only) discharged during an exit interview at the end of their treatment from September 2005 until March 2007. Patients were given contact information for breast nurse specialists, and received regular mammographic surveillance, but were only seen at a breast clinic if necessary.

From the 114 questionnaires there were 78 respondents (68%) who completed at least one of the ten questions. 62 of the 78 (79%) received verbal information about PLFU at discharge and of these 61 (98%) felt the information was easily understood. 55 of the 78 received written information regarding PLFU and this was clear in 53 (96%). 60 of 76 (79%) had received their mammography appointment card and of these 57 (95%) found it easy to interpret. 74 of 78 (95%) patients had a clear idea how to contact the breast unit, but only 5 of 78 patients (6%) required a clinic appointment during the study period. All 61 respondents (100%) were either very satisfied or satisfied with process to contact the breast unit. Only 7 of 65 (13%) patients felt that the PLFU service could be improved.

The introduction of a PLFU protocol for low risk breast cancer patients has been well received by the majority of patients. This model is applicable to all UK breast units.

## O-24 Total duct excision is still required if breast cancers are not to be missed

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Introduction: Nipple discharge is the third most common reason for presentation to a symptomatic breast clinic. Discharge that is clear, serous, serosanguinous or bloodstained is associated with an increased incidence of malignancy. No other methods of investigating nipple discharge have been found to be a suitable substitute for surgery to exclude malignancy.

**Methods:** Details of patients undergoing either microdochectomy or total duct excision between 1995 and 2005 were collected and analysed. An eligible cohort of 194 patients who underwent duct excision for nipple discharge alone was identified.

Results: Malignant disease was identified in 11 (5.7%) patients: 4 invasive and 7 in-situ. All but one patient with malignant disease had single duct unilateral discharge. Discharge due to malignant disease was significantly more likely to be bloodstained than that due to benign causes (Fisher's exact test, 2-tailed p-value = 0.00134). Two of three patients with ADH have gone on to develop malignancy and six patients with benign pathology have also developed malignancy; 3 in the ipsilateral breast and 3 in the contralateral breast.

Conclusion: Our findings do not support a policy of conservative management. We have found that 10.2% of patients with demonstrably bloodstained nipple discharge had an underlying malignant lesion, despite the absence of other clinical or radiological abnormality. From our data it would appear practical to advocate conservative management for women less than 30 years of age. We conclude that cases of demonstrably blood-stained discharge should undergo duct excision if malignant lesions are not to be missed.

## O-25 Are there associations between deprivation and tumour characteristics and treatment factors in the scan breast cancer database?

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This study aimed to explore if there were any socioeconomic gradients in tumour characteristics or

treatment factors for breast cancer that could explain the socioeconomic gradients in breast cancer specific survival observed by a number of previous studies. The South East Scottish Cancer Network (SCAN) collects a compulsory dataset on all new breast cancer cases in the South East of Scotland. Four of the five databases which make up SCAN which cover residents of Lothian, Fife and Borders were used in this study. Between 1996 and October 2006 6942 patients were registered. Quintiles of the Scottish Index of Multiple Deprivation (SIMD) Score derived from 2001 census data were assigned to each patient in the database using their postcode. Women for whom no deprivation score could be assigned and all men were excluded leaving 6869 records. Associations between SIMD and the outcome measures were assessed used  $\chi^2$  tests and p values are presented for trends across deprivation quintiles. Logistic regression modelling was used to estimate odds ratios (OR) for the outcome measures after adjusting for potential confounders with data presented for comparisons between the most (Q5) and least (Q1) deprived quintiles. Increasing deprivation was significantly associated with increased risk of having a non-screening referral (p = 0.044), of having oestrogen receptor negative tumours (p = 0.001) and grade III tumours (p=0.001). Deprived women were no more likely than affluent women to have Stage III/IV disease but did appear less likely to have in situ disease. The only treatment factors associated with deprivation were waiting >28 days from referral to first clinic for women with nonscreen detected cancers (OR for Q5 vs. Q1=1.41 (95% CI 1.08-1.84), entry into a clinical trial (0.61, 0.50-0.75) and reconstruction surgery among women who had received mastectomy (0.31, 0.16-0.62). There was no association between deprivation and breast surgery type, receiving axillary surgery (patients who received breast surgery only), receiving adjuvant therapies or waiting >28days from first clinic to staring treatment after adjusting for age, stage and other clinically relevant factors. The findings suggests that differences by deprivation in treatment received do not contribute to socioeconomic gradients in survival but tumour characteristics may be part of the explanation in this population of women with breast cancer.

## O-26 A comparative study of pathological prognostic features, treatment and outcomes in women diagnosed with ductal carcinoma in situ of the breast from affluent and deprived areas

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**Introduction:** Few data exist that report the effect of deprivation in relation to DCIS management and pathological variations. We assessed management of ductal carcinoma in situ in affluent and deprived groups and whether differences in clinical and pathological factors were present.

Methods: All patients treated for DCIS between 1988 and 2001 were assessed. Outcomes measured were: mode of detection, tumour size, histological grade, surgical procedure, adjuvant therapy and recurrence in relation to deprivation category. Deprivation was categorised using Carstairs and Morris Index. The intermediate group was not assessed.

Results: 686 patients were diagnosed with DCIS; 164 (24.7%) lived in affluent areas and 161 (24%) in deprived areas. No difference in mode of detection (screening/symptomatic) between deprivation categories was found (OR 1.35 (95% CI 0.831–2.197); p=0.224). No differences in the initial surgical procedure or eventual surgical