## Geographical mobility is predictor of demand on psychiatric services

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High rates of geographical mobility among psychiatric patients may be one of the main reasons for unexpected high demands on hospital beds and services, according to new research.

A study of severely mentally ill patients in London found that 28% of inpatients changed address at least once in the 12 months before admission, with 13% changing more than once. In the two years before hospitalisation, 39% had changed addresses.

The report of the research, by a team at Imperial College School of Medicine and the Institute of Psychiatry, says that geographically patients had significantly longer periods in hospital than those who did not move. "These findings suggest that greater mobility could be one of the most important reasons for the higher than expected demands on psychiatry services and the difficulties in maintaining contact with patients in London in general and inner London in particular" (Social Psychiatry and Psychiatric Epidemiology 2000;34:164-9).

The report, which comes amid growing concern about the inadequacy of bed provision in some metropolitan areas, says that the high rates of mobility in inner London may help explain the much greater demand for inpatient services in the inner city, a demand which, the authors say, has brought services close to crisis point. They say that more attention should be focused on geographical mobility as a predictor of psychiatric service use.

The report also says that, because London does not have enough psychiatric beds, many of its patients have to be admitted to other hospitals, with a substantial proportion treated as extracontractual referrals. The most mobile patients are not represented in census figures because they are transient residents. "They therefore are not represented to the degree that their high profile warrants, and only a small number can be extremely expensive to a psychiatry service. They certainly need to be considered when planning bed requirements for inner cities, and the National Beds Inquiry in the United Kingdom, and other public mental health services, need to consider both geographic mobility and the homeless in addition to standard weighting factors.

"The needs of this group do not appear to be addressed adequately at present."



This self portrait is one of more than 50 000 paintings produced by people suffering mental difficulties that were collected by art therapy pioneer Edward Adamson, who died in 1996. Paintings from the collection are to be exhibited in a new mental health facility that was opened on the 31 May by the South London and Maudsley NHS Trust at St Thomas's Hospital, London. It brings together several services, including inpatient acute wards, outpatients, and services for older adults, that were previously dispersed around the hospital. Further information on the Adamson collection can be obtained from Alice Jackson, museum curator, on 020 7411 6371.

## High insulin levels linked to deaths from breast cancer

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High fasting concentrations of insulin may be an independent risk factor for poor outcomes in women with breast cancer, according to a study presented at the annual meeting of the American Society of Clinical Oncology, in New Orleans, Louisiana. The study sheds some light on cell growth and may lead to new therapeutic avenues.

Researchers from the University of Toronto Mount Sinai Hospital led by Dr Pamela Goodwin

followed 535 women with breast cancer for 10 years and studied the relation between breast cancer grade and stage and insulin concentration. Fasting insulin concentrations were measured to avoid postprandial fluctuations.

Cancer grade refers to the nuclear and histological appearance of the tumour cells (low, high, or intermediate grade corresponding to how differentiated the tumour seems), and stage refers to the level of spread of the tumour. Generally, higher grade cancers tend to be more aggressive and progress to higher stages.

Patients enrolled in the study received standard accepted treatments of surgery with chemotherapy, hormonal therapy, and radiotherapy if indicated. The researchers found that women with the highest insulin levels were eight times more likely to die during the study than women with the lowest insulin levels, with 70% of such patients being alive after seven years compared with 95% of those with normal insulin levels.

Moreover, those with high insulin levels were four times more likely to suffer metastatic disease and disease recurrence. Although many of the women in the study were obese, and obesity is itself associated both with a greater risk of breast cancer and with insulin resistance, in this study insulin level alone was found to be an independent risk factor for breast cancer. Dr Goodwin said that some women of normal weight in the study also had high insulin levels and that the worse prognosis held for them as well.

It is not entirely surprising to find that insulin may be implicated in breast cancer. While insulin is usually thought of in association with diabetes and as the key to controlling blood sugar levels, it is also a cellular growth factor. Previous studies have shown that the cell surface receptor for insulin on breast cancer cells differs from that of normal cells. High insulin levels, alone or in concert with defective insulin receptors, may promote neoplasia.

Although further research is needed to confirm and clarify the role of insulin in breast cancer, the finding suggests that patients with breast cancer and high insulin levels may be able to reduce risk of progression by modifying their diet and exercising to decrease insulin levels.