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Seven key investments for health equity across the lifecourse: Scotland versus the rest of the UK

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ABSTRACT

While widespread lip service is given in the UK to the social determinants of health (SDoH), there are few published comparisons of how the UK's devolved jurisdictions 'stack up', in terms of implementing SDoH-based policies and programmes, to improve health equity over the life-course. Based on recent SDoH publications, seven key societal-level investments are suggested, across the life-course, for increasing health equity by socioeconomic position (SEP). We present hard-to-find comparable analyses of routinely collected data to gauge the relative extent to which these investments have been pursued and achieved expected goals in Scotland, as compared with England and Wales, in recent decades. Despite Scotland's longstanding explicit goal of reducing health inequalities, it has recently been doing slightly better than England and Wales on only one broad indicator of health-equity-related investments: childhood poverty. However, on the following indicators of other 'best investments for health equity', Scotland has not achieved demonstrably more equitable outcomes by SEP than the rest of the UK: infant mortality and teenage pregnancy rates; early childhood education implementation; standardised educational attainment after primary/secondary school; health care system access and performance; protection of the population from potentially hazardous patterns of food, drink and gambling use; unemployment. Although Scotland did not choose independence on September 18th, 2014, it could still (under the planned increased devolution of powers from Westminster) choose to increase investments in the underperforming categories of interventions for health equity listed above. However, such discussion is largely absent from the current post-referendum debate. Without further significant investments in such policies and programmes, Scotland is unlikely to achieve the 'healthier, fairer society' referred to in the current Scottish Government's official aspirations for the nation.

Recent national and international reports have all recommended broad categories of policies, and types of public programmes, to help reduce socioeconomic inequalities in health (British Academy, 2014; Macintyre, 2007; Marmot, 2010; Marmot et al., 2008; European Commission, 2013). In many cases, these policies and programmes rightly attempt to directly influence the societal distribution of an underlying determinant of health, such as: income (especially after government taxes and transfers); educational and health services; social welfare benefits; and other goods and services important to health and well-being. What is found less often in the current published literature is any sort of 'report card' on a country's success in implementing these recommendations, and achieving specific objectives that one would expect from doing so. Part of the reason for this dearth of evidence within the UK relates to the increasingly disparate statistical indicators utilised across devolved jurisdictions to assess health, educational, and economic outcomes at the population level. This paper aims to fill that gap, focussing on comparable data on investments for health equity in Scotland, as compared with England (or, where data did not permit separation, England and Wales).

Prior to writing this paper, we distilled from key SDoH reports (Marmot, 2010; Marmot et al., 2008; Marmot and Wilkinson, 2003) what we regard as the seven key societal policies and programmes to help reduce health inequalities by socioeconomic position (Table 1). Our proposed 'societal investments' inevitably contain categories of public investment which others may not rank as

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Table 1
Seven key societal investments for improving health equity over the lifecourse.

Stage of lifecourse	Societal investment
Very early life	1. Universally accessible (free at point-of-care) strongly promoted, high-quality sexual and reproductive education/counselling in youth; family planning; prenatal and perinatal care (including effective breastfeeding support)
	2. Labour market, tax and transfer policies to lift all families with young children out of poverty
	3. Universally accessible (virtually free), high-quality, early childhood education programmes, located in every neighbourhood within walking distance of parents' homes
Later childhood and adolescence	4. Systematic support to enable universal secondary and – where appropriate – post-secondary – education and training, suited to full and productive employment
All of life	5. Accessible (free at point of care), high-quality primary, secondary and tertiary health care, including evidence-based public health services
	6. Strong, evidence-based economic and marketing controls on established health hazards, including: tobacco, alcohol, unhealthy foods, and gambling
	7. Sustainable economic development policies that support full meaningful employment

highly in the hierarchy of interventions – at the whole-society level – that are critical to reducing socioeconomic and health inequality. However, we believe this is a strong first iteration, to which we hope others will make constructive revisions.

This article summarises the evidence, from both published studies and routinely collected data in the UK on socioeconomic and health outcomes, that illuminates how well Scotland in particular is doing, in comparison to the rest of the UK (given Scotland's well-known greater health and health inequality burden) (Hanlon et al., 2005). In most cases we have not attempted to assess Scottish and UK levels of financial investment, per se. This is because detailed analysis of expenditure on particular policies and programmes, especially in the public sector, is both difficult and inherently non-comparable across jurisdictions. Instead, we have tried to gauge the extent to which any results of those investments are currently evident, in terms of recent changes in specific population-level outcomes. Our focus is those outcomes related to socioeconomic inequalities, which one would expect to improve as a result of such interventions, if they were properly invested in and implemented, over time. In some cases we have not been able to access disaggregated UK data for these outcomes across the other devolved jurisdictions, for direct comparison to equivalent Scottish outcomes. In these cases we have resorted to all-UK-level data, which of course understates any differences between the rest of the UK and Scotland.

1. Investment #1: universally accessible (free at point-of-care), strongly promoted, high-quality sexual and reproductive education/counselling in youth; family planning; prenatal and perinatal care

The extent of provision, throughout the UK, of universally accessible (free at point-of-care), prenatal and perinatal services is more favourable than many developed countries (Roberts, 2012). Current UK-wide services through the National Health Service (NHS) ensure that virtually all mothers and children have very good chances of receiving, at no direct cost, high-quality prenatal/perinatal care by international standards, according to their needs and preferences, regardless of their gender, place of residence, ethnicity or socioeconomic position (SEP) (Krieger et al., 1997), thus enhancing equitable health outcomes (Marmot et al., 2008; Schoen et al., 2010). For example, there is little variation in the levels of expected mortality among very preterm babies of different socioeconomic backgrounds, receiving similar neonatal care (Smith et al., 2009). Nevertheless, infants born into social disadvantage in the UK continue to experience adverse birth and infant outcomes, including low birth weight, premature birth, stillbirth, and infant mortality (Weightman et al., 2012). Investments in early years, such as universal access to evidence-based prenatal/perinatal care, have the potential to reduce health inequalities in later life (Roberts, 2012). In the UK, one such investment that attempts to promote the well-being of infants and equalises their life chances is the universal Child Health Programme. The core of this programme is universally offered child health reviews, generally delivered through home visits by Health Visitors (HVs), but complemented by general practitioner (GP) and special nurse-led clinics, depending on local service models. The reviews comprise an integrated package of immunization, screening, surveillance, health promotion and parenting support delivered primarily by HVs to all infants and their families. However, despite the wide availability of such universal services, there still exist – as detailed below – marked socioeconomic differences in infant mortality in both England and Scotland.

1.1. Infant mortality

Current official publications of SEP gradients in early-life outcomes, using methods comparable across UK jurisdictions, are largely limited to time-trends in infant mortality rate (IMR). The longest comparable pair of time-series we could identify from Scotland, versus England and Wales, comes from the period 2001–2009 inclusive (Poverty, 2011; ONS, 2012). In England and Wales, IMR decreased in a linear fashion over this nine-year period, from approximately 6.5 to about 4.8/1000 live births (LBs) in the lower SEP groups, whereas the reduction in the higher SEP group was from a much lower 2001 rate of 4.2, to about 3.6/1000 live births by 2009 (Fig. 1). Thus, in England and Wales, the absolute IMR decline between these two calendar years' IMRs, in 2001 and 2009, was much greater in the lower-SEP grouping (1.7/1000 LBs) than in the higher-SEP grouping (0.6/1000 LBs). Despite a narrowing of the absolute gap between higher- and lower-SES IMR risks over this period, it must be noted that the gap was narrowing very slowly, with nine years of progress still leaving the lower-SEP infants with a substantially higher relative risk of death in 2009 compared to the higher-SEP infants that year, and – in the case of England and Wales – worse off than the higher-SEP infants were a decade earlier. Data from 2010 to 2011 are now available (after which ONS changed from using father's social class to highest household social class), showing similar patterns as seen in Fig. 3 (Supplementary Figs. 1 and 2).

Comparable statistics from Scotland show more statistical instability over time (Fig. 2), due to the much smaller number of infant deaths in a population less than one tenth of the size of the UK as a whole (Poverty, 2011). Nonetheless, both jurisdictions show a remarkably similar overall pattern – a more rapid absolute decline in IMR, in the years leading up to 2009, for lower-SEP infants than for higher-SEP infants. However, that pattern of decline left the most recent IMRs much more discrepant – in terms of