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Capture of systemic anticancer medicines in Pharmaceutical Benefits Scheme (PBS) data likely higher than previously reported

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Letter to the Editor

We welcome the Tervonen et al. article, *Capture of systemic anticancer therapy use by routinely collected health datasets* (*2020;30(1):e3012004*)[1], addressing the fit-for-purpose nature of Pharmaceutical Benefit Scheme (PBS) and other routine data to capture 'fact of treatment' for people receiving anticancer medicines in NSW public hospitals (2008–2012). Compared with treatment recorded in the NSW Clinical Cancer Registry (ClinCR), they found PBS capture rates of >80%, but this varied by cancer type.

To our knowledge, the NSW ClinCR has not been validated as the gold standard for treatment ascertainment.[2] We also believe the authors' findings likely underestimate PBS capture rates.

1. The analysis examined if patients had a PBS record indicating anticancer treatment within 60 days of the ClinCR treatment start date; this is more specific than the stated study aims. Importantly,

treatments initiated in public hospitals due to urgency, treatment intensity, or multiple modality treatment are not captured in the PBS data (as medicine costs are billed to the hospital). However, treatment would be recorded in the PBS after public hospital discharge, which could be >60 days after the first recorded ClinCR treatment.

2. The analysis included oral treatments, with the exception of hormone therapy. PBS ascertainment of hormone therapy is higher than in hospital records (the source of the ClinCR data).[3] For cancers where oral therapies were the mainstay of treatment, the authors report high PBS capture rates (92% for neurological cancers). The overwhelming majority of breast cancers are treated with hormone therapy[4]; if these treatments were included in the analysis, higher PBS capture rates may have been observed.
3. As stated by the authors, PBS ascertainment has improved since 2012 due to individual-level processing of PBS items dispensed and administered in public hospital outpatient settings. Moreover, the study was necessarily restricted to public hospitals; capture rates for the entire cancer treatment population are likely to be higher as private hospital inpatients can be prescribed PBS medicines.

Finally, we reiterate the authors' conclusions; researchers must establish the utility of patient-level PBS data to address specific research questions relating to anticancer treatment. Quantifying capture rates by cancer site alone does not account for staging, different treatment modalities, sequencing, and delivery settings.

Author details

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