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Unplanned health service use among people living with cancer and mental health conditions: A retrospective matched case–comparison study in Australia

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People living with mental health conditions experience persistent inequities across the cancer pathway, yet their patterns of unplanned service use remain poorly described. This study examined predictors of unplanned health service use among people with cancer, with and without mental health comorbidities, in Australia. A retrospective matched case–comparison study using data from three Australian states, linking non-admitted patient (NAP) oncology records to cancer registry, hospital admission, emergency department (ED) presentation, outpatient mental health, and mortality data. Adults aged ≥18 years living with cancer who had NAP oncology encounter between 2018–2021 were included. Individuals with mental health conditions were matched 1:1 to those without a mental health diagnosis using propensity scores. Negative binomial regression, adjusted for sociodemographic and clinical factors, examined unplanned ED presentations or hospitalisations within 12 months. Of 99,230 people living with cancer, 10,442 (10.5%) had a recorded mental health condition. After matching, individuals with mental health conditions had a 36% higher risk of unplanned ED use (IRR 95% CI 1.32–1.41), 31% higher risk of unplanned hospitalisations (IRR 95% CI 1.26–1.36) and 46% higher risk of cancer-related hospitalisations (IRR 95% CI 1.39–1.53) compared to those without. Virtual care use, digestive and lung cancers (vs breast) and physical comorbidities were also associated with increased unplanned use. Substantial inequities in unplanned acute care exist for people with cancer and mental health conditions. Strengthening integration between oncology and mental health services and refining virtual care delivery may reduce avoidable acute care use and support more equitable outcomes.

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