1. William Whittaker - *The pursuit of happiness: Subjective wellbeing and internal migration in Great Britain*

In a Human Capital context, migration is justified where the net expected lifetime utility from moving is greater than that of staying. The lack of returns to earnings or employment probability for migrants found in the literature questions the validity of this approach to migration. However, an individual’s utility is a function consisting of more than earnings and employment, and will in part be determined by other factors such as health. This paper is the first study to assess the effects of migration on self-assessed health. We use nationally representative data from the first eighteen waves (1991-2008) of the British Household Panel Survey (BHPS). The panel structure of the BHPS is ideal for migration analysis, and the data contains a wide range of personal, labour market, and health characteristics of respondents. Migration is measured as movements in residence, we also model separately movements between Local Authority Districts in Great Britain. The effects of migration on the probability of GHQ caseness are measured in the year following a move. The methodology controls for the potential endogeneity of the migration decision and potential correlation between unobserved heterogeneity and the covariates. The results suggest the effects of migration differ by motive and past health status. We find no effect of migration on caseness for those moving for job-related reasons, for non-job-related moves we find higher caseness for those without caseness prior to the move, and lower caseness for those with caseness prior to the move. The results shed some light into justifying migration for some groups not found to benefit in the labour literature.


**Background**

In October 2008, a US-inspired, tournament-style pay-for-quality scheme was introduced for the 24 acute hospital Trusts in the North West (NW) of England. In a recent paper, Ryan (2009) found no evidence that the similar US PHQID scheme had impacted on mortality. We apply similar tests to the Advancing Quality (AQ) scheme using more limited data from all 24 trusts in the NW in the 18 months before the introduction of the scheme and the first 18 months of the scheme.

**Data**

Information on hospital admissions was obtained from Hospital Episode Statistics (HES) for the period 1st April 2007 to 31st March 2010. We obtain figures on in-hospital mortality for 760,000 individual patients with three of the health conditions covered by AQ (pneumonia, heart failure and acute myocardial infarction). The patient level data set was augmented with information on Trusts’ performance in each AQ clinical area. The data are available for each individual indicator.
Methods
We test whether the AQ programme has had an impact on short-term mortality risk in two ways: (i) by comparing in-hospital mortality between the North West and the rest of England and (ii) by relating changes in the AQ quality indicators to changes in risk-adjusted outcomes within the North West.

Results
Our findings suggest that the introduction of the AQ programme is associated with reduced mortality risk amongst patients with pneumonia and heart failure. Pneumonia mortality declined by 1.8% and heart failure mortality declined by 1.2%. In the first year of the scheme, we estimate that 520 deaths were averted for bonuses totalling £3.2M. However, we find that improvements in Trusts’ quality indicators in the North West are not consistently associated with lower death rates.

Implications
The difference-in-difference results suggest that the AQ scheme has been successful in reducing mortality. However, the findings using the scheme metrics are less encouraging. For none of the three conditions are changes in the Composite Process Score associated with changes in patient mortality. This could indicate that the process of combining indicator achievements into a composite score is inaccurate but, even when we use the indicator achievements directly, only one of the fourteen indicators is significantly negatively correlated with the mortality rate. This may suggest either that the difference-in-differences approach is not valid or that the beneficial effects of the scheme are not captured by improvements in the specific metrics.

3. Mark Harrison, Mark Dusheiko, Tim Doran, Hugh Gravelle, Matt Sutton, Martin Roland - The impact of financial incentives for improvements in the quality of primary care on emergency hospital admission rates

Background
Better management of some chronic conditions by primary care may reduce emergency admission rates for complications related to these conditions. In 2004/5 the UK government introduced a pay-for-performance scheme for quality of chronic disease management in primary care: the Quality and Outcomes Framework (QOF). We investigate the impact of the introduction of the QOF on emergency hospital admissions by comparing admission rates associated with conditions for which quality of primary care was directly incentivised under the QOF compared with emergency admissions for a set of ambulatory care sensitive conditions (ACSC also considered preventable in primary care but whose care was not incentivised).

Methods
We use annual practice level emergency admissions data from Hospital Episode Statistics (HES) for 2000/1 to 2008/9. We define two sets of ACSC emergency admissions, firstly those for conditions incentivised directly by the QOF (asthma, chronic obstructive pulmonary disease (COPD), stroke, hypertension, epilepsy and coronary heart disease (CHD)), and secondly those not incentivised by the QOF (22 conditions including cellulitis, anaemia, perforated/bleeding ulcer, and urinary infection).
We undertake differences in differences analyses, comparing the change in mean emergency admission rates between conditions incentivised and non-incentivised before (2000/1 to 2003/4) and after (2004/5 to 2008/9) the introduction of the QOF in 2004/5.

**Results**

Both sets of conditions had a similar slight upward trend in admissions prior to the introduction of the QOF. After the introduction of the QOF in 2004/5 admission rates for incentivised conditions decreased significantly while admissions for non-incentivised conditions continued to rise at their previous rate until 2005/6. Between 2006/7 and 2008/9 there was little difference in the trends between incentivised and non-incentivised emergency admissions.

Difference in differences estimates imply that the effect of the QOF was to reduce incentivised admission rates by 7%. Across the whole of England this represents a reduction of 38,500 emergency admissions, implying a cost saving of £96M (£11,324 per practice) at an average cost of £2,500 for incentivised emergency admissions.

**Implications**

The introduction of a pay-for-performance scheme to improve quality of care for chronic conditions in a general practice was associated with a significant reduction in secondary care emergency admissions and substantial cost-savings.

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4. **Eleonora Fichera & Matt Sutton - State and Self Investments in Health**

In this paper we consider how State investments can crowd out or reinforce self-investments using a theoretical model of insurance and protection. We apply this model to the smoking cessation decision made by individuals diagnosed with a cardiovascular disease using data from the 1998, 2003 and 2006 waves of the Health Survey of England. Prescription of lipid-lowering drugs, which increased substantially over this period, is used as measure of State investment. Using bivariate and trivariate probit models, and variables in clinical guidelines, we allow for the endogeneity of the doctor's decision to prescribe and offer smoking cessation. We find that unobservable characteristics affecting the prescription of drugs are positively correlated with those affecting smoking advice and negatively correlated with those affecting the propensity to quit. Our results indicate that prescription of lipid-lowering drugs to individuals with cardiovascular disease increases the probability of smoking cessation by 19-28 percentage points.

5. **Stephen Birch - Integrating Workforce Planning within Health Care Planning**

Health workforce planning has received little attention from economists leaving plans to be determined in accordance with target levels of provider-population ratios and developed in association with best demographic evidence of changes in populations. Absent from these approaches has been any explicit consideration of the health care needs of populations, the contribution of health care providers to those needs and the dynamic changes to these factors. In this presentation an extended model of health workforce requirements is presented.
that is derived from, and hence integrated with health system planning. Under this approach the implicit assumptions of traditional models are relaxed in order to incorporate the production of health and health care explicitly into workforce planning and hence making a clear separation of requirements from supply. By focusing the determinants of provider requirements on factors that are independent of provider supply, the approach avoids the “illusions of necessity” that have generated continuous increases in provider requirements in the past. Instead the question of how many providers to use is shown to be directly related to how providers are to be used.

As a result of the integration with service planning the model can be used to explore the workforce implications of alternative models of regulating, managing and delivering health services. Use of the model to explore the implications of different workforce policies applied independently as well as part of a broad policy portfolio is illustrated using data from Canada with particular attention being paid to health care teams and the use of new health care professions.