

Trends in Utilization and Physician Payments for Dialysis Arteriovenous Fistula and Graft Maintenance Procedures From 2019 to 2021 - An Update on Bundled Medicare Payments

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Purpose



In 2017, bundled Current Procedural Terminology (CPT) codes were introduced to reduce duplicate payments for dialysis arteriovenous fistula and graft maintenance procedures. The purpose of this study was to provide an update on the trends in volume and payment of these procedures from 2019 to 2021 following the implementation of these bundled codes.

Methods



Using the CPT codes for arteriovenous fistula and graft maintenance procedures, claims from the Medicare Part B Physician/Supplier Procedure Summary Master File were collected from the years 2019 to 2021. Trends of the annual total volume of procedures and total physician payment were analyzed per specialty.

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[CPT bundle codes for dialysis maintenance procedures have resulted in a decrease in the volume of procedures and total physician payments from 2019 to 2021. During this time, there was a slight increase in average per-procedure payments.]

	# of Dialysis Procedures	Total Physician Payment	Average Per-Procedure Payment
2019	483,780	\$414,600,000	\$857
2021	354,124	\$311,400,000	\$879
% change	↓ 26.8%	↓ 24.9%	↑ 2.6%

Figure 1. Volume and payment of dialysis procedures from 2019 to 2021.

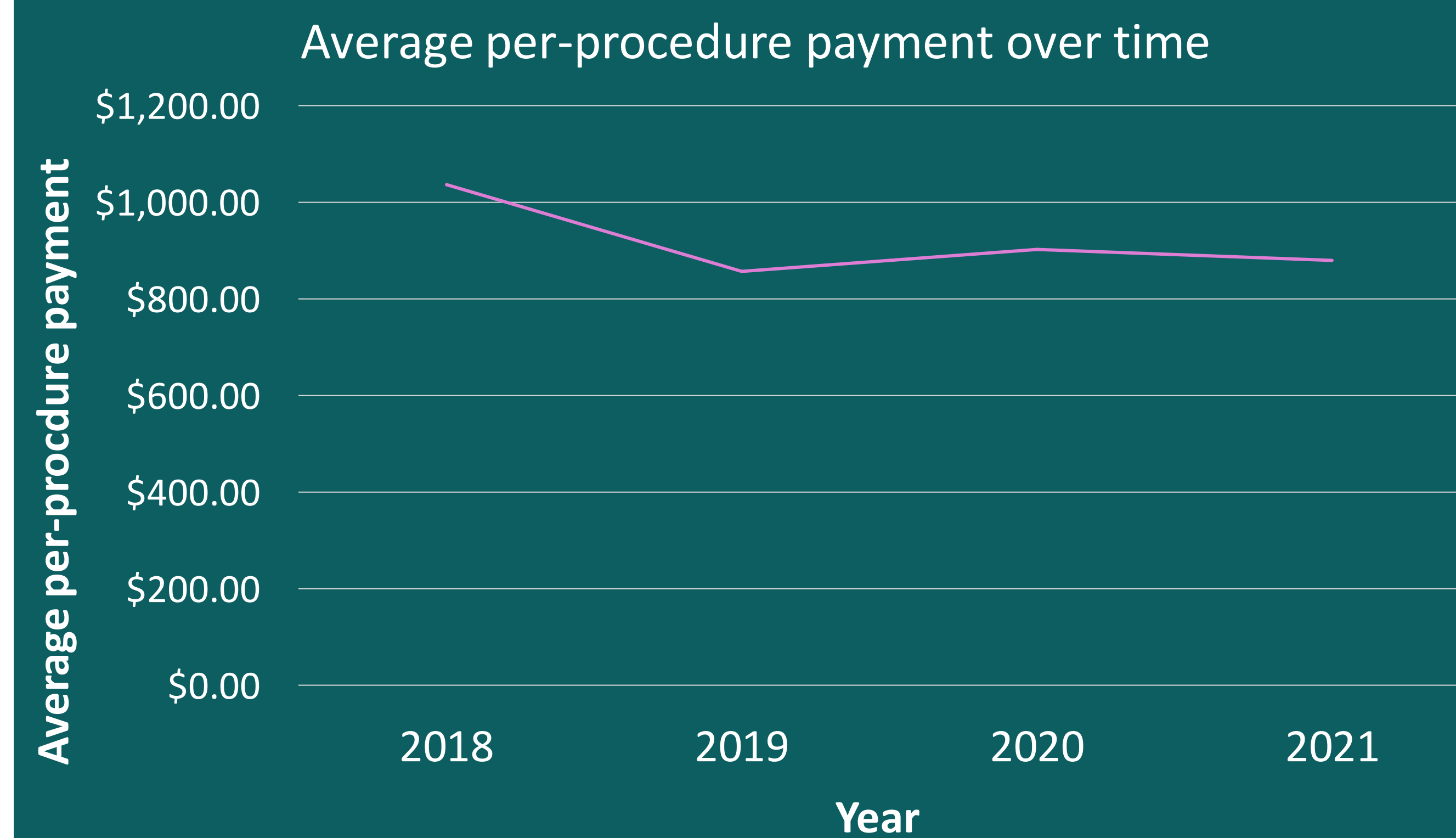


Figure 2. Change in the average per-procedure payment over time following the introduction of bundled CPT codes.

Results



From 2019 to 2021, the volume of dialysis maintenance procedures decreased from 483,780 to 354,124 (26.8%). This decrease was driven primarily by radiologists (31.0%), followed by nephrologists (28.0%) and surgeons (23.4%). The total physician payment decreased from \$414.6 million to \$311.4 million (24.9%). This was driven by a decrease in the total payment for radiologists (55.0%) and surgeons (63.5%), however, there was an increase in payment for nephrologists (80.6%). In 2021, the average per-procedure payment was 2.6% higher than it was in 2019.

Conclusions



Following the introduction of CPT bundle codes for dialysis arteriovenous fistula and graft maintenance procedures in 2017, there has been a decrease in the volume of procedures (26.8%) and total physician payment (24.9%) from 2019 to 2021. Following the drop in 2018, the average per-procedure payment has had minimal change from 2019-2021, with an overall increase of 2.6%. This data suggests that the bundle codes, designed to reduce redundant payments, correlated with a decrease in volume and total physician payment for dialysis procedures from 2019 to 2021, but a relatively stable per-procedure payment.

References

1. Lindquister WS, Dhangana R, Warhadpande S. Bundled Medicare Payments: Trends in Utilization and Physician Payments for Dialysis Arteriovenous Fistula and Graft Maintenance Procedures From 2010 to 2018. *American Journal of Roentgenology*. 2020;215(4):785-789. doi:10.2214/ajr.19.22675



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