MEASURING THE EFFECT OF A COMMUNITY RESPIRATORY SERVICE ON CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) EMERGENCY ADMISSIONS TO HOSPITAL: A CONTROLLED INTERRUPTED TIME SERIES ANALYSIS

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Background A community respiratory service was implemented in the North West of Glasgow in January 2013, as part of the Reshaping Care for Older People Programme (RCOPP). The service comprises a team of physiotherapists, occupational therapists and support workers to work with older COPD patients, providing education and self-management advice, and, where appropriate, treatment at home, in order to reduce the risk of hospital admission. This study aimed to measure the impact of the service on emergency admissions (EAs) to hospital due to COPD.

Methods COPD EAs were defined as emergency admissions to hospital with a primary diagnosis of COPD. Rate of COPD EAs per 1000 population aged 65 years+ in Glasgow City was compared before and after onset of the service with a 10 month phase-in period, using segmented linear regression with 21-month (April 2011- December 2012) pre- and 17-month (November 2013-March 2015) post-intervention periods. Rate of COPD EAs for residents of South and North East Glasgow (S+NE) - areas within Glasgow City, but with no such service in place - were used as a comparison group. The model adjusted for the rate of all-cause emergency admissions in order to control for the effect of other initiatives set up during the RCOPP. Autoregressive and moving average terms were included in the model, as well as a fourier term to adjust for seasonality. Results Comparing April-July 2011 and April-July 2012, rate of COPD EAs increased in NW but remained approximately the same in S+NE. Rates reduced in both areas by 2014. By comparison, all-cause EAs rose in NW before 2013, followed by a reduction thereafter while in S+NE reductions were seen in each consecutive year. Adjusting for all cause EAs and changes in S+NE, and therefore factoring out the impact of other RCOPP initiatives, the impact of the service was found to be a level change of -0.28 (-0.32, -0.24) and a trend change of -0.02 (-0.02, -0.01) COPD EAs per 1000 per month. This is equivalent to a predicted reduction due to the service of -0.57 COPD EAs per 1000 popn per month, in March 2015, and a relative reduction of 24.7%. Rate of COPD EAs per month reduced over time after the introduction of the service (from the point of full staffing).

Conclusion After factoring out the impact of other possible RCOPP initiatives, the community respiratory service was associated with a significant reduction in the rate of COPD EAs.

OP71

PATIENT CHOICE AND EQUALITY OF ACCESS IN SCOTLAND: AN ANALYSIS OF NHS FUNDED TREATMENTS IN THE NHS AND PRIVATE SECTOR

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Background In February 2003, 'Partnership for Care – Scotland's Health White Paper' invoked spare capacity in the

private sector as a means of treating NHS patients whose waiting times exceeded the national guaranteed limits. No evidence was given in support of the policy of giving patients a choice of provider with the intention that this would 'complement and not detract from NHS Boards' corporate responsibility to develop sustainable local solutions to long waits'.

Previous research using data on elective hip replacements has found evidence that the use of the private sector to provide NHS funded treatment disadvantaged older patients and patients from the most socio-economically deprived areas of Scotland.

Methods Data on NHS funded elective operations performed by the NHS and by private providers were extracted from Information Services Division NHS Scotland admitted patient care datasets for: hip replacements; knee replacements; cataract operations; arthroscopies; cholecystectomies; and inguinal hernia operations.

Using a segmented regression model built around the introduction of patient choice, changes in inequality between patients living in the most socioeconomically deprived and least socioeconomically deprived areas of Scotland were analysed. Similarly models were built to test for changes in inequality between the oldest patients and the other age groups.

Results Initial findings show that after the introduction of patient choice, there is evidence that patients living in the most socio-economically deprived areas had levels of inequality increase for cataract operations, 1.62% increase (95% confidence interval 1.58%, 1.66%) and cholecystectomies, 0.42% increase (0.36%, 0.48%) although inequality may have decreased by 0.66% (0.64%, 0.68%) for arthroscopies.

For the oldest patients (85 years and over for hip, knee and cataract; 70 years plus for arthroscopy; and 80 years plus for cholecystectomies; and inguinal hernia operations) there is evidence of improving inequality for hip replacements with a 1.42% reduction in inequality (1.53%, 1.31%) whereas inequality appears to have increased by 0.11% (0.09%, 0.13%) for cataract patients and by 4.00% (3.96%, 4.03%) for arthroscopy patients.

Conclusion Patient choice was introduced in Scotland and England with no evidence to support it and with very little evaluation since. This research shows that that for some of the most vulnerable patients and for certain procedures there may be a widening of inequalities which may be a result of the operation of patient choice. Conversely reductions in inequality may have occurred in some cases. Further research is necessary to understand the mechanisms involved in any such changes in inequality.

OP72

EFFECTIVENESS OF PRIMARY-CARE BASED COMMUNITY-LINKS PRACTITIONERS IN AREAS OF HIGH SOCIOECONOMIC DEPRIVATION

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Background A common policy response to health inequalities is the introduction of social prescribing programmes. Social prescribing aims to link patients to non-medical sources of support within a community, expanding options and resources