared to an office setting. By 2024, this disparity had ballooned to 124% on average. As reimbursements for high-technology procedures decrease in the office setting, the same services provided in the hospital show significant increases. This dynamic further drives hospital consolidation and reduces the number of specialists in lower cost settings.

Figure 3



[8] Reimbursement is calculated as the average PFS non facility fee compared to the average PFS facility fee plus the average HOPD OPPS fee

[9] Graph shows 273 of the 300 codes where total reimbursement is less than direct costs. 27 CPT codes were excluded as they were added to the fee schedule after 2019.

REQUESTS: DVAC requests CMS:

- Immediately address shortfalls in which PFS reimbursement is less than direct costs for at least 300 services in the PFS, including dialysis vascular access;
- Truly "prioritize stability and predictability over ongoing updates" by freezing the final year of implementation of the clinical labor policy in 2025 that will result in further significant redistributions and instability to the Physician Fee Schedule;
- Implement MEI Rebasing to help offset ongoing cuts to office-based dialysis vascular access; and
- Focus on fundamental PFS reform.

III. DIALYSIS VASCULAR ACCESS PROVIDER DESERTS

The U.S. Department of Health and Human Services, Health Resources and Services Administration defines primary care health professional shortage areas, in part, as "geographic areas …. [that] … either have either have a population to full-time-equivalent primary care physician ratio of at least 3,500:1, or a population to full-time equivalent primary care physician ratio of less than 3,500:1 but greater than 3,000:1 and unusually high needs for primary care services or insufficient capacity of existing primary care providers."

As noted in a 2019 Health Affairs article, however, "to the extent that current policy interventions focus on expanding primary care but not specialist care in rural areas, they appear to be misguided and unlikely to reduce disparities in rural health outcomes. Notably, multiple studies have found that regular treatment by specialist physicians in the ambulatory care setting is associated with better quality of care and reduced risk of death or hospitalization for people with chronic conditions. This does not detract from the value of primary care. However, access to primary care does not appear to drive rural-urban health outcome disparities."[10]

DVAC's 2024 review of information provided by Redi-data found significant specialty care deserts across a spectrum of interventional and diagnostic providers, including A) Urology, B) Cardiology, C) Radiation Oncology, D) Vascular Surgery, E) Interventional Radiology, and F) Diagnostic Radiology.[11] Importantly, according to this data, there are significant interventional and diagnostic provider deserts where there are NO such providers in the majority of counties in a majority of states. These deserts correspond to critical cuts to interventional providers described earlier in this comment letter.[12]

Ongoing cuts to interventional and diagnostic providers under the MPFS are a key driver in the collapse of independent vascular access providers and an ongoing catalyst of health system consolidation. DVAC believes PFS reform must include policies to address these concerns, including policies to remove high-cost supply and equipment from the PFS.

[10] https://www.healthaffairs.org/doi/10.1377/hlthaff.2019.00838
[11] https://www.redidata.com/
[12] For additional information on vascular access deserts (including interventional radiology and vascular surgery), please see Appendix II

IV. REMOVING CERTAIN HIGH-COST SUPPLIES AND EQUIPMENT FROM THE PFS IS KEY TO FOR PFS REFORM

DVAC's comments on options for PFS reform are in the context of several CMS requests for comments in the 2025 PFS Proposed Rule:

- *[W]e request general information from the public on ways that CMS may continue work to improve the stability and predictability of any future updates. Specifically, we request feedback from interested parties regarding scheduled, recurring updates to PE inputs for supply and equipment costs.*

- *[W]e seek information about specific mechanisms that may be appropriate, and in particular, approaches that would leverage verifiable and independent, third party data that is not managed or controlled by active market participants.*

- *[W]e continue to encourage interested parties to provide feedback and suggestions to CMS that give an evidentiary basis to shape optimal PE data collection and methodological adjustments over time.*

DVAC's primary feedback to these requests is that – by its nature – the PFS is incapable of properly incorporating PE data into its reimbursement methodology. This is because the PFS was not set up to handle high-cost supplies and equipment. When the Medicare Physician Fee Schedule was adopted in 1992, policymakers did not anticipate technological advances would allow for advanced, high-tech, minimally invasive services in the office. Over the years, as scientific advances have allowed high-tech, high-cost supplies and equipment to move from the hospital to the community-based setting, the reimbursement for such supplies and equipment has not followed to the PFS. This dynamic has degraded the ability of the PFS to reimburse both for office-based interventional services as well as cognitive services, such as primary care. As a result of "budget neutrality," actions by policymakers in recent years to correct for reimbursement shortfalls in some areas of the PFS have eroded reimbursement for other PFS services.

As shown in Figure 4 below, while the IPPS, HOPPS and ASC Fee Schedules include only technical payments (e.g., the high-technology equipment, supplies and other innovations that have been a hallmark of the U.S. healthcare system) for HIPDs, HOPDs and ASCs, the PFS includes technical payments for office-based providers *plus* professional payments for physicians in all settings (e.g. HIPD, HOPD, ASC and office). As a result, PFS technical payments currently "budget-neutralize" office-based supply and equipment technicals to *dissimilar* professional payments for physician work in all sites-of-service (i.e. hospital, ASC and office). This dynamic is a significant contributor to the reimbursement cuts to office-based interventional services described earlier in this comment letter.

Figure 4

Key Spending Components of Major Medicare Fee Schedules				
Site-of-Service	**Hospital Inpatient Department**	**Hospital Outpatient Department**	**Ambulatory Surgical Center**	**Physician Office**
Medicare Fee Schedule	**Inpatient PPS**	**Hospital Outpatient PPS**	**ASC PPS**	**Physician Fee Schedule**
Technical⊥	Included for the Hospital Inpatient setting	Included for the Hospital Outpatient setting	Included for the ASC setting	Included for the Office-Based setting
Professional┼	Not Included	Not Included	Not Included	Included in the Physician Fee Schedule to reimburse for physician work in all sites of service (Inpatient PPS, Hospital Outpatient PPS, ASC PPS, and Physician Fee Schedule)

⊥ "Technical" refers to Medicare payments primarily for operating and capital costs, but excluding PFS payments for physician work.
┼ "Professional" refers primarily to physician work as well as a small amount (i.e "facility" practice expense relative value units) intended to cover indirect expense of physician costs of operating a medical practice.

Because most Medicare reimbursement for *hospital-based* services is derived from entirely distinct hospital inpatient and outpatient payment systems,[13] hospital payment system reimbursement has grown faster than practice costs even as many PFS services literally are no longer reimbursed even for their costs.[14] This dynamic has been a key catalyst for consolidation: according to a 2021 AMA study, physician-owned practices have decreased 11% since 2012 as hospital ownership of these practices has increased 11%.[15]

Removing High-Tech Supply and Equipment from the PFS

For years, the AMA RUC has recommended "CMS separately identify and pay for high-cost disposable supplies priced more than $500."[16] DVAC believes such an approach has merit. Removing high-tech supply and equipment services from the PFS could necessitate new "place of service" designations for such services and more appropriate inclusion in the larger ambulatory technical (i.e. OPPS/ASC) fee schedule. We believe the inclusion of certain high-tech supply and equipment services in the larger ambulatory technical (OPPS/ASC) fee schedule would the best way for CMS to provide an "evidentiary basis to shape optimal PE data collection and methodological adjustments over time," given previous CMS statements that, "we continue to seek the best broad based, auditable, routinely updated source of information regarding PE

[13] The Hospital Inpatient Prospective Payment System and the Hospital Outpatient Prospective Payment System
[14] American Medical Association, *Medicare physician payment is NOT keeping up with inflation*, April 2023 https://www.ama-assn.org/about/leadership/medicare-physician-payment-reform-long-overdue
[15] American Medical Association, *Recent Changes in Physician Practice Arrangements: Private Practice Dropped to Less Than 50 Percent of Physicians in 2020*, Carol K. Kane, PhD, June 2021
[16] https://www.ama-assn.org/system/files/oct-2020-ruc-recommendations.pdf

costs."[17] Removing high-tech supply and equipment from the PFS also would free up resources within the PFS to achieve its primary raison d'être: reimbursement for physician work.

Reimbursing under the OPPS/ASC fee schedule for certain high-cost technical inputs used in office-based interventional care would stop further closures of independent dialysis vascular access practices, given that the PFS effectively no longer covers such procedures. Importantly, such a policy also would (1) protect the PFS from further dilution from unsubsidized migration of high-cost supplies from the hospital and (2) provide additional resources for primary care as well as the overall PFS. Moreover, there is clear precedent for such action: in the 2010 PFS, the Centers for Medicare & Medicaid Services (CMS) finalized its proposal "to remove physician-administered drugs from the definition of physicians' services" due to the "significant and disproportionate impact that the inclusion of drugs has had on the SGR system."[18]

REQUEST: We urge CMS to work with Congress on policies to establish a new site-of-service for office-based dialysis vascular access to reimburse for the technical inputs utilized in such procedures under the OPPS/ASC fee schedule in order to help strengthen the PFS and protect independent physician practices.

CONCLUSION

DVAC's comments on the CY 2025 Physician Fee Schedule Proposed Rule seek to ensure ongoing access to vascular access services. We look forward to continuing to work with CMS to maintain and improve access to ESRD patient-focused vascular access services. If you have additional questions regarding these matters and the views of the DVAC, please contact Jason McKitrick at (202) 465-8711 or jmckitrick@libertypartnersgroup.com .

[17] 83 FR 59455

[18] CY 2010 PFS Proposed and Final Rules. 74 FR 33650 and 74 FR 61965


DIALYSIS VASCULAR
ACCESS COALITION


ASDIN
AMERICAN SOCIETY OF DIAGNOSTIC AND INTERVENTIONAL NEPHROLOGY


ASN
American Society of Nephrology


AKDHC
Arizona Kidney Disease & Hypertension Centers


AKA
AUSTIN KIDNEY
ASSOCIATES


azura
vascular care


BNMG
Balboa Nephrology Medical Group


DALLAS
NEPHROLOGY
ASSOCIATES
Comprehensive Kidney Care


Dialysis
Access Specialists


HDU
Home Dialyzors United


Lifeline
VASCULAR CARE


NEPHROLOGY
ASSOCIATES
delawarekidney.com


NANI
Nephrology Associates of
Northern Illinois and Indiana


Northwest
RENAL
Clinic, Inc.

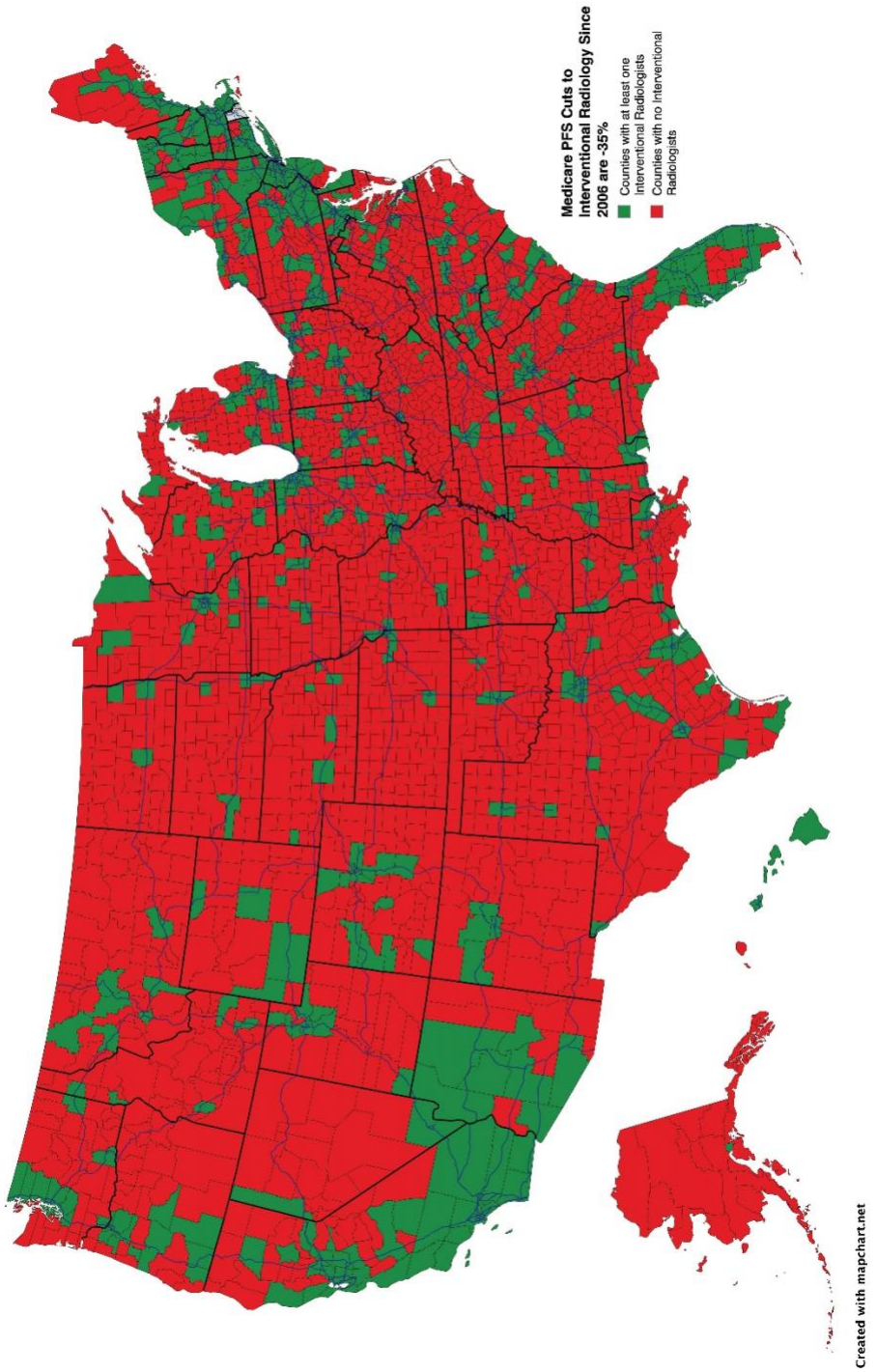

RPA
Renal Physicians Association

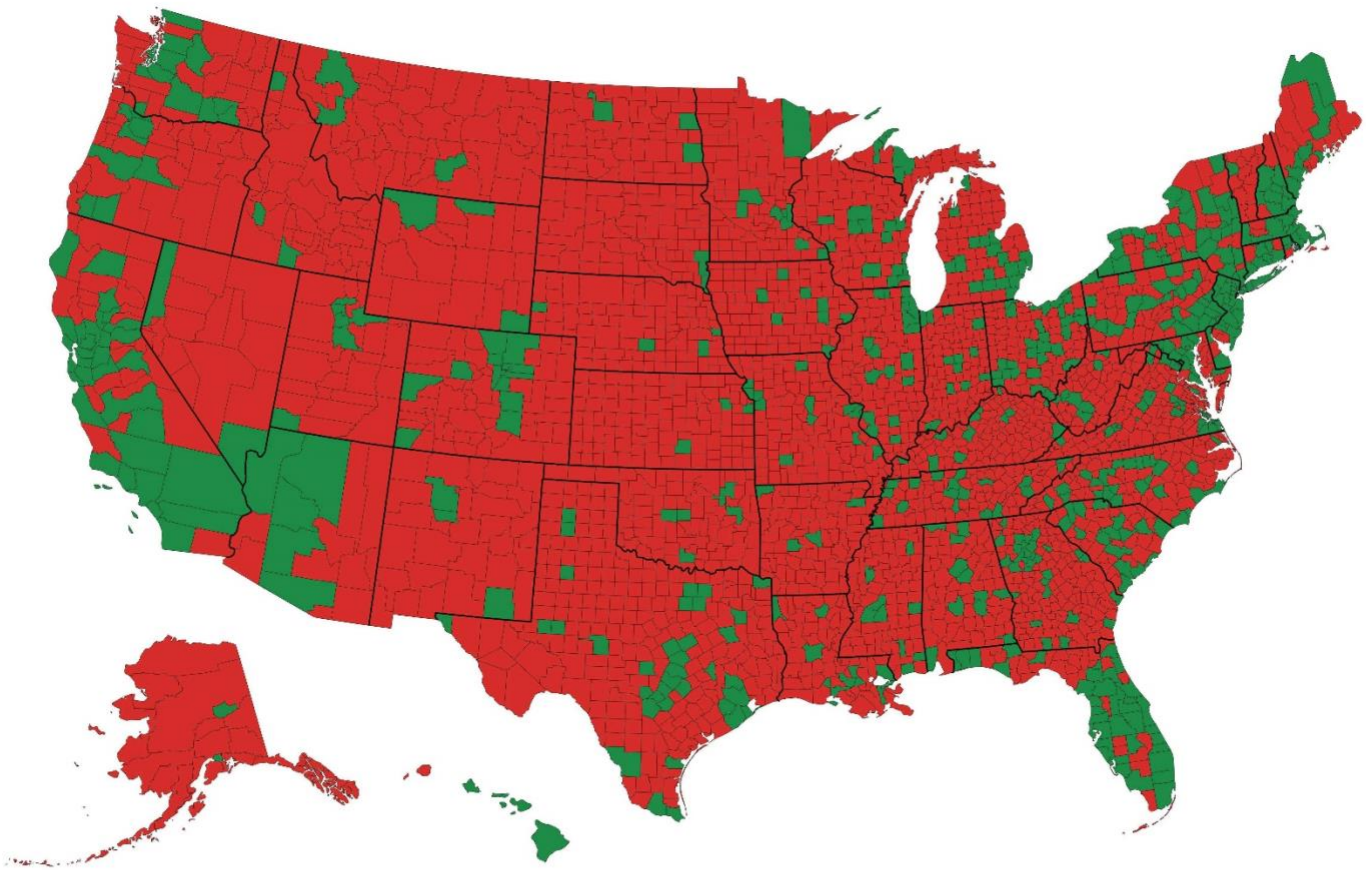
300 CPT Codes where Total Reimbursement < Direct Costs in the PFS

10036	Plmt sft tiss loclzj dev ea	37186	Sec art thrombectomy add-on	50389	Remove renal tube w/fluoro	78140	Red cell sequestration	88185	Flowcytometry/tc add-on	93986	Dup-scan hemo compl uni std
19086	Bx breast add lesion mr imag	37187	Venous mech thrombectomy	50431	Njx px nfrosgrm &/urtrgrm	78185	Spleen imaging	88313	Special stains group 2	93990	Doppler flow testing
19286	Perq dev breast add us imag	37188	Ven mechnl thrmbc repeat tx	50434	Convert nephrostomy catheter	78191	Platelet survival	88314	Histochemical stains add-on	94015	Patient recorded spirometry
19288	Perq dev breast add mr guide	37191	Ins endovas vena cava filtr	50435	Exchange nephrostomy cath	78201	Liver imaging	88346	Imfluor 1st 1antb stain px	94644	Cbt 1st hour
20983	Ablate bone tumor(s) perq	37192	Redo endovas vena cava filtr	50592	Perc rf ablate renal tumor	78202	Liver imaging with flow	88361	Tumor immunohistochem/comput	94664	Evaluate pt use of inhaler
21125	Augmentation lower jaw bone	37193	Rem endovas vena cava filter	50593	Perc cryo ablate renal tum	78215	Liver and spleen imaging	88364	Insitu hybridization (fish)	94669	Mechanical chest wall oscill
21127	Augmentation lower jaw bone	37197	Remove intrvas foreign body	50705	Ureteral embolization/occl	78226	Hepatobiliary system imaging	88367	Insitu hybridization auto	94761	Measure blood oxygen level
21215	Lower jaw bone graft	37220	Iliac revasc	52284	Cysto rx balo cath urtl strx	78227	Hepatobil syst image w/drug	88369	M/phmtrc alysishquant/semiq	94762	Measure blood oxygen level
22527	Idet 1 or more levels	37221	Iliac revasc w/stent	52442	Cystourethro w/addl implant	78231	Serial salivary imaging	88373	M/phmtrc alys ishquant/semiq	95012	Exhaled nitric oxide meas
27278	Arthrd si jt prq wo tfxj dev	37222	Iliac revasc add-on	53855	Insert prost urethral stent	78232	Salivary gland function exam	88374	M/phmtrc alys ishquant/semiq	95024	Icut allergy test drug/bug
31627	Navigational bronchoscopy	37223	Iliac revasc w/stent add-on	53860	Transurethral rf treatment	78261	Gastric mucosa imaging	88377	M/phmtrc alys ishquant/semiq	95065	Nose allergy test
31634	Bronch w/balloon occlusion	37224	Fem/popl revas w/tla	55873	Cryoablate prostate	78264	Gastric emptying imag study	88381	Microdissection manual	95070	Bronchial allergy tests
31652	Bronch ebus sampling 1/2 node	37225	Fem/popl revas w/ather	55874	Tpml plmt biodegrdabl matrl	78265	Gastric emptying imag study	89230	Collect sweat for test	95145	Antigen therapy services
32408	Core ndl bx lng/med perq	37226	Fem/popl revasc w/stent	58340	Catheter for hysterography	78266	Gastric emptying imag study	91065	Breath hydrogen/methane test	95146	Antigen therapy services
32994	Ablate pulm tumor perq crybl	37227	Fem/popl revasc stnt & ather	58353	Endometr ablate thermal	78278	Acute gi blood loss imaging	92977	Dissolve clot heart vessel	95147	Antigen therapy services
32998	Ablate pulm tumor perq rf	37228	Tib/per revasc w/tla	58356	Endometrial cryoablation	78290	Meckels divert exam	93005	Electrocardiogram tracing	95148	Antigen therapy services
33285	Insj subq car rhythm mntr	37229	Tib/per revasc w/ather	58558	Hysteroscopy biopsy	78300	Bone imaging limited area	93017	Cardiovascular stress test	95149	Antigen therapy services
36005	Injection ext venography	37230	Tib/per revasc w/stent	58563	Hysteroscopy ablation	78306	Bone imaging whole body	93225	Ecg monit/reprt up to 48 hrs	95782	Polysom <6 yrs 4/> paramtrs
36010	Place catheter in vein	37231	Tib/per revasc stent & ather	58565	Hysteroscopy sterilization	78315	Bone imaging 3 phase	93226	Ecg monit/reprt up to 48 hrs	95783	Polysom <6 yrs cpap/bilvl
36011	Place catheter in vein	37232	Tib/per revasc add-on	58580	Transcrv abltj utrn fibrd rf	78451	Ht muscle image spect sing	93229	Remote 30 day ecg tech supp	95807	Sleep study attended
36012	Place catheter in vein	37234	Revsc opn/prq tib/pero stent	5X007	Ablt trurl prst8 tis thrm us	78452	Ht muscle image spect mult	93241	Ext ecg>48hr<7d rec scan a/r	95808	Polysom any age 1-3> param
36013	Place catheter in artery	37235	Tib/per revasc stnt & ather	5X008	Ablt trurl prst8 tis trnsdcr	78456	Acute venous thrombus image	93242	Ext ecg>48hr<7d recording	96446	Chemotx admn pertl cav impl
36014	Place catheter in artery	37236	Open/perq place stent 1st	5XX05	Cysto insj dev ischmc rmdlg	78457	Venous thrombosis imaging	93243	Ext ecg>48hr<7d scan a/r	98975	Rem ther mntr 1st setup&edu
36015	Place catheter in artery	37237	Open/perq place stent ea add	70390	X-ray exam of salivary duct	78468	Heart infarct image (ef)	93245	Ext ecg>7d<15d rec scan a/r	98977	Rem ther mntr dv sply mscskl
36140	Intro ndl icath upr/lxtr art	37238	Open/perq place stent same	74251	X-ray xm sm int 2cntrst std	78579	Lung ventilation imaging	93246	Ext ecg>7d<15d recording	99153	Mod sed same phys/qhp ea
36160	Establish access to aorta	37239	Open/perq place stent ea add	74400	Urography iv +-kub tomog	78598	Lung perf&ventilat diferentl	93247	Ext ecg>7d<15d scan a/r	99454	Rem mntr physiol param dev
36200	Place catheter in aorta	37241	Vasc embolize/occlude venous	74415	Urography nfs drip&/bls w/nf	78600	Brain image < 4 views	93268	Ecg record/review	99459	Pelvic examination
36221	Place cath thoracic aorta	37242	Vasc embolize/occlude artery	75600	Contrast exam thoracic aorta	78601	Brain image w/flow < 4 views	93270	Remote 30 day ecg rev/report	G0166	Extrnl counterpulse, per tx
36245	Ins cath abd/l-ext art 1st	37243	Vasc embolize/occlude organ	75901	Remove cva device obstruct	78606	Brain image w/flow 4 + views	93271	Ecg/monitoring and analysis	G0238	Oth resp proc, indiv
36247	Ins cath abd/l-ext art 3rd	37244	Vasc embolize/occlude bleed	77078	Ct bone density axial	78610	Brain flow imaging only	93296	Rem interrog evl pm/ids	G0239	Oth resp proc, group
36251	Ins cath ren art 1st unilat	37246	Trluml balo angiop 1st art	77290	Set radiation therapy field	78630	Cerebrospinal fluid scan	93325	Doppler color flow add-on	G0249	Provide inr test mater/equip
36252	Ins cath ren art 1st bilat	37252	Intrvasc us noncoronary 1st	77336	Radiation physics consult	78635	Csf ventriculography	93451	Right heart cath	G0288	Recon, cta for surg plan
36253	Ins cath ren art 2nd+ unilat	40806	Incision of lip fold	77370	Radiation physics consult	78645	Csf shunt evaluation	93454	Coronary artery angio s&i	G0341	Percutaneous islet celltrans
36254	Ins cath ren art 2nd+ bilat	47382	Percut ablate liver rf	77372	Srs linear based	78650	Csf leakage imaging	93668	Peripheral vascular rehab	G2082	Visit esketamine 56m or less
36465	Njx noncmpnd sclrsnt 1 vein	47383	Perq abltj lvr cryoablation	77373	Sbrt delivery	78660	Nuclear exam of tear flow	93701	Bioimpedance cv analysis	G2083	Visit esketamine, > 56m
36466	Njx noncmpnd sclrsnt mlt vn	47531	Injection for cholangiogram	77417	Radiology port images(s)	78700	Kidney imaging morphol	93786	Ambl bp mntr w/sw rec only	G6003	Radiation treatment delivery
36473	Endovenous mchnchem 1st vein	47536	Exchange biliary drg cath	77610	Hyperthermia treatment	78801	Rp loclzj tum 2+area 1+d img	93792	Pt/caregiver traing home inr	G6004	Radiation treatment delivery
36481	Insertion of catheter vein	47537	Removal biliary drg cath	77615	Hyperthermia treatment	78802	Rp loclzj tum whbdy 1 d img	93880	Extracranial bilat study	G6005	Radiation treatment delivery
36482	Endoven ther chem adhes 1st	47538	Perq plmt bile duct stent	77790	Radiation handling	78803	Rp loclzj tum spect 1 area	93922	Upr/l xtremity art 2 levels	G6006	Radiation treatment delivery
36572	Insj picc rs&i <5 yr	47539	Perq plmt bile duct stent	78013	Thyroid imaging w/blood flow	78804	Rp loclzj tum whbdy 2+d img	93923	Upr/lxtr art stdy 3+ lvls	G6007	Radiation treatment delivery
36584	Compl rplcmt picc rs&i	47540	Perq plmt bile duct stent	78014	Thyroid imaging w/blood flow	78808	Iv inj ra drug dx study	93924	Lwr xtr vasc stdy bilat	G6008	Radiation treatment delivery
36836	Prq av fstl crtj uxtr 1 acs	47544	Removal duct glbldr calculi	78016	Thyroid met imaging/studies	78830	Rp loclzj tum spect w/ct 1	93925	Lower extremity study	G6009	Radiation treatment delivery
36837	Prq av fstl crt uxtr sep acs	49185	Sclerotx fluid collection	78018	Thyroid met imaging body	78831	Rp loclzj tum spect 2 areas	93926	Lower extremity study	G6010	Radiation treatment delivery
36903	Intro cath dialysis circuit	49423	Exchange drainage catheter	78070	Parathyroid planar imaging	78832	Rp loclzj tum spect w/ct 2	93930	Upper extremity study	G6011	Radiation treatment delivery
36904	Thrmbc/nfs dialysis circuit	49424	Assess cyst contrast inject	78075	Adrenal cortex & medulla img	7XX00	Mr sfty implt&/fb asmt stf 1	93931	Upper extremity study	G6012	Radiation treatment delivery
36906	Thrmbc/nfs dialysis circuit	49446	Change g-tube to g-j perc	78103	Bone marrow imaging mult	7XX01	Mr sfty mplt&/fb asmt stf ea	93970	Extremity study	G6013	Radiation treatment delivery
36908	Stent plmt ctr dialysis seg	49450	Replace g/c tube perc	78110	Plasma volume single	86486	Skin test unlisted antign ea	93971	Extremity study	G6014	Radiation treatment delivery
36909	Dialysis circuit embolj	49451	Replace duod/jej tube perc	78120	Red cell mass single	88120	Cytp urne 3-5 probes ea spec	93978	Vascular study	G6015	Radiation tx delivery imrt
37183	Revision tips	49452	Replace g-j tube perc	78121	Red cell mass multiple	88121	Cytp urine 3-5 probes cmptr	93979	Vascular study	G6016	Delivery comp imrt
37184	Prim art m-thrmbc 1st vsl	50387	Change nephroureteral cath	78130	Red cell survival study	88184	Flowcytometry/ tc 1 marker	93985	Dup-scan hemo compl bi std	Q0092	Set up port xray equipment

APPENDIX I

APPENDIX II


Medicare PFS Cuts to Interventional Radiology Since 2006 are -35%
Counties with at least one Interventional Radiologists
Counties with no Interventional Radiologists
Created with mapchart.net



Medicare PFS Cuts to Vascular Surgery Since 2006 are -29%

- Counties with at least one Vascular Surgeon
- Counties with no Vascular Surgeon