normalized and equally weighted. We compared the multiple index of deprivation between immigrants and the local population. We also measured access to primary healthcare services, as the nearest distance from the centroid of census tract to the corresponding health service through a GIS platform.

Results Socioeconomically deprived immigrants concentrate in the same areas that as the local population, that is in the north and centre boroughs of the city. These deprived areas do not only concentrate higher deprived population, but also concentrate higher crime rates and fewer healthcare services than other areas of the city. Nevertheless, the spatial access to primary healthcare services is similar across the four primary healthcare services, averaging 1 kilometer of distance.

Conclusion The spatial characterization of socioeconomically deprived population and their distance to healthcare services is useful for policy design and evaluation. We found that both immigrant and local population in socioeconomic deprivation tend to concentrate in similar poorer sectors of the city. The multidimensional index of deprivation was measured for the first time in Chile and became highly informative. More studies are required to understand how socioeconomic deprivation might impact on accessing healthcare among immigrant population in Chile and other countries.

P50 ABSTRACT WITHDRAWN

P51 COMORBIDITIES AND THE CLINICAL PATHWAY TO ACCESS JOINT REPLACEMENT SURGERY: AN EXPLORATORY QUALITATIVE STUDY

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Background Hip and knee replacement surgery is one of the most common and effective surgical procedures. The rise in multi-morbidity world-wide is leading to increasing numbers of patients with comorbid conditions undergoing joint replacement surgery. Financially stretched commissioners of health care services in the English National Health Service (NHS) are increasingly seeking to restrict access to elective surgery, including hip and knee replacement surgery despite a lack of evidence to support these decisions. It is important to get a better understanding of the referral and selection of patients with comorbidities for joint replacement surgery.

Methods An exploratory qualitative approach involving semi-structured interviews with eight orthopaedic surgeons, seven general practitioners (GPs), and five professionals working in intermediate musculoskeletal services (specific centres within the English NHS to support the referral process from primary to specialised care).

Results In general, the presence of comorbidities was not seen as a barrier to being referred or selected for joint replacement. Each professional group, however, concentrated on different aspects of the patients' condition which appeared to affect how each group managed patients with comorbidities. GPs focused on the long-term impact that comorbidities have

on the patients' everyday life. Intermediate care professionals focused on the short-term impact of comorbidities on the patients' likelihood of being selected for surgery. Orthopaedic surgeons focused on the short-term impact of comorbidities on the surgery itself. This implied there was a disagreement about roles and responsibilities in the management of patients with comorbidities. None of the three groups believed it was their responsibility to address comorbidities in preparation for surgery. This disagreement was identified as a reason why some patients seem to 'get lost' in the referral system when they were considered to be unprepared for surgery. Patients were then potentially left to manage their own comorbidities before being reconsidered for joint replacement.

Conclusion At the clinician-level, comorbidities were not perceived as a barrier to accessing joint replacement surgery but at the pathway-level, it may create an implicit barrier such that patients with comorbidities may get 'lost' to the system. The current orthopaedic clinical pathway may be less suitable for patients with comorbidities.

P52 THE EFFECT OF STEP-DOWN INTERMEDIATE CARE ON DAYS LOST TO DELAYED DISCHARGE FROM HOSPITAL: A CONTROLLED INTERRUPTED TIME SERIES ANALYSIS

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Background Step-Down Intermediate Care (IC) was developed in Glasgow City and implemented in November 2014. IC units act as a bridging service between hospital and home, for those deemed medically fit for discharge, but who would otherwise spend some time delayed in hospital, usually due to a lack of appropriate care, support or accommodation in the community. The aim of this study was to measure the effect of IC on days delayed.

Methods Rate of days delayed per 1000 population aged 75 years+ in Glasgow City was compared before and after onset of IC with a 6 month phase-in period, using segmented linear regression with 23-month (January 2013–November 2014) pre- and 13-month (June 2015–June 2016) post- intervention periods. Rate of delayed days for residents of Inverclyde and West Dunbartonshire (I&WD)- areas with similar high levels of deprivation, within NHS GGC, but with no IC in place – were used as a comparison group, as in April 2015 a national target was set to reduce delays.

Results Between January 2013 and November 2014 rate of days delayed in hospital increased by 41%. Rate of days delayed in I&WD was approximately half that of Glasgow at the start of the study period, however these also increased in the pre intervention period, by 33%. Rates reduced in both areas between November 2014 and June 2015. After accounting for secular changes pre-intervention, Glasgow City saw a level change of –57.66 (–60.85, –54.48) days per 1000 population with no significant change in trend, 0.35 (–0.19, 0.88). However, following adjustment for changes in I&WD, and therefore a factoring out of the new national target, the impact of IC in Glasgow City was found to be a level change of –12.56 (–17.65, –7.47) and a trend change of –0.38 (–0.73, –0.04). This is equivalent to a predicted reduction due to IC of –7.28 days delayed per 1000 popn, in June 2016, and a relative reduction of 18%. Rate of days delayed in Glasgow City continued to increase over time after the