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Inequalities in routes to diagnosis for individuals diagnosed with breast cancer in England

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Background

In England, people from marginalised groups, such as people with severe mental illness (SMI), are more likely to be diagnosed with breast cancer at a late stage. Differences in routes to diagnosis may be a contributing factor.

Method

Differences in route to diagnosis, for individuals diagnosed with breast cancer, were compared between the broader population and ethnic minority groups, men, people living in deprived areas, people with a learning disability and people with SMI. Demographic characteristics and differences in route to diagnosis were assessed using primary care records, derived from the Clinical Practice Research Datalink, and the Cancer Registry. People were eligible for inclusion if they received a primary diagnosis of breast cancer, were aged 18+, and were diagnosed between January 2009 and December 2018. Binary logistic regression was used to compare the proportion diagnosed via each route.

Results

29,311 (33.9%) people were diagnosed via screening, 42,810 (49.5%) via urgent suspected referral, 2,525 (2.92%) via emergency presentation, and 7,185 (8.3) via other routes. The proportion diagnosed via screening was lower for people in deprived areas (0.87 [0.83–0.91], $p<0.001$), people with SMI (0.87 [0.78–0.96], $p<0.01$), and people of Black or Asian ethnicity ($p<0.01$). These groups were all more likely to be diagnosed via urgent suspected referral ($p<0.05$). Black ethnicity, SMI, and higher deprivation, specifically, were more likely to be diagnosed via emergency presentation ($p<0.05$).

Conclusions

Routes to diagnosis differ between population groups. These findings identify areas where targeted efforts could help reduce inequalities, offering opportunities to improve cancer outcomes.

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