TEN percent of patients undergoing percutaneous coronary intervention with stent implantation (PCI-S) for the treatment of coronary artery disease did not receive guideline-recommended dual antiplatelet therapy within 30 days of their procedure, according to the authors of a research letter published online today by the Medical Journal of Australia.

The authors, led by Dr Benjamin Hsu, a Research Fellow at the Centre for Big Data Research at the University of NSW, analysed de-identified, linked Pharmaceutical Benefits Scheme (PBS) and Medicare Benefits Schedule (MBS) data for a 10% random sample of Medicare beneficiaries, provided by the Australian Department of Health, to quantify rates of antiplatelet drug dispensing within 30 days of PCI-S.

“Of 2869 patients who underwent PCI-S during the study period, 2592 (90%) were dispensed antiplatelet drugs within 30 days of the procedure,” Hsu and colleagues found. “Our findings indicate that 10% of patients undergoing PCI-S did not receive guideline-recommended dual antiplatelet therapy within 30 days of their procedure. Dispensing was more frequent for concessional PBS beneficiaries, patients who had not undergone PCI-S in the preceding year, patients not dispensed antiplatelet drugs during the preceding 6 months, and patients dispensed proton pump inhibitors within 30 days of the procedure.

“Antiplatelet therapy was also more frequent among patients from Victoria or Tasmania, Queensland, and Western Australia than for those from NSW or the Australian Capital Territory."

“Cost may have been a barrier, as antiplatelet therapy was less frequent among general than concessional PBS beneficiaries; the maximum out-of-pocket cost for any single PBS item in 2013 was $5.90 for concessional beneficiaries, but $36.10 for general beneficiaries; general beneficiaries may have already experienced significant out-of-pocket costs for both health insurance and their procedure,” the authors wrote.

“In most states, the Public Hospitals Pharmaceutical Reform Agreement ensures that PBS-subsidised medications can be dispensed to patients when they are discharged from hospital. NSW and the ACT, however, do not participate in this agreement; patients are discharged from public hospitals with unsubsidised medicines sufficient for only 2–7 days, after which they must visit a community doctor for prescribing of PBS-subsidised medications.

“This inconvenience may contribute to the lower 30-day dispensing rate in these jurisdictions."

The authors recommended that further research be undertaken to investigate why some patients undergoing PCI-S are not receiving dual antiplatelet therapy directly after their procedure.

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