
Health Inequalities in Scotland

Catriona Morton

A national
calamity;
A Frontline
GP view.

[illegible]

Calamity

“A disaster or misfortune, especially one causing extreme havoc, distress or misery”

The single biggest unaddressed challenge to the Scottish health services is the profound and enduring health inequalities relating to socio-economic status*. The UK ranks second in the EU for income inequality, exceeded only by Lithuania¹. Yet it is just these inequalities that determine our nation's poor health status, and Scotland remains the 'sick man of Europe', a shameful failure which not only persists, but is set to grow². This is despite multiple initiatives over the years, which have largely not delivered sustainable or effective change, resource failing to reach those most at need. This paper is a personal view, albeit of an experienced frontline clinician, and one that may resonate with many GPs who serve deprived populations. It aims to summarise some aspects of Scottish health inequalities, makes proposals about approaches, and offers some pragmatic achievable solutions. Above all it is an appeal to properly formulate what those solutions might be and allow Scottish General Practice to help address the over-riding health issue of our time and country.

July 2020

**Throughout the paper ‘health inequalities’ specifically refers to those relating to socio-economic status, though they often relate to, and compound, others, including those faced by people who are older, who have disabilities, are in ethnic minority groups, who face gender discrimination and so on.*

¹ <https://data.oecd.org/inequality/income-inequality.htm>

² Socioeconomic inequality in recent adverse mortality trends in Scotland. Fenton et al; <https://doi.org/10.1101/542472>
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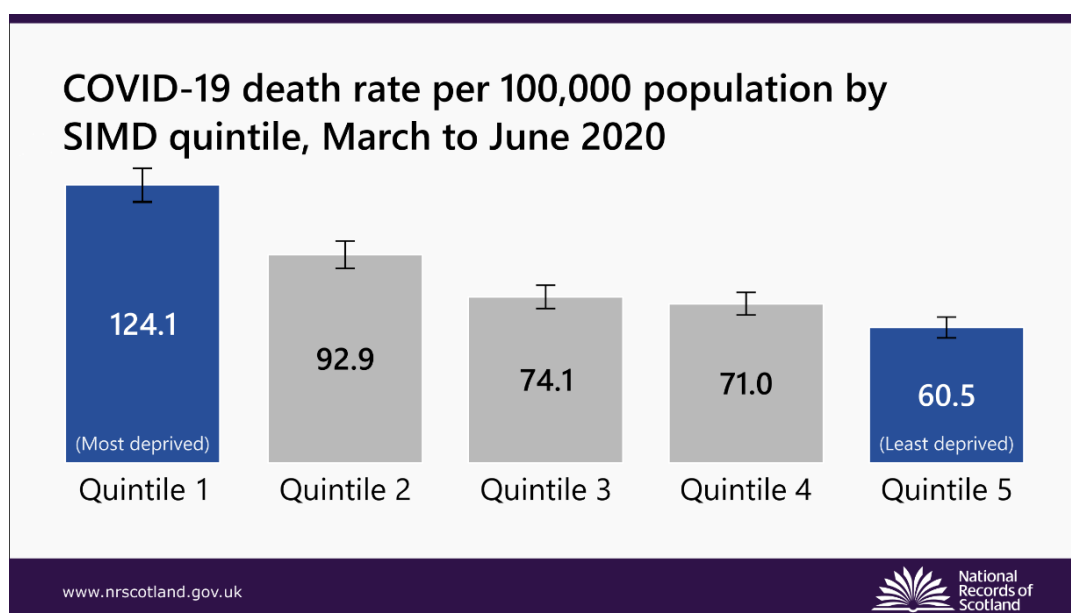
Patients and staff at Craigmillar Medical Group, Edinburgh, and especially one patient for her account of living with multi-morbidity.

PREFACE: Covid-19.

The Covid-19 pandemic delayed the launch of this paper – and gave new perspectives on the tragedy that is socially-determined inequalities of health. Others have written superb narratives, and I will not repeat those here. Please see the analysis offered by Michael Marmot and the RCGP³, and the Deep End's thought-provoking accounts of Covid-19 and Scottish Deep End General Practice⁴.

Instead, this is a short reflection on the implications of Covid-19 for the rest of this paper. Corona virus very quickly exposed the deep inequalities – health and otherwise – already existing in our society and highlighted how those were painful everyday experiences for many. Remarkably early in the pandemic, the evidence and evaluations emerged. The following are some brief snapshots:

- The most socio-economically deprived are more likely to die:



- It is estimated that around half the excess Covid-19 mortality seen in black and ethnic minority populations is accounted for by poverty.⁵
- Those in the lowest paid jobs were least likely to work from home during the pandemic. The Resolution Foundation describes that people in the bottom half of the earnings distribution, are twice as likely to be key workers, and 2.4 times more likely to work in shutdown sectors, than to work in jobs which could be done from home. The reverse is true for those in the top half of earners, twice as likely to be working from home than to be in either of these two groups. Women - and especially single mothers - are disproportionately affected, with additional consequences for child welfare and care, including home schooling. The conclusion was that *"lower earners face the 'double whammy' of being more exposed to both economic risks during the coronavirus crisis, and health risks"*⁶. Scottish data shows that for working

³ <https://elearning.rcgp.org.uk/mod/page/view.php?id=10692>

⁴ DEEP END REPORT 36. General Practice in the time of Covid-19. June 2020. See: https://www.gla.ac.uk/media/Media_728030_smxx.pdf

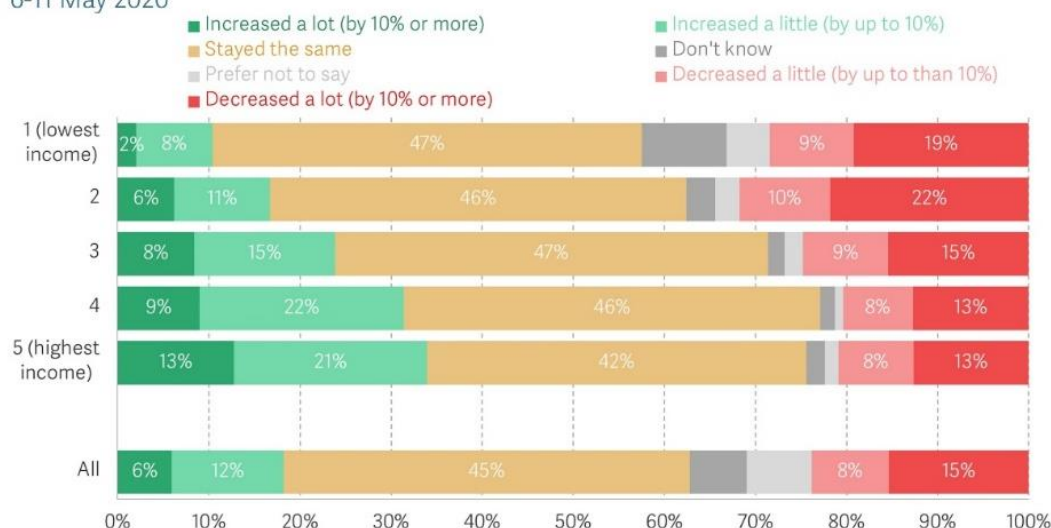
⁵ Michael Marmot. The Institute for Health Equity. July 2020.

⁶ Risky business. Economic impacts of the coronavirus crisis on different groups of workers. Resolution Foundation. April 2020.

people (age 20-64), 'process, plant and machine operatives' were most likely to die: 43 deaths and an age-standardised death rate of 25.1 per 100,000 population (National Records Scotland; period ending 14/6/20).

- The poorest suffer the worst in terms of household income during Covid-19. Again, the Resolution Foundation describes the dismal situation⁷, first reminding that *"aggregate wealth levels have almost doubled over the past decade, meaning the real pound-terms gaps between rich and poor families has grown markedly"*. The poorest households already hold the greatest debt (as a proportion of 'marketable assets'), leading to household income fragility. Already worsening pre-Covid-19, the lowest-paid workers have also been worst affected by the crisis: *"one-third of employees in the bottom quintile of weekly earnings (before coronavirus) have experienced furloughing, job loss or hours reductions associated with reductions in pay, compared to 15 per cent in the top quintile"*. But the Foundation also found that those in the lowest income households had fewer options for reducing spending. Meanwhile the wealthiest have been able to save more during the pandemic:

Proportion of people whose family saving rate have changed since the coronavirus outbreak, by family income quintile prior to the outbreak: UK, 6-11 May 2020



Notes: Base = all UK adults not studying or retired. Quintiles are based on net family income prior to the coronavirus outbreak. Sample weighted to be representative of individuals but not families. Respondents were asked to what extent, the amount of money that they (and a partner) can save or put aside each month had increased or decreased or remained the same since the start of lockdown.
Source: RF analysis of YouGov, Adults aged 18 to 65 and the coronavirus (COVID-19).

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- Food insecurity has worsened – a May 2020 YouGov poll, in conjunction with the Food Foundation and Guy's and St Thomas's Charity – indicates that 4.9 million adults and 1.7million children are food-insecure⁸. This was despite extensive outreach and emergency programmes, including for those shielding.
- When so much health care became digitally dependent, those most in need of connection with services were least likely to access or afford it, yet another inverse care law. In its 2019 report on the digital divide⁹, the Office for National Statistics highlighted that 10% of adults - over 5 million people in 2018 - were non-internet users, and that use also depends on a range of skills, some analytical. Disabled people, those on long-term sickleave or who were 'economically inactive' were more likely to be non-users. Scottish data showed a steep gradient of households with an internet connection rising from around 50% to almost 100% (lowest to highest income bands). A Rapid Needs Assessment indicates that

⁷ Rainy days. An audit of household wealth and the initial effects of the coronavirus crisis on saving and spending in Great Britain. Resolution Foundation June 2020.

⁸ <https://foodfoundation.org.uk/>

⁹ Exploring the UK's digital divide. Office for National Statistics. March 2019.

digital exclusion has worsened during the pandemic¹⁰, some unable to afford the credit or data, especially for the longer or more expensive calls required for health care consultations. The situation is worse still if translation services are needed, and for certain marginalised groups, including the homeless. Other impacts described are lack of access to reliable information and deteriorations in mental health and social isolation. The Deep End Covid-19 report describes problems associated with remote consultations in deprived settings.

- A renewed focus on Public Health and inequalities: So much could be said, but the King's Fund assessment was that *"Public health is about much more than infection control, and healthier populations will be more resilient to new threats. Preventable conditions including obesity and Type 2 diabetes are major risk factors for Covid-19. This should be a wake-up call for the government to make population health an urgent priority. We need ambitious and binding national goals to drive progress, a cross-government strategy to reduce health inequalities and increased investment in prevention and public health"*¹¹.

"AS WITH MOST DISEASES, COVID-19 has hit the poorest and most vulnerable in society the hardest. In the UK, people living in the most deprived areas have twice the mortality rate from COVID-19 of those in the least deprived areas. They face increased exposure to the disease and have been most affected by the wider unintended consequences of social distancing measures and the economic downturn. Furthermore, the disproportionate impact of the pandemic on people from Black, Asian and Minority Ethnic (BAME) communities is partly explained by socio-economic disadvantage. And all this in the context of a decade of widening social and health inequalities". RCGP 2020.

Covid-19 also brought discussion of Public Health itself. General Practice provides very local 'micro-public health' - GPs were visible and spoke out and adapted, but lacked data and wider influence; our Scottish GP Cluster Groups should provide 'interface public health' but are fledgling, and Cluster and Practice Quality Leads were occupied with practice and Coronavirus workload during the pandemic. 'Macro Public Health' often felt lacking and the hope is that Public Health Scotland, by chance launched during the Pandemic, will provide a stronger presence for the future.

The iceberg tips of other profound inequalities became more visible with Covid-19, including the devastation in some Care Home and black and ethnic minority communities. The Black Lives Matter movement brought emphasis to what the data has long shown: that how people are related to, the access of communities to resource and proper status, and the response of our social systems have huge impacts on health. International Lancet authors¹² outline that the *"two–four times increased mortality risk from COVID-19 for minority ethnic groups have brought to light social and structural injustices that have existed for centuries and are derived from the same intersecting systems of oppression"*. They go on to state that this is *"about division and control, and ultimately power"*and *"constitute a structural form of violence"*. These are also the mechanisms which cost lives because of relative poverty: none of that is new either. Public Health

¹⁰ Offline and left behind: how digital exclusion has impacted health during the covid-19 pandemic. Ray et al. BMJ Opinion. July 3 2020.

¹¹ Sally Warren, Director of Policy at The King's Fund. 2nd June 2020.

¹² Racism, the public health crisis we can no longer ignore. Devakumar et al; <https://doi.org/10.1016/>
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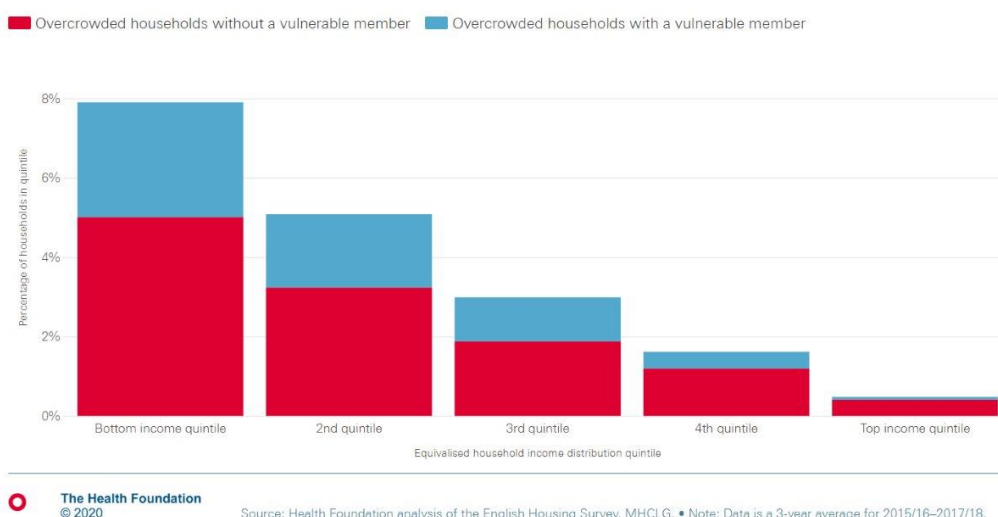
England reports that *“These inequalities largely replicate existing inequalities in mortality rates in previous years...”*¹³.

Confounding all this, Covid-19 health policies did not always reflect the reality. Our shielding focus was on conditions such as severe asthma or immunosuppression: the mortality data indicates that the overwhelming risk factor is age. However, the precise populations described later in this document - those suffering premature multimorbidity, struggling with mental health and obesity, and socioeconomically deprived - are significantly more likely to die from Covid-19.

Our most at risk populations in socioeconomic terms are also likely to be living in conditions which make shielding and distancing more difficult and damaging. Factors include over-crowded housing and less access to gardens. Gender-based violence has risen markedly with corona virus¹⁴; women’s UK death rates attributed to this doubling early in the early pandemic phase¹⁵.

Households with lower incomes are much more likely to be overcrowded

Prevalence of overcrowding by equivalised household income distribution quintile and presence of older adults or people with health conditions in the household



Children are extremely unlikely to die from Covid-19, but their welfare - which should always be a priority concern - has been relegated to marginal and poorly evidenced discussions. Now well-reported are rises in particular childhood mortalities in London; poorer access to digital learning; those in poorer households spending less time on lessons; lack of access to much-needed free school lunches (only ensured by the actions of Marcus Rashford, a footballer who grew up in poverty); and very little if any, access to day centres and other resources which normally offer support and safety to those who most need it. Research by the Sutton Trust¹⁶ (and others) has shown marked gradients between schools in private and state sectors (worse again for state schools in poor areas), and between affluent and socioeconomically deprived pupils. This applied pretty much across the board – participation in live or recorded lessons, access to an online platform or to digital tools, confidence and satisfaction of parents, quality of work, money spent on private tuition. In terms of digital technology, *“a large proportion of teachers in private schools (42%) thought all of their students would have adequate access, compared to a much lower figure (just 9%) in the most well-off state*

¹³ Disparities in the risk and outcomes of COVID-19. Public Health England. June 2020.

¹⁴ Professor Caroline Bradbury-Jones. BMJ Blog. Evidence-based Nursing. May 2020.

<https://blogs.bmj.com/ebn/2020/05/10/fine-tune-your-domestic-violence-radar-nursing-and-covid-19/>

¹⁵ Violence against women during covid-19 pandemic restrictions. C García-Moreno et al; BMJ 2020;369:m1712. May 2020.

¹⁶ COVID-19 and Social Mobility Impact Brief #1: School Shutdown. <https://www.suttontrust.com/>

schools, and only 2% in the poorest state schools". Many teachers favoured strategies whereby the most socioeconomically disadvantaged children might receive additional resource.

There was a deprivation-related gradient, too, with school hours worked: for both primary and secondary school pupils, those in private education were twice as likely to work for over 5 hours per day than those in the state sector. Educational academics estimate that an additional hour of 'instructional time' per week is associated with a test score gain of 6% of a standard deviation and predict widening of deprivation-related inequalities with Covid-19¹⁷. There is growing recognition of education as a *"neglected social determinant of health"*¹⁸ with strong correlations with morbidity and life expectancy. Crucially, too, it is a modifiable determinant. Again Covid-19 has been revealing but may also bring opportunities for change.

GPs, working with Health Visitors, have multiple roles in supporting child safety and wellbeing, counting on their knowledge of families, but also all the cues and interactions brought by face to face consultations. Children's Social Work services are relying heavily on telephone-only contact during the pandemic, part of a wider diminution of systems both formal and informal. We worry about the loss of direct contact, the extended GP team being so often both the early detector of things 'not quite right', and the final safety net.

In Craigmillar we have experienced tremendous collegiality - between staff, across interfaces - but also *with* our patients who gave solid understanding and support for all those working in our health centre and the community, and for each other. Shielding conversations were revelatory and moving. Continuity of care is the game changer – we all experienced emotional, and sometimes harrowing, conversations where the realities of living with multimorbidity and disability for those with few material resources were laid bare. Having pre-established mutual trust in conversations is what allowed us to undertake phone calls effectively, not only for mental health issues, but for assessing physical symptoms too. We miss the face-to-face contact we believe to be more crucial in people with severe medical complexity.



There has been a tragic cost as some people were either frightened, or overwhelmed by rapidly progressing illness, and died without seeking medical help. We have had more deaths than usual, many of them with no recent patient contact, and some in the tragically young. From lockdown (23/3/20) to the end of April, 14 of our practice patients died, and in that time we had just 22 morning housecall requests, both unusual. As elsewhere, suspicion-of-cancer referrals have plummeted, despite exhortations for patients to contact their GPs with worrying symptoms. As the ongoing pandemic unfolds, economic, health and social effects of Covid-19 will potentially be with us for many years and will disproportionately affect this community. New models for ongoing chronic disease management will have to rely much more on digital and non-face-to-face delivery, and we are looking at ways not to disadvantage further those with poor access or literacy. It has already been recognised that Covid19 and Non-Communicable Diseases have the same underpinnings, *"twin epidemics"* synergistically increasing morbidity and mortality and that an *"alternative concept of socially transmitted conditions has been proposed to reflect their shared social, environmental, and commercial determinants and to stress the anthropogenic and socially contagious nature of the diseases"*¹⁹. The authors

¹⁷The COVID-19 crisis and educational inequality. Professors Anna Vignoles & Simon Burgess. 20 May 2020. <https://campaignforsocialscience.org.uk/>

¹⁸ Education: a neglected social determinant of health. Editorial. The Lancet Public Health. Vol 5 July 2020.

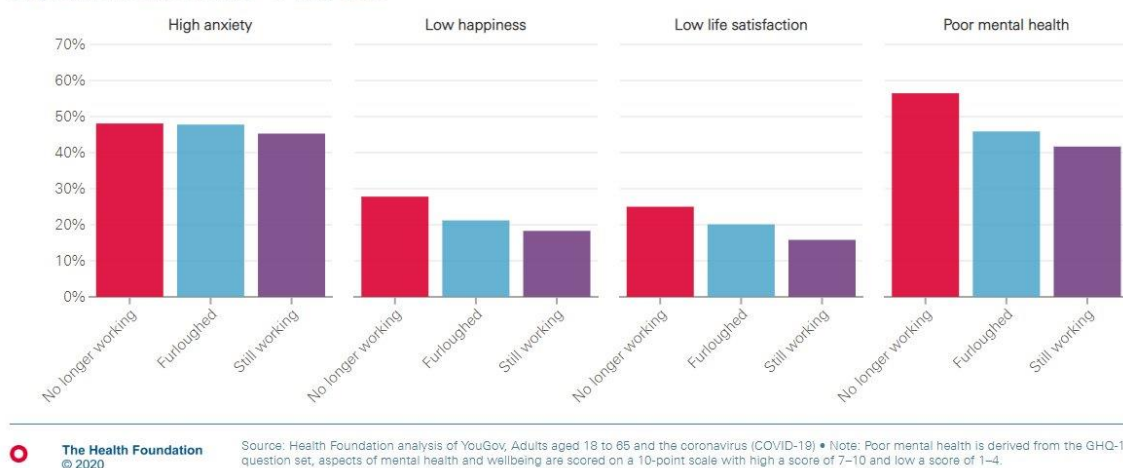
¹⁹ BMJ Editorial: Twin epidemics of covid-19 and non-communicable disease. Sheldon et al. 30 June 2020. BMJ 2020;369:m2618.

propose both strengthening approaches to upstream determinants and local systems, and that we need to move away from the current focus on individual behaviours.

The impact of Covid-19 on mental health, both during and after the pandemic is likely to be significant. Our in-house Mental Health Nurses are invaluable, learning quickly how to use non face-to-face consultations differently, including for those with substance misuse. Some drug-dependent patients are in difficulty, having lost their usual supports, sometimes having to self-isolate or shield in challenging household situations, of having poorer access to pharmacies. The Health Foundation has already shown the exacerbation of pre-existing trends of poor mental health, with recent Covid-19-exacerbated levels of anxiety and depression higher *“among young people, those with lower household income, people with a diagnosed mental illness, people living with children, and people living in urban areas”*²⁰.

People no longer working after the COVID-19 outbreak were more likely to report poor mental health and wellbeing

Proportion of 18–65-year-olds employed prior to COVID-19 outbreak reporting aspects of mental health by change in employment status: UK, 6–11 May 2020



We are aware of a burgeoning mental health workload and prior to the pandemic had already adopted trauma-informed practice. The Royal College of Psychiatrists, together with 12 mental health charities, has advocated that approach, and predicts that Covid-19 could widen mental health inequalities for a generation. Their report²¹ goes on to say that the *“pandemic will leave an unequal legacy of complicated bereavement, trauma, and economic repercussions which will push more people towards financial insecurity and poverty, significant risk factors for poor mental health”*.

We had previously trained our receptionists to be Care Co-ordinators and throughout the pandemic they have welcomed and sign-posted patients phoning for help. They do this with skill and compassion, whilst alongside learning and understanding all the new information and nuances brought by Covid-19. They continued food bank work, texting details of new referrals, but also undertook proactive outreach phone calls to the most socially vulnerable. These brief check-ins covered food, housing and personal security, with 80% of calls resulting in an onward referral to foodbanks, welfare rights advisers or clinicians. We still have a Link Worker and Citizens Advice Bureau staff attached to the practice and they have been able to continue very worthwhile work on the phone. When we collectively discussed what Care Co-ordinators would like for our ‘new normal’ going forward, they suggested more emphasis on the practice as a community hub, taking

²⁰ Emerging evidence on COVID-19’s impact on mental health and health inequalities. <https://www.health.org.uk/>. June 2020.

²¹ Covid-19 could widen mental health inequalities for a generation, warns charity. BMJ 18 June 2020. <http://dx.doi.org/10.1136/bmj.m2466>

on more of a link worker role, a 'one stop' approach to supporting access to both community and health resources. They reported missing the face to face contact with patients, were worried about vulnerable patients who were not presenting, and were very aware of the gap in support they normally offered at the reception desk.

We must also recognise that Scotland's progressive policies have brought benefit, free social care in particular. The existence of Health and Social Care Partnerships (HSCPs) meant that - at their best - there was rapid joint working across the interface, particularly to support Care Homes, those having to shield and other vulnerable populations. Our lack of electronic prescribing feels increasingly outdated, relaying paper scripts cumbersome in a pandemic. But at least community pharmacy colleagues are spared having to charge for prescriptions as elsewhere in the UK. There have of course been pandemic 'silver linings': accommodation was found for the homeless; food deliveries and other help is especially welcome to those who struggle to buy these in normal times; service development fast-tracked, and remarkable new working between sectors and professions. There have been new public realisations, perceptions reframed with the recognition that those so often shown little respect, and low levels of pay, are actually the people who keep our society going - cleaners, Council workers, shop workers, carers, lorry drivers, teachers, post office workers, Care Home staff and so many other health and social care workers too. Some of these occupations are associated with much higher Covid-19 mortalities too: death rates of 50.1 (men) and 19.1 (women) per 100,000 care workers, others with increased risk including construction workers, taxi and bus drivers, chefs, cleaners and retail workers²². The Black Lives Matter movement will hopefully demonstrate that new perspectives can bring resonance and solidarity across communities and its focus is increasingly on economic and systems change. We now need these new drivers for equity to be born out in policies that make a difference to lives both at a societal level, but also a health service one too, where we can do so much to mitigate and support.

The rest of this paper has *not* been adjusted to reflect the pandemic, but rather describes the health inequalities landscape on which Covid-19 'landed'. The sections on food poverty, multi-morbidity, children's health and a new relationship with Public Health may have more resonance now. Harry Burns, Scotland's ex-Chief Medical Officer (CMO), has talked of Scots living in poverty as the 'white aboriginals', with patterns of ill-health like those of disenfranchised colonised populations elsewhere. Australia, not renowned for its socially progressive policies, has had just 104 COVID-19 deaths (28/6/20). The Australian Government's Department of Health strongly prioritised Primary Care, emphasising its role as first point of health care contact and learning from previous epidemics²³. In addition to identifying those at risk in standard shielding categories similar to our own, it also included "*Aboriginal and Torres Strait Islander people over 50 years of age with chronic conditions*" and ensured "*dedicated funding for the provision of telehealth consultations was made available to ensure both vulnerable patients and vulnerable healthcare providers were protected from the start of the pandemic*". Had we the sort of health-inequality intelligence and resource argued for later in this paper, we might have been in a position to better fast track such approaches.

Covid-19 has demonstrated just how agile General Practice is, that it remains as committed and able as ever, that where there is a will, and barriers removed, there can be astonishingly rapid change. The pandemic has also brought new incentives and mandates for change, new perspectives on the impact that poverty has on health. We must not lose this opportunity for long term systemic transformation and ensure that tackling health inequalities is intrinsic to our 'new normal'.

²² ONS data summarised in BMJ 2020;369:m2620. 4 July 2020. England and Wales data.

²³ Editorial: Five principles for pandemic preparedness: lessons from the Australian COVID-19 primary care response. Michael Kidd; British Journal of General Practice, July 2020 317. <https://bjgp.org/content/70/696/316>

1. Do we have a problem?

In the aftermath of the second Gulf war, men cared for by my practice had a lower life expectancy than those in Iraq, and over a decade on, that life expectancy has *fallen*. The male life expectancy in Greendykes and Niddrie, where our practice is sited, is just 58 years²⁴. Men in Tanzania (which has 3 million orphans and ranks as one of the poorest countries in the world) have a life expectancy of 61 years. In Europe, again in terms of life expectancy, Scotland stands between Cyprus and Albania which have per capita GDPs of around \$29,000 and \$13,000 respectively. Since the late 1970s, Scotland has had the highest mortality among working-age men and women in Western Europe²⁵.



“Glaswegian men have a lower life expectancy than those in Algeria, Mexico, Jamaica or Iran”.

New Statesman. June 2019

Income inequality is a well-established ‘fundamental cause’ of health inequality. Income inequalities in Scotland have widened since the late 1970s, and the Glasgow Centre for Population Health reports that there has been no real narrowing of the gap in the last 20 years²⁷. Its 2018 report goes on to say that *“with income inequalities predicted to widen further in the years ahead, health inequalities in Scotland are also likely to widen unless there is a concerted political effort to address the issue”*.

“The scale of low paid employment is considerable. In 2016, half a million jobs in Scotland – 20% of all employee jobs, and almost 40% of part-time jobs – were paid below the level of the ‘real’ living wage (RLW). Approximately 65,000 of those jobs were in Glasgow”. Glasgow Centre for Population Health.

²⁴ Health Inequalities Case Studies. Local Intelligence Support Team. NHS National Services Scotland. 2018.

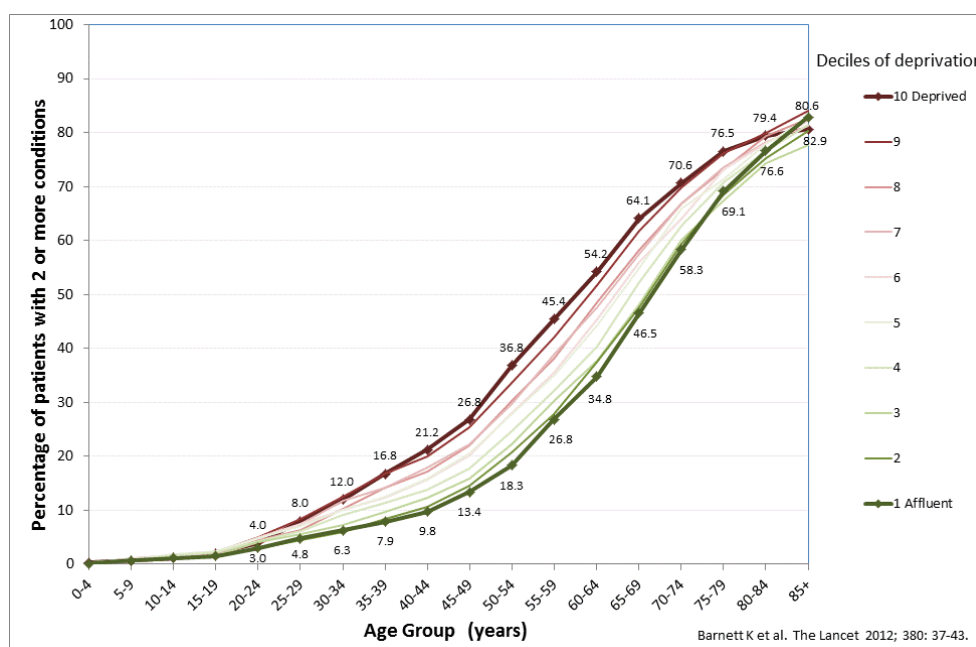
²⁵ Recent mortality trends in Glasgow: age-and gender-specific mortality compared with the rest of Scotland, 1981-2015. Glasgow Centre for Population Health. November 2017.

²⁶ Edinburgh Evening News 22 Dec 2008.

²⁷ Even money? Trends in earnings and income inequalities in Scotland and the UK, 1997-2016, Glasgow Centre for Population Health. December 2018

In Scotland we have an additional factor – the ‘Glasgow effect’, bringing an excess mortality of 5,000 lives per year. The Glasgow Centre for Population Health, in its pioneering study, undertook extraordinarily detailed work, collecting and analysing data on multiple aspects of the lives of people living in the poorest localities of the post-industrial cities of Liverpool, Manchester and Glasgow. These were chosen for their remarkably similar heritage: west coast, a history of rapid industrialisation, associations with the slave trade, a subsequent decline, and in parallel, the wealthy in those cities generally flourishing.

More recently it was able to report some better news with drops in mortality in Scotland between 1981 and 2015, but the mortality *gap* has widened, because Glasgow did not achieve those improvements as fully²⁸. In particular, the *mortality gap grew for infants, children, and the elderly*. For ‘older working aged adults’ (45-64) the Glaswegian mortality rates were 37% higher for women and 72% higher for men than in the rest of Scotland (2015). It is in this age group that premature multi-morbidity emerges in the most deprived, 10-15 years earlier than the least deprived, and is the underpinning of those stark figures²⁹:



The Scottish Public Health Observatory goes on to report on the stalling of the improvements in life expectancy: these are seen across the UK, but particularly in Scotland. The Observatory report concludes: *“As mortality improvements in Scotland stalled in 2012-2017, socioeconomic gradients in mortality became steeper, with increased mortality rates over this period in the most socioeconomically deprived fifth of the population”*³⁰. In other words, Scotland’s health inequalities are widening, and this primarily relates to worsening health in the Scottish urban poor³¹. Dr McCartney, head of the Observatory, also describes a

²⁸ Recent mortality trends in Glasgow: age-and gender-specific mortality compared with the rest of Scotland, 1981-2015. Glasgow Centre for Population Health. November 2017.

²⁹ Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. Karen Barnett, Stewart W Mercer, Michael Norbury, Graham Watt, Sally Wyke, Bruce Guthrie. The Lancet: DOI:10.1016/S0140-6736(12)60240-2. 10 May 2012.

³⁰ Socioeconomic inequality in recent adverse mortality trends in Scotland. Fenton et al; <https://doi.org/10.1101/542472>

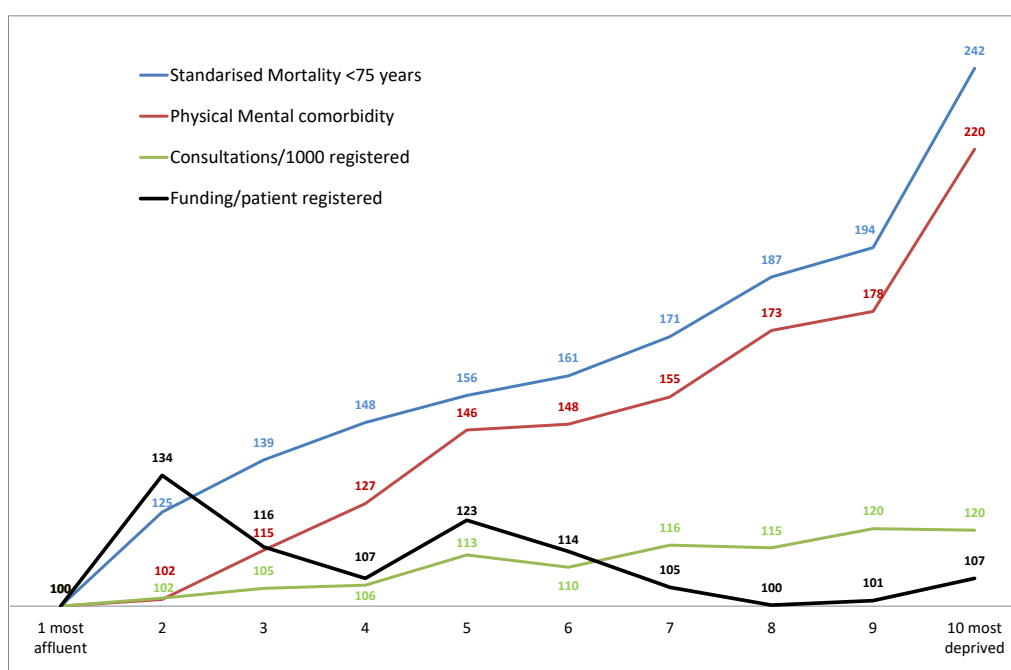
³¹ Gerry McCartney, RCGP Scotland roundtable meeting on Health Inequalities. 31/7/2019.

recent rapid acceleration in inequalities, now akin to those of the 1920s, and attributes the rapid widening to austerity. He also believes that “*Primary Care has a key role to mitigate*” and that services need to be proportionate to need. Scotland’s mortality trends can be viewed at the Scottish Public Health Observatory site³². The Observatory’s grim news is that mortality gaps of Scotland are set to increase further, unless specific action is taken to address them.

These are national issues, but they are felt heavily at practice level. Mercer, Watt, Guthrie and other Primary Care academics have demonstrated this in a series of ground-breaking papers, reflecting years of expert research. The West of Scotland enablement study³³ showed that patients from deprived areas had more multimorbidity, more psychological problems, more chronic health problems and reported not having enough time to discuss these with their GP. Yet they had shorter consultations, had to wait longer for an appointment, GP stress was higher and patient empowerment lower. So – as we might expect – a national problem is reflected locally, right down to the level of the GP consultation.

This also demonstrates a health care *delivery* problem. We have an NHS which fails to account for health need in the most deprived, and increasingly does so by calling this ‘unmet need’ – as though that is something we cannot address in General Practice. This establishes a nihilistic narrative, which discounts the evidence, and fails to show proper respect for, or acknowledgement of those patients, or the health care providers caring for them. What is worse is that when GPs in deprived areas have sight of such need, or have it openly declared to them, they do not have the material resources to address it. This is professionally compromising and disheartening.

The data tell the story³⁴:



³² <https://www.scotpho.org.uk/population-dynamics/recent-mortality-trends/>

³³ The Inverse Care Law: Clinical primary care encounters in deprived and affluent areas of Scotland. Mercer SW & Watt GCM. Annals of Family Medicine 2007; 5; 503-10.

³⁴ McLean et al. (2015). General practice funding underpins the persistence of the inverse care law: cross-sectional study in Scotland. Br J Gen Pract. 2015 Dec;65(641):e799-805.

What we now know through deeper analysis is that the funding per patient registered is skewed by the understanding that those in remote and rural areas have far higher costs attached to their care³⁵. This is because of remoteness, the lack of economies of scale, distance to specialist medical facilities and so on. And these patients are predominantly not in the most deprived groupings, so comparing urban-only populations indicates that the most deprived patients do receive more funding. However, the tremendously steep (and diverging) slopes for mortality, morbidity and workload still hold and it can be argued are simply not sufficiently reflected in an adequate funding differential. The consultation rate in the deprived is much higher: that its gradient does not match the steeper morbidity and mortality slopes suggests that those practices are perhaps restricted, not able to respond fully to need.

It is still the health of the poor - health inequalities - which is the driver for Scotland's terrible 'stuck record'. Scottish Parliament records the summing up of a previous CMO, Sir Harry Burns: *"affluent people in Scotland had a life expectancy - better than the western European average, but the gap in life expectancy between the extremes of rich and poor in Scotland was 14 or 15 years. He said that if poor people's life expectancy had improved at the same rate as it did until the 1950s or 1960s, average life expectancy would be what it had been for most of the past 150 year - the western European average or slightly better than that. There was, he said, nothing intrinsically unhealthy about Scotland or the Scots. What had happened in the past 40 or 50 years was that a large part of the population has failed to improve its health at the same rate as the more affluent in the population had. Understanding that, he said, was the key to doing something about it"*³⁶

Running parallel, is the rapid decline in funding to Scottish General Practice as a percentage of health spend. Dr Irvine has tracked multiple Scottish NHS funding streams³⁷. The Scottish spending high on General Practice was 9% in 2005/6, and since then the percentage has fallen annually and the most recent calculation from ISD cost tables suggests that it is now at a record low of 6.83% for 2017/18. She reflects that *"General practice is the only major category of health care that has been subject to a real terms decline in funding....As the available funding drops to very low levels, it becomes particularly difficult for rural and deprived urban practices to cover for the rising additional costs of providing services in more remote areas or to patients with multi-morbidity and unmet need, even with their excess cost adjustments and morbidity/life circumstances adjustments, respectively"* and that *"few, if any, GPs have it easy, regardless of where they work"*. Dr Irvine went on to outline the crucial function of General Practice in more widely protecting from NHS "over-consumption" as well as its key role in addressing inequalities.

Unfortunately, the opportunities to address this brought by the new GMS contract were not maximised, especially disappointing when we surely now have the knowledge and experience to work out how this could be done. However, at a RCGP Scotland round table discussion in 2019, Dr Andrew Buist (Chair, Scottish GP Committee, and lead GP contract negotiator) brought welcome new perspective, and one all GPs can support:

- An increase in core GP funding
- A move away from divisive formulae

³⁵ Helene Irvine, recently retired Public Health Consultant. NHS Greater Glasgow & Clyde.

³⁶ Health and Sport Committee Report on Health Inequalities. Scottish Parliament. SP Paper 637. Published 5 January 2015.

³⁷ Helene Irvine. Reporting to the RCGP Scotland round table meeting on Health Inequalities. 31/7/2019.

- An increase in GP partners where they are most needed.

Subsequently, at the 2019 Scottish LMC Conference, he supported the formation of a health inequalities working group, as did the Conference. This is very welcome, and levelled the playing field for discussion, bringing new possibilities for the future.

2. Why are we failing to solve this?

“Medicine is a social science, and politics is nothing else but medicine on a large scale. Medicine, as a social science, as the science of human beings, has the obligation to point out problems and to attempt their theoretical solution: the politician, the practical anthropologist, must find the means for their actual solution. The physicians are the natural attorneys of the poor, and social problems fall to a large extent within their jurisdiction”

Rudolf Virchow (1821-1902)

We are a small nation, whose exceptionally poor health outcomes relate predominantly to health inequalities. Yet we have some of the best primary care data and researchers in the world. We have a strong tradition of high-quality General Practice. We have a government which aims to reduce health inequalities and address social injustice, a common theme that runs through many policy areas. We have a government and profession committed to strengthening primary care and delivering health care closer to patients and their homes. We value compassionate, realistic care. We have a Deep End group with strong links to both academic research and grass roots General Practice, with a growing international reputation. Yet we have a GP contract not designed to serve practices looking after the most socio-economically deprived in our society, though probably better supporting those with pocket deprivation. However, modelling theory indicates that outliers and exceptions are best dealt with separately, particularly important when in this case they determine the health of the nation.

Could we instead construct?

- **DESIGNED, EVIDENCE-BASED, GENERAL PRACTICE**
- **A SPECIFIC MODEL FOR BLANKET DEPRIVATION PRACTICES**
- **WITH DEFINED RESOURCES, SPECIFIED PROCESSES, EVALUATED OUTCOMES**
- **SYSTEMATICALLY SUPPORTED BY ‘MIDDLE GROUND RESEARCH’**
- **A REMIT TO FURTHER DEFINE HOW WIDER PRIMARY CARE SERVICES BEST SUIT THEIR POPULATIONS**
- **AND A COLLEGIATE SUPPORTIVE HORIZONTAL NETWORK ALONGSIDE.**

This could be a model available to all those in blanket deprivation practices who wanted to adopt it – and sufficiently attractive and sustainable to encourage opt-in to the better care it should provide patients. We may need to add a mechanism to keep earnings within an agreed envelope, should that become an issue. The vision would be to build a network, so that general practice remains a whole system, though not every practice might opt to take part. Collegiality would be key, with cultural development rather than imposed management, wherever possible. Practices would need to be prepared to examine themselves and participate in shared learning, in order to make adjustments and move forward. We will need bespoke

information and we could learn from existing Scottish pilots which have already explored this landscape (SHIP, Pioneer, Care Plus). Above all, we need sound sustainable growth.

Why we fail: Background.

A fundamental tenet of nationalised health services is that they should make a difference to health. And yet some have implied that somehow this applies less to patients suffering ill health as a result of health inequalities. A sub-text in the national dialogue has been that health inequalities be addressed by the upstream determinants (which are largely socio-political: income – overwhelmingly so, housing, transport, education, criminal justice approaches, policies relating to food, drugs, alcohol, smoking and so on). These *are* crucial, but the argument has been used to suggest that health inequalities should ONLY be addressed by such means. This predicates that ill health exacerbated or caused by inequalities cannot be addressed by primary medical care, nor, presumably, some of the screening and other preventative programmes it delivers.

We should instead be emphasising the established value of General Practice in such settings. The best way to prevent lung disease is smoking cessation, good occupational controls and reduced air pollution: but we don't specify that NHS monies should not be spent looking after people suffering respiratory disease as a result of these. In General Practice terms, there now seems to be widespread acceptance that GPs should address the 'unmet need' of the "general frailty associated with age" (new Scottish GMS contract). That will mean keeping such patients at home wherever possible (in line with the evidence that this improves outcomes), using Realistic Medicine and palliative care approaches where appropriate, reserving hospital admission for short term acute illness, and appropriately addressing polypharmacy, and supporting independent living. The contract states:

"Where care at home is desirable and adequately supported it is better for patients. GPs spending more time on patients with complex needs would help to ensure that admission to acute care should only be to achieve a specific outcome, or for an assessment or treatment that can only be provided in a hospital setting. GPs will also be involved in establishing care plans for patients with complex needs, including anticipatory care plans, which can be used by community teams to enable patients to be cared for in their own homes for as long as possible".

However, the funding for that has been skewed to the elderly – whereas these are also the needs of younger deprived patients, whose healthy life expectancies are reached at a much earlier chronological age. We should recognise that the upstream factors that sustain a healthy elderly population in the community are good housing, social supports, exercise, economic security and so on. These apply equally to Deep End patients. GPs provide health services - which we know make a difference – but a need to address upstream factors (largely through separate measures) should not be an argument for limiting GP resource or intervention.

No country in the UK has 'solved' this – the problem highlighted by Marmot in 2010³⁸, namely that the poorer someone is, the less likely they are to live in good quality housing, have time and money for leisure activities, feel secure at home or work, have good quality work (if they do), or afford healthy food - the social determinants of health. Dr Malcolm Wright, Chief Executive of the NHS, has talked of the National

³⁸ Marmot Review report – 'Fair Society, Healthy Lives'. Feb 2010.

Performance Framework, and asked us as a health care community to reflect on that and “**what kind of country we want to be**”³⁹.

The Framework aims are to reduce inequalities, its stated outcomes that people in Scotland:

- “grow up loved, safe and respected so that they realise their full potential
- live in communities that are inclusive, empowered, resilient and safe
- are creative and their vibrant and diverse cultures are expressed and enjoyed widely
- have a globally competitive, entrepreneurial, inclusive and sustainable economy
- are well educated, skilled and able to contribute to society
- value, enjoy, protect and enhance their environment
- have thriving and innovative businesses, with quality jobs and fair work for everyone
- are healthy and active”.

Compare that with the reality from a paper examining resilience in Scottish young people facing poverty and adversity⁴⁰:

“Many people round here dinnae have electricity, dinnae have food, nothing for Christmas or whatever. No holidays, cars or nothing like that” (Jon, eighteen, Robbiestoun).

And from Edinburgh:

“Ah used tae get excluded and everything as well. Like, ah goat, like, not, ah wis meant tae be properly a Christmas leaver because my birthday was in September, but they said they didnae want me back. So ah left and ma last exam, they just told me tae leave. Cos they didn’t want me like and ye get some of them that think they’re better than you and you’re always dae wrong and - ah could go on all day about that school but who cares?” (John, sixteen, Pilton).

Scotland has led the way on so many fronts: alcohol and smoking legislation, free prescriptions and personal care, and anti-austerity measures with progressive social policies. The challenge now is to be even more radical across policy areas and for the Scottish Government to be bold and decisive in this area. As already mentioned, we have the tools for the job:

- primary care researchers who are world leaders in this area, publishing highly respected papers on population health relating to inequality, but also, *indications of what will work in addressing this*
- a Scottish GP contract with unique aspirations and approaches
- a committed GP identity, with both a grassroots and leadership presence, strengthened through the Deep End Group, which would be willing to forge a new partnership of innovation and transformation subject to scrutiny of the evidence and of outcomes.

This is a one-off opportunity – with £250m of unaccounted monies on the Primary Care table – to develop and explore a new model. Surely, we could make the **kind of General Practice we would want Scotland to have** – in terms of serving its deprived communities, its most needy? Could Scotland consider itself a flagship country in developing health justice, as it has social justice? Could we be a world-beater in that sphere too?

³⁹ Scottish School of Primary Care 2019 Annual Conference. 28 May 2019.

⁴⁰ Steeling young people: Resilience and Youth Policy in Scotland. Davidson E and Carlin E. Social Policy and Society (2019). 18:3, 479-489.

Tudor Hart clearly showed in a highly deprived setting that General Practice could improve the health of its population⁴¹. It is time to repeat that project in modern times.

2.1 OUR SCOTTISH HERITAGE – A FAILURE TO LEARN; A FAILURE TO ACT

St Ann's, Nottingham

From: 'Poverty, The
Forgotten Englishmen'.
Kenneth Sidney Coates



I started working in Craigmillar, Edinburgh, in 1996. Prior to that I had worked in St Ann's, Nottingham, and Moss Side in Manchester, at the time amongst the poorest wards in England. Our St Ann's practice was said to care for a quarter of the city's psychotic patients, the surgery building was broken into frequently, and local people suffered high levels of morbidity, some relating to a high prevalence of vascular disease in the local Afro-Caribbean population. Moss Side in the 1990s had been profoundly affected by violence, drug misuse, poverty and poor health. Housing stock was poor. My practice also cared for many Somalian refugees, fleeing extreme violence.



Moss Side 1990

Poverty and health inequalities - and an inadequate response to both - are UK-wide. Yet when I moved to Craigmillar I was taken aback by the depth of the poverty and ill health there, reflecting the Scottish lag behind the rest of Britain in terms of premature morbidity and mortality. I had been used to seeing young people dependent on drugs, but not multiple generations affected, grandparents with major addiction

⁴¹ The Exceptional Potential of General Practice. Making a Difference in Primary Care. Editor Graham C.M Watt.

problems, still holding carer responsibilities not just for their children but grandchildren too. I heard from colleagues how GPs and District Nurses working closely in teams had looked after the men and women dying young in the community of a new unknown, 'wasting' disease, AIDS. It was especially shocking, and moving, to meet teenagers who had lost both their parents to HIV and who had managed to struggle on and forge a life for themselves and their siblings despite that.

That same year (1996) the Health Services Research Policy group published a review of the effectiveness of health service interventions aimed at reducing inequalities in health. They concluded that the most significant contributions to reducing these were in improving economic and social conditions and the physical environment (as we all recognise). But health service interventions, either alone or in collaboration with other agencies, can also reduce inequalities in health, and have a clear role. Their systematic review⁴² related to socio-economic status.



Craigmillar and Niddrie, 1990s

There were multiple health care interventions which were effective, including smoking cessation, additional support for screening services, and very strong evidence to support treatments for cardiovascular disease and risk. *They concluded that the people who delivered the intervention are as important as the intervention itself or its setting, and that support and skill development is crucial.* The authors emphasised – as have so many subsequently – that standardised approaches to, for instance, screening or immunisation, will often *increase* inequalities between deprived and affluent areas because of variance in uptake. They highlighted the importance both of targeting interventions and evaluating the impact. This constitutes the mitigation of inequalities. The findings, now over two decades old, have since been reproduced by many others in more modern settings. What have we learnt from this evidence, and how does it inform our actions?

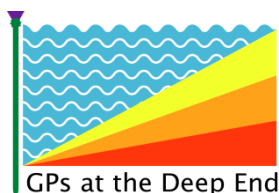
In 2008 the RCGP's 'Guide for GPs on Health Inequalities'⁴³ outlined the interventions most likely to help in terms of the evidence base. The College emphasised the need for *"access to quality General Practice...highlighted by a large review of all studies between 1985 and 2005, which quantified the benefits of GPs. The findings suggested that an increase of one GP per 10,000 population was associated with an average mortality reduction of 5.3%, equivalent to 49 fewer deaths per 100,000 per year"*. The authors emphasised that *"reducing health inequalities requires addressing the issues of accessibility and availability of General Practice"*. Our Scottish Government is working hard to examine, and adjust where it can, upstream factors, in the face of the UK government's focus on austerity. But when it comes to planning for General Practice, it is as if we don't have this, or subsequent evidence. We need to view the Scottish Allocation Formula critically in this light. The SAF is the ONLY mechanism by which resource goes directly to practices, and as we will see later, some of the GP practices that serve the most socio-economically deprived communities in Scotland received no uplift, thereby limiting a highly effective intervention, namely the General Practitioner working in a deprived setting.

⁴² A systematic review of the effectiveness of health service interventions aimed at reducing inequalities in health. Arblaster, Lambert et al. J Health Serv Res Policy. Volume 1; number 2. April 1996.

⁴³ Addressing Health Inequalities: A guide for General Practitioners. RCGP Health Inequalities Standing Group. 2008
[Health inequalities in Scotland: A GP View](#)

Twenty years ago, Professor Graham Watt wrote his RCGP paper on the Arbuthnott formula⁴⁴. He described all the issues which still dog us, including the *"general inability of routine data to take account of co-morbidity (the greater number, severity and complexity of health and social problems which exist within families living in deprived areas)"*. He described the effect of what we now call blanket deprivation whereby patients in the most deprived categories and localities suffer the cumulative effects of ill-health. When such patients form a large portion of a practice's list, it makes it more difficult for the practice to effectively deliver the required health care in response. He highlighted the higher consultation rates, shorter consultation times and the increased likelihood of unmet need within consultations resulting in an under-estimation of need for health services in such groups. He spoke of the additional use of general medical and out of hours care and less of preventative and routine specialist care. He reflected on Arbuthnott's call for research in inequalities in health care, and the relative deficiency of research skills and infrastructure in deprived areas.

Professor Watt then described the swimming pool, first drawn by Tudor Hart, with GPs serving deprived populations swimming hard in the deep end, trying to keep their heads above water. This was later developed by the Deep End Group⁴⁵, the basis of its logo, with the imagery of GPs looking identical on the surface of the pool, but hugely different activities and pressures beneath that. The slopes on the right of the flag represent the gradients of need against the flat gradient of primary medical provision.



"There are significant and long-standing health inequalities in Scotland. The public sector can make better use of its resources to address these challenges". Audit Scotland 2012⁴⁴

To address inequalities, we should take this analogy further, and consider the resource in terms of the pool of need: that resource should *fill in the deep end, essentially levelling the bottom of the pool*. As the level of resource becomes higher, that would then extend to the shallower ends too. Instead we actively move resource into the shallow end of the pool, where those with the best health outcomes are already well supported (by the SAF).

Almost a quarter of a century on, these papers are now historical - but we have failed to learn from decades of history, and our infrastructure and resource distribution with respect to health inequalities reflects this.

Finally, Audit Scotland has confirmed this failure to intervene effectively. In its 2012 report⁴⁶ it outlined that *"tackling the problems most associated with health inequalities would also reduce the direct costs to the NHS and wider societal costs"*. It too reflected the historical emphasis on reducing health inequalities, from 'Equally Well' onwards. The Commission reported that *"the distribution of Primary Care services across Scotland does not fully reflect the ill health and wider needs found in deprived areas"* and recommended that Scottish Government and Health Boards should *"include measurable outcomes in the GP contract to monitor progress towards tackling health inequalities"*. It emphasised that deprivation is the key determinant of health inequalities, with age, gender and ethnicity also being factors; and that children in deprived areas have significantly worse health than those in more affluent ones. The report determined that the **£170 million allocation in the previous year for reducing health inequalities had essentially done very little**, with the gap in life expectancy in women (between the most and least deprived) increasing, and overall the

⁴⁴ After Arbuthnott: Many questions still need to be asked. Graham Watt. Hoolet, RCGP Scotland. Winter 1999.

⁴⁵ <https://www.gla.ac.uk/researchinstitutes/healthwellbeing/research/generalpractice/deepend/>

⁴⁶ Health inequalities in Scotland: Audit Scotland. December 2012.

difference in healthy life expectancy remaining at 18 years. It highlighted the need for improved access to health and social care, which was a recommendation of the 'Equally Well' report from the Ministerial Task Force on health inequalities, published over a decade ago⁴⁷.

"The NHS has been insufficiently imagined as an agent of social justice. Health care in deprived areas is a holding operation, avoiding the disgrace of open gaps but failing to achieve what could be achieved".

Graham Watt. Building equity in the NHS: the role of general practice. BJGP Editorial. August 2019

Why have approaches not worked? The impression is of exhortations or non-specific over-arching aims ("support deprived practices", "address health inequalities") without the necessary detail. We now have HSCPs but very limited linkage with Social Work and Social Care on the ground. The additional needs of deprivation are rarely accounted for in terms of extended teams (eg community nurses, midwives). We have short-lived pilots or additional funding, many requiring intensive work by practices to engage with them. We have never truly costed good General Practice in blanket deprivation settings - fit for purpose in terms of addressing the needs of that population – systematically providing resource for evidence-based approaches.

What we now need are *specific, targeted, defined measures* which link to data in terms of provision. This could be done par excellence in General Practice where funding can be highly accountable, exceptionally so for some services. We need to end 'pilotism'. Often pilots are established when we already know that something works; or have time-limited funding – so that even if they show benefit, they do not continue. Their loss is of a piece of the Primary Care landscape which staff and patients had got to know, and use. That damages relationship continuity too, and trust. Constantly re-establishing new projects is VERY costly on multiple levels, not least as there is a 'start-up cost' for those using them, including practices. Instead of pilots, we need sustainable, reinforced and scaled-up infrastructure.

Things might be better now, had Health Boards and Councils followed Audit Scotland⁴⁸ recommendations and *"identified what they collectively spend on reducing health inequalities locally, and work together to ensure that resources are targeted at those with the greatest need"*. It will be interesting to see if Clusters will be able to do better with their new contract imperative to *"ensure relentless focus on improving clinical outcomes and addressing health inequalities"*⁴⁹. The recently-established Public Health Scotland body is tasked with developing new ways to link with local communities, and forge links and relationships at that level⁵⁰. These are currently tentative, fledgling structures, but would help with the detailed analysis of primary medical care that we so need. With the evidence for effectiveness of General Practice and the extended team, particularly if linked to a health development model, just imagine what we could have done with that health inequality money. Would that not be an experiment worth pursuing in the face of such failure of current models? Case management in primary care NHS settings has been shown to work. It is speculative now, but perhaps we would be in a very different place, had we pursued that approach but linked that with social care; or funded 'health care for GIRFEC' properly as happened in SHIP. That surely would have been a better spend of the £170 million.

⁴⁷ Equally Well. Report of the Ministerial Task Force on Health Inequalities. The Scottish Government. 2008.

⁴⁸ Health inequalities in Scotland: Audit Scotland. December 2012.

⁴⁹ The 2018 General Medical Services Contract in Scotland. BMA & Scottish Government.

⁵⁰ A consultation on the new National Public Health Body 'Public Health Scotland'. COSLA and Scottish Government. May 2019.

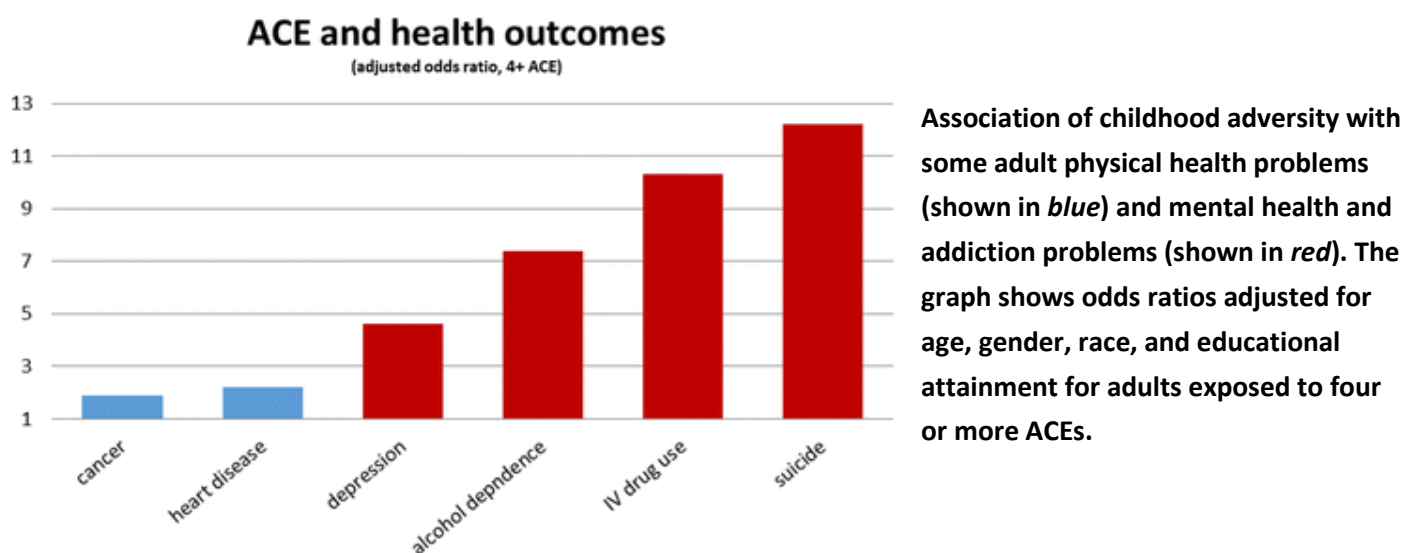
2.2 'Unmet Need' and General Practice.

GPs working in deprived practices see people with unmet health needs all the time, many relating to mental health. Like many others serving deprived populations, my practice has identified multiple areas where we simply cannot provide what we consider is required to better address health-care needs. We do respond to individual need, and all the staff in the Practice work tremendously hard, often at- or over- capacity for large portions of the day (and evenings too), to address need presented to us. We are aware that in so many of our population, underneath the expressed need is an iceberg of unmet need. That drives presentations and requires more complex and detailed care to address. In some ways 'unmet need' is a vague term; but we have come to define and understand what it means in our practice as outlined below. Our whole team recently identified patients with chaotic or sub-optimally coordinated care, many with complex multimorbidity and social problems. We all knew who they were and why they were suitable for care planning approaches. However, we have not yet been able to tackle the excess morbidity which requires new approaches. Examples follow, but in addition we still retain the current GP activity of trying to fully look after those who are "ill or believe themselves to be ill" in our over-busy, shortened, stressed appointments.

The following are some examples of work to meet some of the unmet need, explored further in Chapter 3:

- [ACE \(Adverse Childhood Experience\) work.](#)

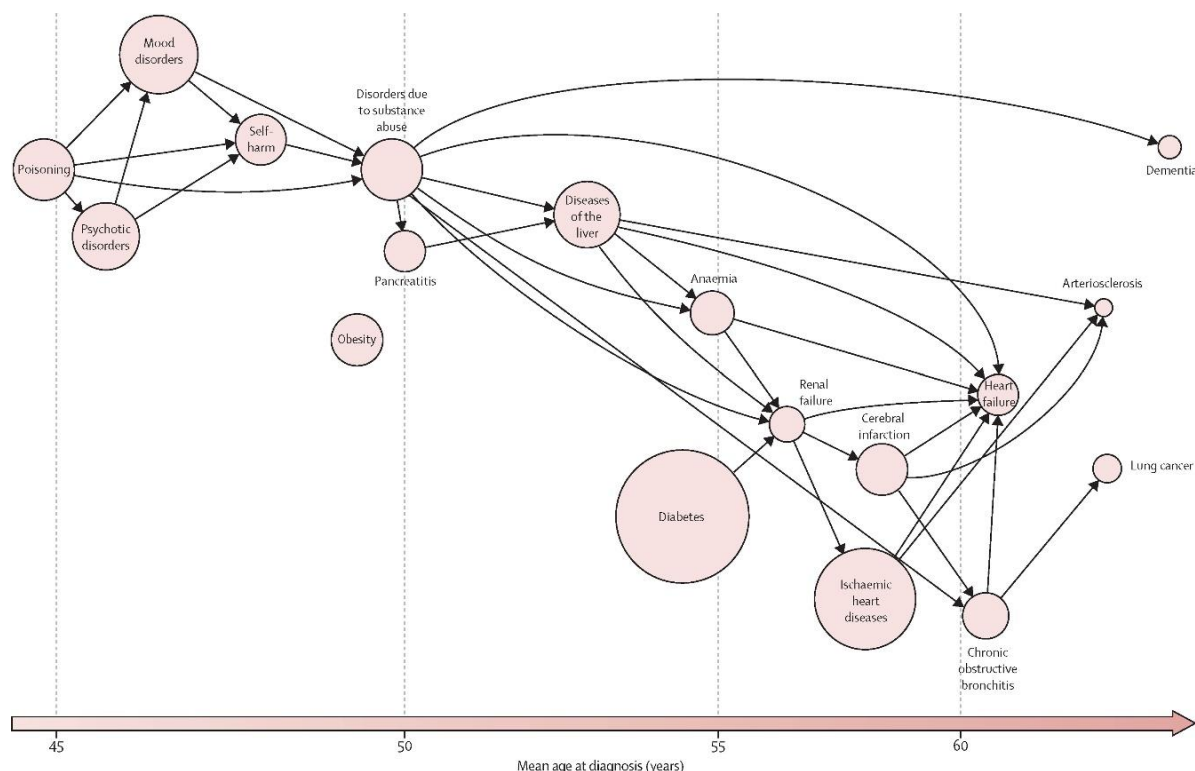
We are aware of the growing body of evidence that childhood trauma and family dysfunction are painful drivers of adult distress and ill-health: this is now measurable and documented⁵¹. Such patients do not do well in conventional specialist settings, with poor engagement, especially with secondary care. It has been postulated that high levels of adverse childhood experience (greatest in deprived populations) in part accounts for Scotland's excessive morbidity and mortality⁵².



⁵¹ Rethinking the Measurement of Adversity: Moving Toward Second-Generation Research on Adverse Childhood Experiences. Mersky et al. Child Maltreatment 2017, Vol. 22(1) 58-68

⁵² Is there a link between childhood adversity, attachment style, and Scotland's excess mortality? Evidence, challenges and potential research? Smith et al, BMC Public Health 2016. 16:655

A large Finnish study (over a million person-years) looked at the *temporal* associations between socioeconomic status and excess morbidity for a large range of conditions⁵³, triangulated against the Whitehall II study. They were able to show a ‘cascade’ of conditions over time, mental health and substance misuse in early years being associated with significant physical illness in late middle age, cancer and dementia following on:



The disease associations with socioeconomic status (area deprivation / education) in terms of relative risk are also powerful – please see Appendix 1.

Practice staff are increasingly sensitive to how negative experiences feature in the life course of our patients. We recently trained to be an ACE pilot site. Although that informs our routine clinical practice, we had to withdraw as an active participant since we did not have the resource to screen more comprehensively. As expert medical generalists, and leaders of our clinical teams, we feel the failure of this.

- **Cancer and palliative care.**

The statistics are stark: our patients are more likely to have cancer than those in less-deprived areas. And because of those demographics they are also more likely to develop cancer in their 20s, 30s and 40s. We find ourselves regularly looking after patients with palliative needs in early middle age. Non-cancer need for palliative care is also high with people dying from heart and lung failure, other vascular disease, and liver failure in particular – also at relatively young ages: the graph showing multi-morbidity 10-15 years early will have a parallel corollary in extra premature deaths. We have to maintain lower thresholds for considering very significant illness in young people, but the distress and grief of losing life so early in its course, and the burden of loss in those left behind is profound. Much of our time is taken up with dealing with both

⁵³ Association between socioeconomic status and the development of mental and physical health conditions in adulthood: a multi-cohort study. Kivimäki et al; Lancet Public Health. January 30th 2020. [https://doi.org/10.1016/S2468-2667\(19\)30248-8](https://doi.org/10.1016/S2468-2667(19)30248-8)

palliative care and the aftermath of very premature death, often simultaneously. In common with all GPs we can see that giving additional support in this area would bring great benefit, possibly in terms of diagnosis (difficult to know when presentations are often very late) but certainly for supportive care. Many of our patients do not engage with wider teams, including secondary care ones, which means an additional care burden falling on GPs. Here is a heightened need for the expert medical generalist, bringing continuity and co-ordinating care.

- Chronic disease management.

The Scottish NHS monitors long-term health inequalities⁵⁴ and there has been considerable progress in several areas over the years, others remaining static. But there are adverse changes in the *Relative Index of Inequality* (RII). The three clearest areas for study relate to alcohol, cancer and heart disease:

- ***There have been some improvements in the RII relating to alcohol-related deaths, but currently the RII is 10% higher than when monitoring started in 1997***
- ***The RII for cancer mortality has increased slightly over the longer term***
- ***Relative inequalities in CHD mortality among adults aged 45-74 have increased over the long term, with admission rate for heart attack in Scotland's most deprived areas twice that of the least deprived.***

Finally, two indicators relating to premature mortality (under 75 and aged 15-44) have both shown increases in RII over time. There has been a reduction in absolute premature mortality rates, but in 1997, premature mortality rates were three times higher in the most deprived areas compared to the least deprived; by 2017 those rates had increased to four.

Major contributors to the social gradient in health outcomes are non-communicable diseases (NCDs)⁵⁵. In his updated work, Marmot has outlined how powerful are the social determinants of NCDs, the “*causes of the causes of health inequality*”. He goes on to say that two of the four identified social determinants relate to stress and to access to health care opportunities to address them. These are areas where health services can intervene, and we would see these as the bread and butter work of General Practice.

The WHO has identified the top four NCDs (Non-Communicable Diseases) which account for over 80% of deaths, and are underpinned by four major common risks: tobacco use, harmful use of alcohol, unhealthy diets, and physical inactivity (again, all GP territory). But the WHO has now added a fifth, namely mental health and environmental determinants⁵⁶. This is because “*risk factors for NCDs are influenced by socioeconomic determinants of health that exacerbate health inequalities, with the most vulnerable and marginalised groups hit hardest*”. The failure is to “*translate those high-level commitments into effective national action, despite the availability of evidence based and cost-effective interventions for prevention and control of NCDs*”. Our new GP contract reflects exactly that failure to act despite the evidence, and our extensive knowledge about cost-effective interventions.

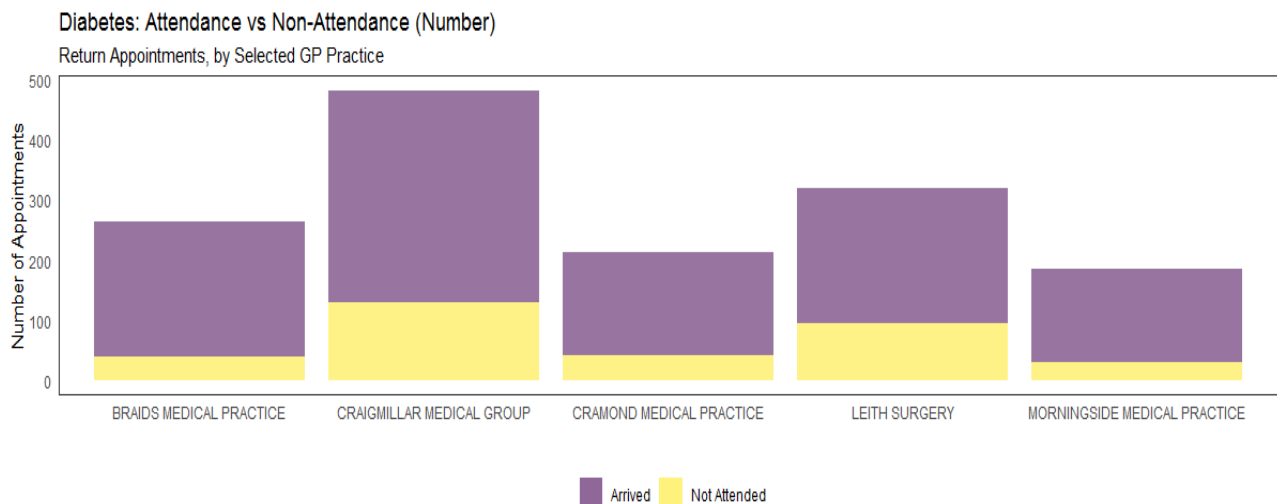
⁵⁴ Long-term monitoring of health inequalities. Population Health Team. Scottish Government Statistics. December 2018 report.

⁵⁵ Social determinants and non-communicable diseases: time for integrated action. Marmot et al; BMJ 2019;364:k1251 <http://dx.doi.org/10.1136/bmj.k1251>

⁵⁶ Mobilising society to implement solutions for non-communicable disease. WHO Global Coordination Mechanism on NCDs. BMJ 2019;365:l360 | doi: 10.1136/bmj.l360

We know that people who have multiple morbidity who are not poor, are literate, who have organisational and psycho-social resource, often readily respond to a suggested change in treatment or health behaviour, with the support of a brief conversation and a leaflet. They are already in a highly advantaged group in health terms because of that affluence, despite any morbidity they may have. In deprived practices, GPs will see patients who are distressed, who often have a background of traumatic and multiple personal loss, even at a young age, and where health behaviours reflect those life and societal circumstances.

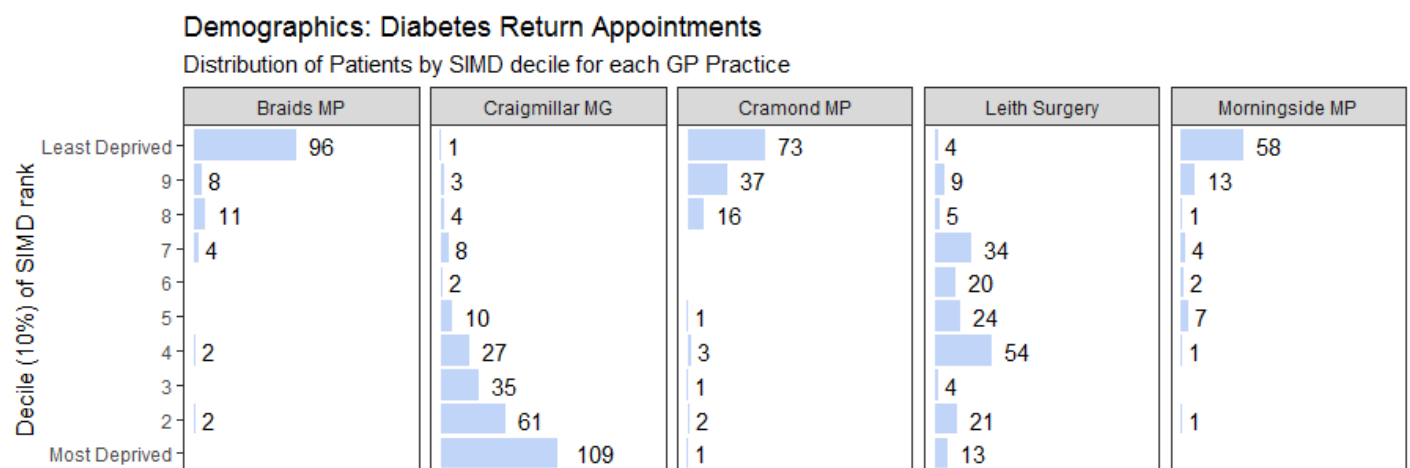
There is also poorer engagement with specialist services. The following are attendance rates over 2 years for those for any type of diabetes for five Edinburgh practices with similar list sizes* but very different demographics⁵⁷. The data also shows higher requirements for specialist diabetes care in deprived practices, despite younger populations:



Source: TRAK 1st May 2017 - 31st April 2019; extracted 8th October 2019

***Braids Medical Practice (9717); Craigmillar Medical Group (9240); Cramond Medical Practice (8948); Leith Surgery (9081); Morningside Medical Practice (8670).**

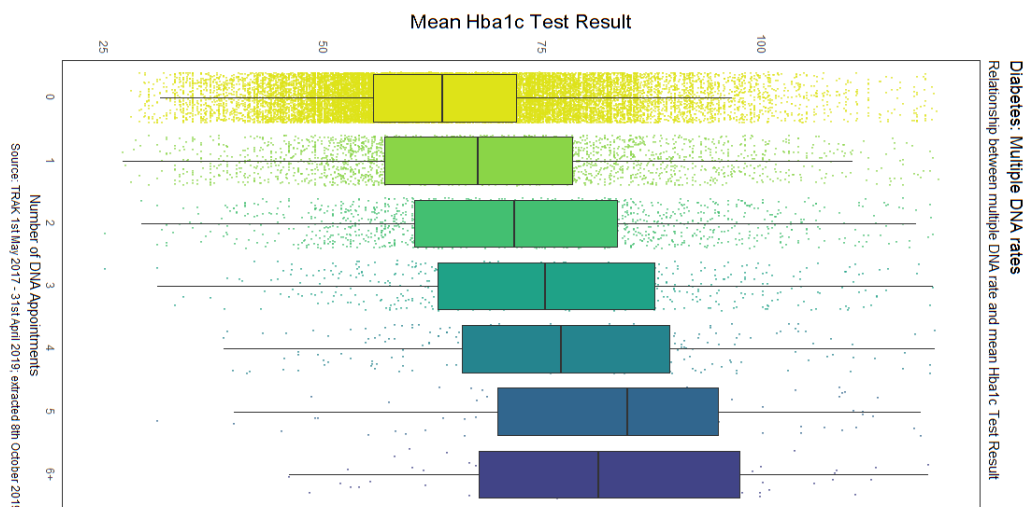
This is the deprivation profile of diabetes referrals from the same practices:



Source: TRAK 1st May 2017 - 31st April 2019; extracted 16th December 2019

⁵⁷ Sophie McCall, Information Analyst, Lothian Analytical Services. Oct 2019.

Furthermore, looking at figures for the *whole* of Lothian, there is a stark association between MULTIPLE DNAs and higher HbA1c level (need), the latter being a marker of poor diabetes control:



Finally, we talk extensively about ‘addressing’ multi-morbidity, but perhaps rarely think about how it all feels from a patient’s perspective. For 2016-17 figures, those living in the most deprived areas are eleven times more likely to report poor health than in the least deprived, almost one in five. They are twice as likely to have a limiting long-term condition⁵⁸. We all need to acquire perspective and imagine more what it is like to live in poor health or with a limiting condition, when our circumstances are also difficult, with little support or money. Lawson et al examined multimorbidity, deprivation and ‘*preference-weighted health related quality of life*’ (PW_HRQoL) scores⁵⁹. The Scottish Health Survey data used is now fairly old (but the only survey to include the SF-12 required for this analysis). The authors recount that multimorbidity is commoner and develops earlier in deprived areas, but that those people “*also experience a range of problems that add to the considerable complexity of clinical and self-management support*”. Their study demonstrated that living with multimorbidity reduced the PW_HRQoL score, worsened further by increasing numbers of conditions. However, the negative effect of multimorbidity on the quality of life score was a third greater in the most, compared with least, deprived quintile. And these larger reductions in the most deprived were most marked in the young. The impact of multimorbidity in 20-44-year olds was 80% greater in the most, compared with the least, deprived quintile. So not only is multimorbidity more common in the young who are socioeconomically deprived, it feels worse, a feature of blanket deprivation.

One of my patients kindly wrote an account of what it is like to develop multimorbidity at a young age: “*Living with any Chronic Illness can be tough to deal with at times and although I have a few, I won’t (If I can help it) let it stand in my way and try and go on as best as I can. I have started Pulmonary Rehabilitation, and my main goal from that is to be able to master stairs without panic this is working out well. I lost both my Parents young due to Cancer and Diabetes problems and am determined to live my life as best as I can, considering my illnesses I am managing well*”. Her full account is in Appendix 2. She describes a resilience

⁵⁸ Long-term monitoring of health inequalities. Population Health Team. Scottish Government Statistics. December 2018 report.

⁵⁹ Double trouble: the impact of multimorbidity and deprivation on preference-weighted health related quality of life a cross-sectional analysis of the Scottish Health Survey. Lawson et al. International journal for equity in health 2013; 12:67.

and determination to change which is very apparent to those who live or work in a deprived community, but is rarely acknowledged.

Our practice in Craigmillar has embraced the House of Care approach using this for all our chronic disease management, other than for the simplest of checks. Many of our patients have low literacy as well as low health literacy and this makes pre-preparation and the 'activation' required by house of care more difficult. Levels of understanding are often poor, and we know that moving from compliance to concordance requires us not just to understand our patients' perceptions and understanding, but often address issues of low self-esteem, poor family or other support and mental health. Type 2 diabetes has a 40% higher prevalence in the most - compared with the least - deprived⁶⁰. We all know the consequences of that single condition, and the multiple opportunities for GP intervention, so many relating to emotional health. Yet patients with multi-morbidity in the most affluent areas of Scotland have on average 40% longer GP appointments, whilst those in the most deprived have no additional time⁶¹. We now have evidence about what works for the most deprived in terms of Primary Medical Care and - as we would expect - that matches our highly valued GP attributes: engagement, relational care, continuity and all the other benefits of holistic, expert Generalism.

We welcome a previous CMO's 'Realistic Medicine' emphasis on shared decision making and more personalised care⁶². She subsequently outlined the difficulties faced when that is hampered by low health literacy in her follow up report 'In Realising Realistic Medicine'⁶³. In that she quotes research which shows that *"a significant portion of the adult population in Scotland would benefit from support with health literacy to support understanding"* - with reference to improving written material. But no mention of the far greater time and involvement required by a health professional sharing knowledge and empowering patients who have low levels of literacy and how that crucial work can be supported in practice. The Govan SHIP project provided that resource, now withdrawn.

- [Chronic pain.](#)

Chronic non-cancer pain presents a huge challenge to our patients and our practice as we jointly seek ways to manage this. We, like many in deprived practices, have become high prescribers of both opioids and gabapentinoids, in response to a high burden of reported chronic pain. In a list size of just over 9,000, we have more than 2,000 patients coded with a chronic pain diagnosis. Our patients commonly work in heavy, repetitive, unrelenting manual jobs, which leave them with long-term pain: we know from the literature that the prevalence of chronic pain is high, and higher still in Scotland⁶⁴, and in those of lower socioeconomic status⁶⁵, the resultant debility significantly affected by emotional and psychosocial factors. We are beginning to address this with greater scrutiny of our prescribing, but the reality is that moving people off

⁶⁰ A Healthier Future – Framework for the Prevention, Early Detection and Early Intervention of type 2 diabetes. Scottish Govt 2018.

⁶¹ Salisbury C, Man M, Bower P, Guthrie B, Chaplin K, Gaunt D, Brookes S, Fitzpatrick B, Gardner , Hollinghurst S, Lee V, McLeod J, Mann C, Moffat K, Mercer SW. Improving the management of multimorbidity using a patient-centred care model: pragmatic cluster randomized trial of the 3D approach. The Lancet 2018, 392;10141, 41–50.

⁶² Realistic Medicine. Chief Medical Officer's Annual Report 2014-15

⁶³ Realising Realistic Medicine. Chief Medical Officer's Annual Report 2015-16

⁶⁴ Prevalence of chronic pain in the UK: a systematic review and meta-analysis of population studies. Faye et al. BMJ 2015

⁶⁵ Patterns of regional variation of opioid prescribing in primary care in England: a retrospective observational study. Mordecai, L et al. British Journal of General Practice. March 2018.

such medications to a new understanding and to self-management requires a huge amount of support and many difficult conversations. Work done elsewhere has shown that programmes based in General Practice can be successful, but those take time. We suggest that patients require more support when they are also often distressed, have long-term mental health problems, multiple yellow flag signs for chronic pain, and where medication probably brings relief to some of their psychological symptoms too. This is borne out by the literature⁶⁶:

“Patients with mood disorders, depression in particular, are more likely to use long-term opioids for pain, despite being most at risk of dependence. This ‘adverse selection’ reflects that patients with depression are twice as likely to transition from short- to long-term opioid use compared to those without a mood disorder”. And the authors go on to highlight that it is “psychological pain, rather than physical pain, that will need to be addressed when supporting patients during opioid reduction”.

Considerable numbers of our patients have neurological damage following trauma and violence. We struggle with the double whammy of seeing people reporting severe widespread pain, and widespread misuse and dependence on the opiates and gabapentinoids so often used to treat it.

We would like to establish a chronic pain management programme within the Practice using a skilled pharmacist and an Advanced Practitioner (Nurse or Physiotherapist) but simply do not have the resource for this. A further driver for this is the rising number of deaths nationally in drug-misusing patients - Scotland’s record now the worst in Europe⁶⁷ - relating to multiple drugs including gabapentinoids. Each year we experience several such deaths in our practice, adding to the burden of grief and premature loss for those left behind. The loss of long-standing, local services under recent reforms (some as a result of withdrawal of Scottish Government funding for drugs and alcohol) has only exacerbated the situation.

- **Mental Health.**

Scottish Government statistics show that adults in the most deprived areas are three times more likely to have below average wellbeing than adults in the least⁶⁸. In our practice we estimate that mental health issues are the predominant feature of half our consultations. Trauma, alcohol, drugs and suicide account for the excess in PREMATURE mortality in Scotland (with half the excess due to alcohol and drugs alone)⁶⁹.

For years, my practice has cared and prescribed for almost 250 drug misuse patients under the Lothian NES (National Enhanced Service). Many now suffer physical, as well as psychiatric, co-morbidity. We believe that caring for drug misuse patients in a practice setting brings benefits in terms of continuity and holistic care. This is borne out by a Lancet review of the evidence⁷⁰.

Recently an elective medical student in the practice was able to undertake health assessments and interventions in appointments running in parallel with patients’ in-house substance misuse ones⁷¹. Some of

⁶⁶ Editorial. Opioid analgesic dependence: where do we go from here. Quinlan, J. British Journal GP. April 2017

⁶⁷ How to save drug users’ lives. Hurley, R. BMJ 2019;366:l5050 doi: 10.1136/bmj.l5050 (Published 8 August 2019).

⁶⁸ Long-term monitoring of health inequalities. Population Health Team. Scottish Government Statistics. December 2018 report.

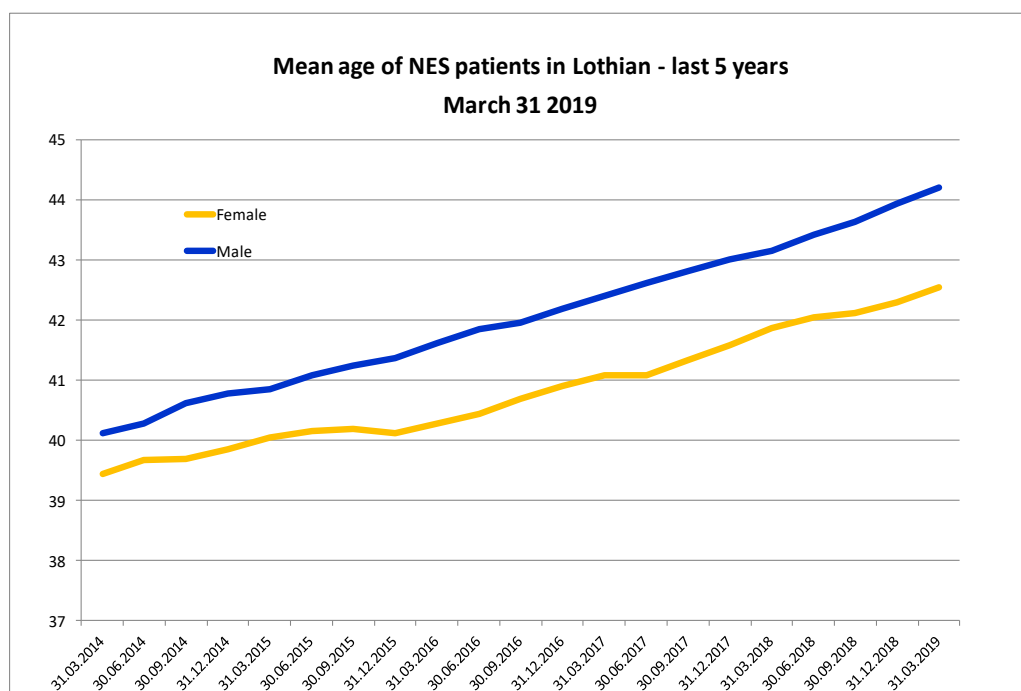
⁶⁹ Is there a link between childhood adversity, attachment style, and Scotland’s excess mortality? Evidence, challenges and potential research? Smith et al, BMC Public Health 2016. 16:655

⁷⁰ What works in inclusion health: overview of effective interventions for marginalised and excluded populations. Luchenski et al; The Lancet; [http://dx.doi.org/10.1016/S0140-6736\(17\)31959-1](http://dx.doi.org/10.1016/S0140-6736(17)31959-1).

⁷¹ Medical Student Health Assessments for Patients with Problem Drug Use. Oliver Shipston-Sharman.

these related to health promotion and screening. As our drug-misusing population ages, those patients are now developing premature morbidity, particularly relating to respiratory disease.

We know this is an ageing cohort; the following patient data relates to the Drug Misuse NES in Lothian:



A group of researchers⁷² has commented on the 12 times higher standardised mortality rate of opiate misusers (London study) compared with the general population; that there are higher prevalences of asthma and COPD in the substance misuse group; that asthma control is poorer, and smoking prevalences very high. They additionally showed a further risk associated with being on a methadone programme, possibly due to confounding ever-use of heroin or crack cocaine, respiratory depression being a concern too. A pilot project in Sheffield⁷³ has shown that in opiate-misusing patients there are significant levels of undiagnosed COPD (20% in the small group studied) and high risk asthma, but low levels of interventions (smoking cessation in a group where virtually all smoked; flu vaccine).

The RCGP guide for GPs in addressing health inequalities⁷⁴ outlined that in men:

- Preventing deaths in early middle age would have a profound impact on the life expectancy gap;
- Coronary Heart Disease (CHD), cancer and respiratory disease account for 2/3 of the observed gap
- Just over half of the respiratory disease related to COPD
- The three key factors which would make the most difference, most rapidly (both locally and nationally) would be effectively managing risk round smoking, blood pressure and cholesterol. These are core practice activities.

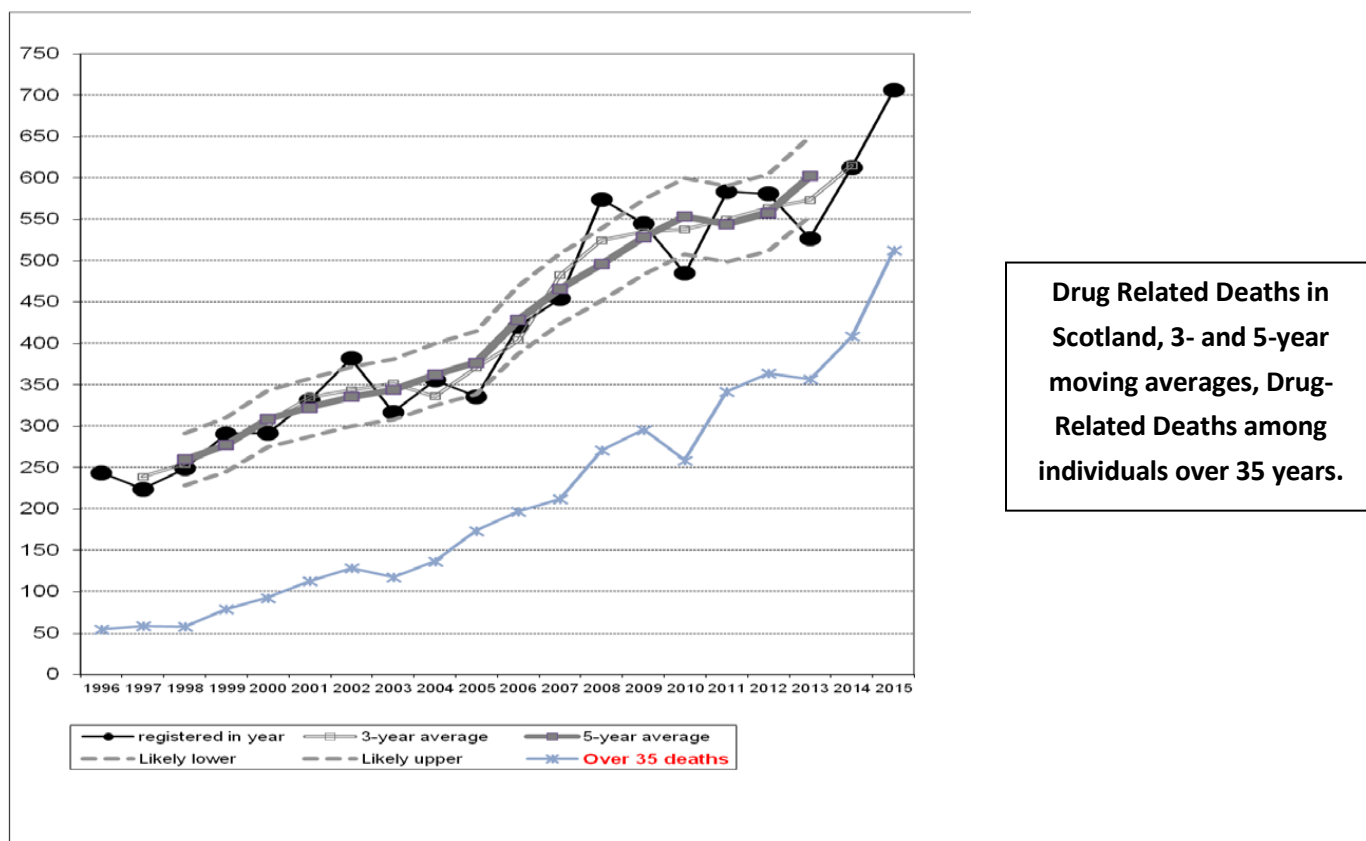
⁷² COPD and asthma in patients with opioid dependency: a cross-sectional study in primary care. Mehta et al. Primary Care Respiratory Medicine. 2020. <https://www.nature.com/articles/s41533-019-0161-7>.

⁷³ Lung Health of Opiate Users (LHOu): A pilot study to assess the respiratory health of opiate misusers attending a community substance misuse clinic. C Mitchell et al. Thorax 2015;70(Suppl 3):A1-Alxxix (2015;70(Suppl):230. Dec 2015

⁷⁴ Addressing Health Inequalities. A guide for general practitioners. RCGP Health Inequalities Standing Group. RCGP 2008.

The Sheffield group highlighted that Harm Reduction has helped with life expectancy in male heroin users rising from age 36 a decade earlier to a mean of 41.4. But also, that it was possible in a primary care multi-disciplinary team (MDT) to undertake spirometry and begin to address some of this morbidity. Our medical student has shown that this is possible in Craigmillar.

All this is a new additional need, largely unmet (and under-researched) and may be contributing to increasing deaths in older age groups:



Deaths due to alcohol, drugs, suicide and violence are the leading cause of premature mortality in Scotland - an unmet need which we could help address in a practice setting. Much of the excess mortality relates to a cohort of drug-using men who were young in the 1990s, and profoundly affected by the socioeconomics of the time⁷⁵ and that chimes with our impressions too. In our experience, the most vulnerable patients are least likely to engage with outside agencies, and the evidence now confirms that⁷⁶. In addition, many will simply not attend outpatient appointments or tests, adding to their burden of disease (under-diagnosis).

We recently – with short term additional resource – ran an in-house Hepatitis C clinic providing treatment to those who had not managed to access outpatient care. The clinic, run by a GP partner and an outreach nurse, enabled 14 people to fully clear their infection (no cases of failed treatment) and a further 8 have completed treatment and are waiting for a confirmatory end-of-treatment blood test (Feb 2020). To put this into context, the Lothian hepatology unit treated 34 patients in the same timeframe, 3 of those being

⁷⁵'Drug-related deaths in Scotland 1979–2013: evidence of a vulnerable cohort of young men living in deprived areas'. Parkinson et al. BMC Public Health (2018) 18:357 <https://doi.org/10.1186/s12889-018-5267-2>.

⁷⁶ What works in inclusion health: overview of effective interventions for marginalised and excluded populations'. Luchenski et al; The Lancet; [http://dx.doi.org/10.1016/S0140-6736\(17\)31959-1](http://dx.doi.org/10.1016/S0140-6736(17)31959-1).

patients from our practice. Those treated in the practice had not been reached by conventional outpatients: Dr Michael Quinn, who ran the clinic, believes it was so successful as he knew, or got to know the patients, reached out to them in different ways and made lots of connections opportunistically when people were seen by others in the practice. He actively tracked them through our appointment system and provided a local, welcoming, familiar clinic, and one which set out to allay anxiety at every stage.

In our practice we have 60 coded for a Hepatitis C diagnosis, 100 for Hepatitis B. An emerging concern is that, as with drug misuse patients, those with Blood Borne Viruses are also an ageing cohort, with emerging multi-morbidity relating to Non-Communicable Disease. Health services are struggling to adapt to that⁷⁷. We have shown that, given resource, practice-based models can be highly effective.

There is so much that could be said – that emotional and mental health is the driver of health generally – as increasingly acknowledged including in WHO Non-Communicable Disease (NCD) analysis and reflected in Scottish Government priorities (*“that we must prevent and treat mental health problems with the same commitment, passion and drive as we do with physical health problems”*⁷⁸). The unmet need in deprived General Practice is enormous, and this is a service essentially delivered at practice level. Such approaches are explored further in Chapter 3 - can General Practice make a difference?

2.3 The new Scottish GMS contract.

“That this conference believes that the new GMS contract gives insufficient support to GPs working in the most deprived practices, who serve some of the most ill populations in Western Europe”.

Scottish LMC Conference motion, 30 Nov 2018: carried.

The opening sentence of our GMS contract reads: *“A strong and thriving General Practice is critical to sustaining high quality universal health care and realising Scotland’s ambition to improve our population’s health and **reduce health inequalities**”*. It does not describe the detail of how that will happen, relying presumably on the new distribution afforded by the Scottish Allocation Formula (SAF) and the new resource available to all practices under the Primary Care Improvement Plans (PCIPs). Both the GP contract negotiators, and our acting-CMO⁷⁹, have made it clear that the contract is not designed to address unmet need, although addressing that is a means of addressing health inequalities. The contract does go on to say that the *“change in focus is to provide care to patients with complex needs at home”* (p 15). Deprived practices do this for those in middle age and it is not clear if that unmet need is specifically catered for in the resource distributions. Was that adequately accounted for in the SAF, with its under-representation of deprived patient data, or are those GPs to look away when they see those needs, or try and fit those into already over-pressurised consultations?

⁷⁷ Health Needs Assessment: Ageing with HIV. Chris Stothart. Senior Health Promotion Specialist. NHS Lothian. January 2019.

⁷⁸ Mental Health Strategy: 2017-2027. Healthier Scotland, Scottish Government

⁷⁹ Gregor Smith. Scottish School of Primary Care 2019 Annual Conference. 28 May 2019.

The contract also refers to admissions avoidance. This is difficult on multiple levels: we know that GPs put in huge efforts to keep the frail elderly out of hospital, as we now understand the damage that admission - particularly if prolonged - can do in that population. In Edinburgh we have 'Hospital at Home' teams which provide helpful specialist support in doing this. But they do not extend to those under 65 which is where the equivalent workload can lie in the most deprived. Several years ago, an intervention in the northern Scottish town of Nairn demonstrated that resourced and supported anticipatory care planning and *"a coordinated team-based approach with a clearly identified population that is at high risk of hospitalisation can reduce admission rates and occupied bed days"*⁸⁰. Done well, anticipatory care planning is humane and enabling, involving people early and fully in decisions about their healthcare. We also know that the award-winning 'PACT' (Patient experience and Anticipatory Care plan Team) initiative, a specialist anticipatory care planning project run in Edinburgh A&E, was successful and cost-effective. It did rely on GPs to do some of the work (for free!) but saved £6 for every £1 spent⁸¹. Much of that work related to mental health morbidity and was effective for some of our patients in some ways. The project has now ended, and funding been withdrawn.

Anticipatory care planning works, but needs resource, and there is so much scope to do better and to reduce pressures on secondary care services too. Those most deprived with physical and psychiatric co-morbidity (compared with those with none of these factors) are at over FIFTY TIMES the risk of 'potentially preventable hospital admission'⁸²: the underlying risk factors apparently operate synergistically. That comes at tremendous cost, both to health services and presumably patients too: it is difficult not to think that there would be better use of that resource, in the community setting, to find ways to prevent admission.

Unmet need applies to staff too. Our reception team is under greater stress - dealing with high workloads, much with an emotional toll - when patients are not just ill but also distressed, who may be demanding, and some who are chaotic and vulnerable and find it difficult to use conventional appointment systems. Yet they are highly committed to the population they serve, showing immense compassion and understanding despite the pressures. We felt that the NUKA⁸³ model was particularly helpful for our demographic and is in keeping with new Scottish GP contract ideals around signposting and getting the right patient to the right place at the right time. We therefore undertook extensive development and training of our receptionists to become Care Co-ordinators. They embraced this wholeheartedly and have developed many new skills and levels of insight, and some have taken part in NHS Lothian's Quality Academy QI initiatives to help achieve change. It has been transformative for them and our practice. Our patients greatly appreciate the new service too. We simply could no longer function as a practice with our current GP complement without their daily work. However, we have not been able to expand that team proportionately to match their additional roles and so they are also more stressed and at times we are short staffed. An uplift to our SAF would have helped with that: the new contract measures do not. An additional disadvantage is that we are likely to lose out to other practices who benefitted from the SAF and can offer higher pay rates, in the now well-recognised scramble to recruit from a restricted workforce.

⁸⁰ Anticipatory care planning and integration: a primary care pilot study aimed at reducing unplanned hospitalisation. Baker et al. British Journal of General Practice, February 2012.

⁸¹ <https://ihub.scot/media/6477/lwic-pact-report.pdf> is a scalability assessment but gives full details of the project.

⁸² The effect of physical multimorbidity, mental health conditions and socioeconomic deprivation on unplanned admissions to hospital: a retrospective cohort study. Rupert Payne et al, CMAJ 2013. DOI:10.1503/cmaj.121349.

⁸³ <https://scfnuka.com/>

In addition to these duties – all expanded by the additional workload of deprivation – our Care Co-ordinators take on other supportive work. They are trained to give free condoms and training (C: Card scheme), administer Food Bank and free bus vouchers, and provide sanitary protection to young girls in need and living in poverty. Meanwhile our Practice Nurses are managing people who develop multi-morbidity, 10 - 15 years younger than the most affluent, and although we have adopted House of Care models, limited literacy and life opportunities make their work more taxing. We know that multimorbidity is associated with GP workload (over half of all GP consultations), higher prescribing workloads, and of course higher rates of hospital admissions⁸⁴. But an additional burden for our nursing team is that premature multimorbidity has a significant effect on the quality of life of young people - especially in deprived areas⁸⁵. In the literature, managing this has been described by Practice Nurses as an “*endless struggle*”⁸⁶ – one which our nursing team takes on with empathy, skill and kindness. Our Primary Care Improvement Fund allocation under the Edinburgh formula, and the limited funds provided nationally, mean that we have restricted resource to transfer some of their workload to the emerging new contract CTACS.

We moved to a model of telephone triage and believe that this works very well for our patients, improving access for those in genuine need. In a study of almost a million patients in UK General Practice, 19% of patients missed two or more appointments in a 3-year period. Figures were higher for the socioeconomically deprived⁸⁷. The Scottish authors suggest that same-day appointments (or other innovations) may help access for this group, by which “*increasing engagement of disadvantaged populations with preventive health-care services could make an important contribution to the reduction of health inequalities*”. We believe that our new approaches have improved access, and reduced non-attendance rates, but we recognise there is unmet need there too, and always have to account for digital poverty. We struggle to maintain the staff and appointment numbers to provide adequate access for our population’s requirements.

All this additional health care need is entirely predictable – and measurable - and there is now an evidence base for addressing it. The usual route for defining and resourcing workload is the GP contract, but our GP negotiators - and now even the RCGP - accepts that this does not lend itself to a capitation model. We could have examined this more formally in terms of cost-effectiveness and inequality impact, as it is so central to what General Practice (and therefore the contract) is intended to do. The capitation may need to be different - or an enhanced service - and include not just a head count but a physical, mental health and psychosocial count too. It might need to weight for premature multimorbidity, for early need for palliative care, for Detecting Cancer Early activity, or resource for a proportion of patients who need longer consultations, or provide transport for people who are not strictly housebound but cannot make it to the surgery for that reason alone, and so on. We have weighted funding for long life (the elderly) but, many in hard-pressed deprived practices argue, not adequately for potential years of life lost or years lived in ill-health (the deprived). We should not hear, from Scottish Government or SGPC negotiators, that someone else will fix this – ignoring the needs of a group of hard-working and committed GPs, their staff and most

⁸⁴ The epidemiology of multimorbidity in primary care: a retrospective cohort study. Cassell et al; BJGP. April 2018.

⁸⁵ The ‘everyday work’ of living with multimorbidity in socioeconomically deprived areas of Scotland. O’Brien et al. Journal of Comorbidity 2014; 4:1–10.

⁸⁶ An ‘endless struggle’: A qualitative study of GPs’ and Practice Nurses’ experiences of managing multimorbidity in socio-economically deprived areas of Scotland. O’Brien et al. Chronic Illness 2010; 7:45–49.

⁸⁷ Demographic and practice factors predicting repeated non-attendance in primary care: a national retrospective cohort analysis. Ellis et al. www.thelancet.com/public-health Vol 2 December 2017.

importantly, their patients. It is therefore encouraging that there is a new intention, and to be a national group, looking at other solutions.

We have tracked deprivation for years in the Scottish population and have a highly skilled and motivated academic community. The Lancet paper on multi-morbidity⁴ is recognised as a world leader. Our academic GP colleagues, with their strong Public Health background, not only support middle-ground research, ideally suited to this, but actually invented it! They have of course, also produced models for managing exactly these challenges (with RCT evidence). Yet we collectively behave as though none of this is pertinent. This is quite extraordinary, and it would be useful to reflect on why this happens.

Managing and accounting for deprivation should in fact be easier than doing the same for rurality, where Scottish Government and the Scottish GP Committee have also acknowledged that the 'mainstream' rules might bring adverse unintended consequences. As previously mentioned, modelling theory indicates that outliers are best dealt with separately - and theoretically we could still do that within a GMS contract framework, although that has now been ruled out. It should be easier to account for what is largely a highly urbanised geographically localised group, with defined needs, readily tracked by demographic or practice data; than account for a rurality remote situation where very particular GP coverage is required for small, scattered groups of patients, and where access might involve driving around a mountain or crossing a stretch of sea; variable GP out-of-hours cover arrangements, and access to specialist services - so easily mapped in urban settings - can be very difficult. From the start, the new GMS contract rightly included specific and active negotiating processes for addressing these rural scenarios, with the establishment of a working group. In contrast, representation of GPs who served populations of blanket deprivation has until now been rather side-lined, the inverse care law reinforced. This should now change with the commitment to a working group by our current SGPC negotiators, a hugely welcome and progressive development.

A further failure of the Scottish health service is that when something has been shown to work, and particularly if that is the case in Primary Care, it is often not continued. This means that both patients and GPs in deprived areas cannot depend on a routine ongoing resource and essentially scabble to attract pilot funding or schemes. Loss of such schemes also means a loss of relational continuity, shown to be so crucial for those most vulnerable. As said previously, if we *know* that something works, that it addresses some of the core issues of health inequalities in a Primary Care setting - and is cost effective - that should be considered in a contextual framework and 'mainstreamed'.

Balint talked of the 'collusion of anonymity', referring to complex patients presenting to multiple GPs, who find them difficult to manage. They are referred to multiple agencies, or move from one clinician to the next, whilst core issues remained un-addressed. The new Scottish GP contract and the response to it from others, has until now created its own collusion of anonymity, but at the level of Health Service strategy and management. The new contract claims in its opening sentence that it will help inequalities but does not delineate how it will do so. Cluster Groups, as part of their intrinsic role, are also to manage health inequalities (*"ensure relentless focus on improving clinical outcomes and addressing health inequalities"*). But many are struggling with their current brief of quality improvement, liaison and meeting work, and are already working beyond their allocations of time and resource. These are very ambitious aims, which have

been both emphasised and strengthened in the most recent document from the Scottish Government⁸⁸. It will be interesting to see if they are able to change services, with current levels of support.

Worst of all, it is as though GPs who work in deprived settings should have lower standards, and expect less, than those working in affluent settings - by ignoring unmet need. The contract outlines that the new resource can help keep the elderly at home through anticipatory care planning and the multi-disciplinary support of the team. There was additional resource to recognise that workload, with weighting for the over-75s. Was the new GMS contract considered in terms of the directive from our NHS Scotland Chief Executive for those in leadership roles to:

- “Assess impact on inequalities from service redesign and investment decisions and
- Govern progress and impact of actions to address inequalities”⁸⁹?

The Scottish Government says that it wishes to address health inequalities and has tasked the HSCPs with this work. Yet HSCPs themselves are struggling to meet existing demand within their budgets, and the new Integrated Joint Boards (IJBs) are still establishing themselves, their interfaces and their priorities. Unless directly instructed to further enhance GP practice work, it is unlikely that any of these bodies will do so, for reasons which are understandable, and which should be acknowledged. Without recognising barriers, we will not make progress.

Deloitte⁹⁰, who provided the economic modelling for the SAF, outlined in its financial report that the most deprived SIMD decile was under-represented in its analysis, that there was unexpectedly little variation across the deciles in terms of consultation rates (at odds with ISD data) and under section 2.4 of their report outline the reasons why deprivation funding might be under-estimated by the formula. Previous ISD data (using a different data set) showed 15% higher consultation rates in the most compared with least deprived quintiles. Deloitte suggests in their SAF analysis that a *“health inequality budget could be allocated to Health Boards who could potentially use local knowledge and discretion to deal with unmet need more effectively. In essence, this is the mechanism proposed by NHSE, which allocated a health inequalities budget to CCGs through the CCG allocation formula, and not directly to general practices or other health care providers”*.

As we know, multi-morbidity occurs 10-15 years younger in the most deprived⁹¹ and further analysis of the well-known Lancet Scottish multimorbidity data demonstrates that although *“there are more elderly patients with multimorbidity in practices serving affluent areas, **the numbers are fewer than the numbers of middle-aged patients with multimorbidity in practices serving deprived areas**”*⁹²

There is therefore extensive evidence of unmet need, but also that it is exactly the workload that the new contract was so ably designed to address. The SGPC position to date is that this cannot be accounted for by the GMS contract. There is increasing evidence that patient care for the most deprived is optimised by *strengthening and expanding the core practice team, rather than relying on external services* – in other words that the health care needs of highly deprived or marginalised people are ideally met by new contract

⁸⁸ National Guidance for Clusters. A resource to support GP Clusters and support improving together. Scottish Government June 2019.

⁸⁹ Scotland’s Health: Maximising the Role of NHS Scotland in reducing Health Inequalities. NHS Scotland. 2017

⁹⁰ Deloitte. The Scottish Allocation Formula; GMS Workload Model. August 2016

⁹¹ Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. Karen Barnett, Stewart W Mercer, Michael Norbury, Graham Watt, Sally Wyke, Bruce Guthrie. The Lancet: DOI:10.1016/S0140-6736(12)60240-2. 10 May 2012

⁹² The Deep End Proposals. March 2013

resources - the practice team. A recent Lancet literature review of what works best in terms of health interventions for marginalised people highlights the need for a multi-disciplinary approach, and 'low barrier' access. It outlines some effective interventions which can be delivered in primary care (and in particular opiate substitute prescribing for those addicted)⁹³. The paper also highlights that these groups are high users of specialist acute services. What could be a more inspiring model for a General Practice serving such populations than their recommendations:

"The values that should underpin services—expressed by people with experience of exclusion—include providing ample time and patience to really listen, striving to develop trust and acceptance, providing supportive, unbiased, open, honest, and transparent services in inclusive spaces and places, encouraging clients to accept personal responsibility for health, allowing clients to take ownership and participate in decisions, and above all, promote accessibility, fairness, and equality for all".

We have already made progress toward achieving that – and feel that working alongside our patients is a form of collaboration, of co-production - but involving the population we serve much more would need improved resource.

The Scottish 'Care Plus' RCT⁹⁴ demonstrated improved outcomes (including cost-effectiveness based on NICE QALY thresholds) with a practice-based intervention to improve quality of life of primary care patients with multimorbidity in areas of high socioeconomic deprivation. We therefore have a Scottish model, with RCT evidence of what works. That included staff support and training too, and retention levels were high.

How General Practice can make a difference to health inequalities is further explored in Chapter 3.

2.4 Why blanket deprivation?

Should blanket deprivation be treated differently? Increasingly the evidence is that it should - because it corresponds to a defined geographic locality which has concentrated deprivation, associated with poorer outcomes and trans-generational ill health. We also need to more routinely consider how to fill the swimming pool of resource for patient need, starting at the deep end, and then working towards those who are less health-disadvantaged. All practices can manage small minorities of patients with disproportionate needs, but that is more difficult when the minority becomes a majority.

Blanket deprivation:

- **Brings multiples of multiples.** In other words, high levels of all the things that we know are commoner in the socioeconomically deprived. Amongst others this means more: low birth weight babies, foetal loss, infant mortality, bottle-fed babies, child protection issues, case conferences, HV discussions and referrals, RTA mortality in children, Adverse Childhood Experiences, childhood and adolescent mental health morbidity, teenage pregnancies, smoking, alcohol-related harm, obesity, poor dental health, drug misuse, anxiety, depression, mental health emergencies, diabetes, heart disease, stroke, peripheral vascular disease, chronic venous ulcers (SIGN), chronic pain, lung cancer, oesophageal cancer, gastric cancer, head and neck cancer, oral cancer, bowel cancer, kidney and bladder cancer, cervical cancer,

⁹³ What works in inclusion health: overview of effective interventions for marginalised and excluded populations. Luchenski et al; The Lancet; [http://dx.doi.org/10.1016/S0140-6736\(17\)31959-1](http://dx.doi.org/10.1016/S0140-6736(17)31959-1).

⁹⁴ The CARE Plus study – a whole-system intervention to improved quality of life of primary care patients with multimorbidity in areas of high socioeconomic deprivation: exploratory cluster randomised controlled trial and cost-utility analysis. Mercer et al; BMC Medicine (2016) 14:88.

terminal illness in the young, COPD, premature multi-morbidity, chronic disease management, Practice Nursing needs, DNAs (GP and hospital), admissions, discharges, referrals (for some), obesity, BBVs, Social Work referrals, non-English speakers and translated appointments (for some), 3rd sector liaison, poor literacy, digital poverty, issues per consultation, poor outcomes, GP stress, medical certification, DWP administrative work, screening defaulters, musculoskeletal problems, assaults and injuries, having no access to a car, disabilities, Learning Disabilities (some - applies to Craigmillar), early bereavement, unemployment, homelessness.

- **Sets the trajectories** of further ill-health by the age of three.
- **Brings organisational strain**, when so much has to be done to an additional level, including administrative work around chronic disease management and recall, and screening. GP workload assessments rarely include the additional administrative time needed for all this, nor the additional patient appointments needed to account for non-attendance. Those workloads can only be covered by GMS and the SAF.

However, the strongest evidence for the difference between blanket and pocket deprivation is sociological. The Scottish focus on resilience has been criticised, with its strong emphases on individual assets and actions, rather than the structural determinants of health, the latter being lives lived in poor neighbourhoods. A Scottish review of the international literature concluded that there is a clear link between Adverse Childhood Experiences (particularly multiple) and ‘socio-economic position’⁹⁵. The authors summarise that the ACE literature describes: *“the direct effects of material deprivation, complex and circular interactions between the latter, structural inequality and other factors, all impacting on parenting capacity via processes related to poor mental health, stigma, psychological vulnerability and more. There is also a body of research that has highlighted additional negative ‘area effects’ linked to issues including poor housing, negative physical environments, residential instability and social selection, which can exacerbate the effects of poverty on individuals”*.

Getting It Right For Every Child (GIRFEC) which - for all its advantages - some researchers believe sets aspirational, largely unachievable thresholds, establishing Scottish youth policy around individuals managing adversity⁹⁶; and suggesting that is the mechanism by which people are meant to avoid becoming the poor of tomorrow. They report that young people in highly deprived urban communities are acutely aware of their lack of material possessions, and of all others around them struggling in a similar way. It was felt to be striking how prevalent these experiences were, and it was clear that there was a neighbourhood structural effect. An example was that none of the Pilton young people interviewed had secure employment, despite no lack of aspiration or expressed hope. What limited them was their experience of inequality. The whole context of blanket deprivation is one where young people have normal aspirations, but low expectations, a powerfully destructive feature.

Scottish people also describe that the negative effect of multi-morbidity on their quality of life is exacerbated by living in a ‘poor area’ with few resources. Typically, a patient related *“having to confront, on a daily basis, a visibly “poor area”, living in “awful housing”*. Thus, the everyday “life work” of patients with

⁹⁵ Relationship between childhood socioeconomic position and adverse childhood experiences (ACEs): a systematic review. Walsh D, et al. J Epidemiol Community Health 2019;0:1–7. doi:10.1136/jech-2019-212738.

⁹⁶ Stealing young people: Resilience and Youth Policy in Scotland. Davidson E and Carlin E. Social Policy and Society (2019). 18:3, 479-489.

multimorbidity, who described the particular impact of depression on their lives, was evidently made much harder by their socioeconomic circumstances”⁹⁷.

There is extensive academic sociological evidence of the disproportionate effect on health because of the influence of 'neighbourhood social deprivation'⁹⁸. This in turn relates to multi-generational longitudinal poverty-linked ill health, with powerful negative effects on mental and physical health, these crossing from one generation to the next. That those are perpetuated largely relates to a political stance or failure. However, once people are ill, that neighbourhood effect of poor local resource makes them feel worse.

Therefore, the local environment, with its lack of resource does not help people to feel better, and all of this applies disproportionately to blanket rather than pocket deprivation. In terms of the latter, there may be different challenges, including identifying such patients and providing the care that suits them, but they are not the same as the overwhelming ones faced by practices where the majority of patients are poor or very poor. To mention again, Scottish research has shown that *“the impact of multimorbidity in younger adults (20-44 years) in the most deprived quintile was 80% greater than that in the least deprived quintile”*⁹⁹.

Professor Bamba’s extensive review includes evidence on health inequalities and austerity from the case study town of Stockton-on-Tees, where *“the gaps in life expectancy are even greater – some of the largest in the world – as there is a 15-year gap in life expectancy between men living in the most affluent suburbs such as Hartburn and those living in the most deprived such as Town Centre ward (PHE, 2017). For women the gap is 11 years. Perhaps most shocking of all is that these two neighbourhoods are only two miles apart”*.

She describes these figures as shocking, but Edinburgh’s are so much worse, reflecting the severe extremes of the city. The authors describe how ‘spatial inequalities’ develop, relating to a complex mix of economic, social, environmental and political processes coming together in particular places. Area-level economics are crucial, and a key predictor of health, including more brutality and limiting long term illness. There are other negative collective effects too, including the effect of stigma (reputation of an area), local food availability and the physical setting (environmental deprivation). The health effects of individual deprivation, eg lower socioeconomic status can be amplified by area deprivation, and the evidence is that ***those on a low income enjoy better health when they live in areas with better collective resources.***

Bamba also outlines that austerity has hit the poorest, hardest, and those effects are “spatially-felt” ie relate not to *pockets*, but the *blankets*, of deprivation found in specific geographical locations. It is estimated that in the UK austerity has resulted in up to 10,000 additional deaths in 2018 compared with previous years.

Finally, there is the GP lived experience. The BJGP account of a day in the life of a GP in a Deep End practice chimes with many of us. That narrative included in Appendix 3¹⁰⁰:

“We have to focus on every single patient and listen. A lot feel they bother us and we cannot fob them off by being stressed or not dedicating time”

⁹⁷ The ‘everyday work’ of living with multimorbidity in socioeconomically deprived areas of Scotland. O’Brien et al. Journal of Comorbidity 2014; 4:1–10.

⁹⁸ Health in Hard Times: Austerity and health inequalities. Editor: Clare Bamba, Professor of Public Health at the Institute of Health and Society, Newcastle University. Policy Press. 2019.

⁹⁹ Double trouble: the impact of multimorbidity and deprivation on preference-weighted health related quality of life a cross-sectional analysis of the Scottish Health Survey. Lawson et al. International journal for equity in health 2013; 12:67.

¹⁰⁰ Discretion is the better part of general practice. G Watt. British Journal of General Practice. June 2015.

A GP who has moved from one of the most, to one of the least, deprived practices in Edinburgh has reflected on the change from serving a population with blanket deprivation, to one with essentially none. She talks of the additional organisational and emotional burden of every consultation in the Deep End practice. She recounts having to check when making a referral if the patient has understood, can read, can make it to the hospital, has a fixed address, feels able to go. She reports:

“Since moving to a more affluent area and no longer in a Deep End practice, I have found there is a higher level of patient confidence when taking part in the conversation with the professional that seems to enable patients to articulate their concerns. This reduces the time within the 10-minute consultation that is devoted to encouraging and facilitating the patient to express themselves. Combine this with far fewer patients consulting with English as their second language or addiction difficulties influencing how they present, and it can perhaps be appreciated that communication challenges take a less emotionally demanding form.

Unlike in more affluent areas the presenting complaint of ‘despair’ underpins a Deep End practice consultation on a regular basis. This can leave a heavy burden of responsibility to also empower, motivate and advise on the complexities of life, alongside the daily inflowing and outflowing tide of health problems associated with deprivation and social isolation.

Does personal financial resource guarantee health? No - but as with many areas of life it usually means there are more options. For a far higher proportion of patients I am now doing private referrals. A whole new service has opened up to me that I have hardly interacted with in 20 years of working as a GP. This now goes a significant way to reducing the pressure on me to manage and support patients who would otherwise continue to struggle with symptoms, often needing ongoing appointments to keep their health under review, whilst they wait on long waiting lists for specialist input.

I have read about health inequalities for years. The statistics on life expectancy and the language of ACEs speak for themselves. There is however a stark reality - after 20 years of working life - to be looking after, for the first time in my career, 85-year olds able to come to the practice for a consultation, who have minor illness only and are otherwise without any major chronic illness. These are a new patient group for me, having previously worked for 16 years, 5 miles away where the life expectancy for a male in the immediate mile radius of the practice is 58”.

That Deep End practice received no uplift in the SAF; the practice described with 0% of patients in the most deprived quintile, received around £65,000 annually, recurrent.

3. Can General Practice make a difference?

The Scottish GMS contract rightly outlines Barbara Starfield's four guiding principles, namely contact, comprehensiveness, continuity and co-ordination. These '4Cs' are the pillars which support the superb services and cost-effectiveness of British General Practice. It can now be reasonably argued - on the basis of published evidence - that these are even more important in deprived settings, where people are less likely to access elective specialist care when that is needed; where the psychosocial so often determines health status; and where people present with multiple issues. It is no coincidence that concepts developed by Julian Tudor Hart in the setting of a deprived Welsh practice are now part of the language of modern mainstream General Practice.

Both the Scottish Government and SGPC negotiators have maintained that those suffering health inequalities due to deprivation are better served by non-contractual provision. And yet this is undermining of the premises of the contract itself. If addressing health inequalities means getting sick people better, alleviating suffering and helping our populations avoid illness in the first place, surely that is what General Practice is all about? It is exactly what is needed! At the 2019 'Exceptional Potential of General Practice' conference¹⁰¹, Professor Watt reported that Tudor Hart consulted *"initially face to face, gradually shifting to side by side"*....and comments that what Julian was talking and writing about was the very modern concept of 'co-production'. He went on to outline that *"After 25 years, involving 210,000 patient encounters, about 180 per week, he could show 30% lower premature mortality rates, compared with a neighbouring population, partly by delivering evidence-based medicine but also **unconditional, personalised continuity of care** for all his patients"*.

He relates, too, that the reduction in premature mortality was due to the 'intervention' of comprehensive, generalist, proactive Primary Care (*"and before statins" ...!*)¹⁰². Do our leaders consider in the face of this and other evidence that somehow Scottish GP is *less* effective at intervening in not dissimilar circumstances? And particularly when Non-Communicable Diseases - a prime focus of Tudor Hart's - remain so powerful in determining health outcomes? Instead we should emphasise the EFFECTIVENESS of what our radical new contract offers - as the IDEAL way for primary medical care to address health inequalities - because of its emphasis on those core pillars of universal generalist care. The evidence is that the model is even more important and effective for those suffering socioeconomic deprivation.

3.1. Access to health care, and the expert medical generalist.

We know now that continuity of care in General Practice is associated with:

*"better clinical outcomes for an array of conditions; reduced mortality; better uptake of preventative services; better adherence to medication; reduced avoidable hospital admissions; and better overall experience of care among patients who prefer continuity and are able to obtain it"*¹⁰³.

Patients prefer it too. The Nuffield report also outlines *"evidence that relational continuity is more highly valued by people with chronic physical and psychological conditions, older people, women, and those with*

¹⁰¹ <https://www.gla.ac.uk/researchinstitutes/healthwellbeing/research/generalpractice/deepend/events/exceptionalpotential/>

¹⁰² The Exceptional Potential of General Practice. Making a Difference in Primary Care. Edited Graham C.M Watt

¹⁰³ Improving access and continuity in general practice. Practical and policy lessons. The Nuffield Trust. Palmer et al. November 2018.

poorer health status". Scottish research¹⁰⁴ informs us that those living in poverty with multi-morbidity especially gain from GPs who *"not only attended to the 'voice of medicine' but gave space to the 'voice of the lifeworld'"*, who understand the 'bigger picture', so much easier to do when an ongoing relationship is there.

However, the new GP contract specifically limits the ability of some deprived practices to extend their GP workforce, compared with colleagues serving affluent urban populations, through the mechanism of the SAF. The SAF is the only mechanism by which core GP funding is available under the new contract: the Primary Care Improvement Fund (PCIF) does afford the opportunity of the new extended workforce, but *not* GPs, and in Edinburgh this has been adhered to very strictly. Another disadvantage is that the extended workforce is severely limited in capacity too, with impressions of the shortfall possibly being worse than GPs themselves. By Feb 2020, two thirds of the way through Phase 1 of the new GMS contract, the whole of Edinburgh had in place (WTE): 6 physiotherapists, 14 Primary Care Mental Health Nurses, 38 pharmacists (various bands / activities) and 19 nurse practitioners. As provision for a tenth of the population of Scotland, this is helpful, but not transforming.

Many of us do not understand the outcomes of SAF weightings, which are counter-intuitive in terms of our grass roots knowledge of practices. In Edinburgh - generally - practices with large elderly populations are also the most affluent. And this makes sense: in Scotland (on average) you will live much, much longer if you are affluent rather than deprived and in better health for longer too. This gradient is steeper than elsewhere in the western world and Edinburgh itself has wider income gaps than comparative cities (top 10% earning on average 6.2 times the bottom 10% per week, compared to Glasgow's factor of 6)¹⁰⁵. Under the SAF the top five 'gaining' Edinburgh practices will share a third of a million pounds per annum between them: only one is deprived. In terms of the % of the practice population in the most deprived SIMD quintile (Q1) the following are SAF gains for the most and least deprived Edinburgh practices (those over 50% in red, those under 2% in blue) – Edinburgh HSCP figures:

| % of Population in Q1 | No. of practices | Population in Q1 | Practice | % in Q1 | GS uplift* (nearest £) |
|-----------------------|------------------|------------------|----------------------|---------|------------------------|
| >70 | 2 | 9,417 | Craigmillar | 72.9 | 0 |
| | | | Niddrie | 72.6 | 13,443 |
| 60-69 | 2 | 16,909 | Muirhouse | 68.3 | 0 |
| | | | Crewe | 64.3 | 0 |
| 50-59 | 2 | 6,104 | Gracemount | 54.2 | 45,401 |
| <2 | 7 | 321 | Cramond | 1.5 | 30,743 |
| | | | Braids | 1.2 | 68,717 |
| | | | Dr Shaw, Stockbridge | 1.2 | 16,388 |
| | | | Grange | 0.4 | 36,431 |
| | | | Morningside | 0.3 | 18,807 |
| | | | Bruntsfield | 0.1 | 0 |
| | | | Pentlands | 0 | 64,870 |

Further details for Edinburgh practices in Appendix 2

¹⁰⁴ The 'everyday work' of living with multimorbidity in socioeconomically deprived areas of Scotland. O'Brien et al. Journal of Comorbidity 2014; 4:1–10.

¹⁰⁵ Scottish Government (2019). Poverty and income inequality in Scotland: 2015-2018.

As Edinburgh is so diverse, and there were concerns about the fairness of PCIF allocations, it was decided to allocate resource proportionate to the GMS allocations, which meant that those with affluent elderly populations benefitted again. To its credit Edinburgh HSCP also top-sliced 12% to attribute 5% on the basis of Q1 proportion (and 2% on the basis of age >85 which was felt intuitively by experienced GPs to be a better measure than age >75 in terms of workload; the remaining 5% to be decided by Clusters). This probably gives very reasonable allocations to the vast majority of practices, but arguably not the severe outliers, including those serving populations with blanket deprivation.

What has been successful, though, is the rollout of 18 Link Workers, attached to the most deprived practices (and some pilot work with elderly non-deprived, too). Allied to this is Edinburgh HSCP's commitment to providing practice-attached Citizen's Advice Bureau workers. The Glasgow Deep End pilot projects showed that trusted Advice Workers, based in practices, and providing help with financial, social security and housing services brought huge benefits¹⁰⁶. The majority of patients seen had never accessed such services before, and the median gain for successful applicants was just under £7,000 per person, per annum.

If national change is possible, one approach would be to consider 'blanket deprivation' in terms of the proportion of the practice population in the most deprived data zones: to give a feel, around 50 practices have 60% or more patients in the most deprived quintile, and the latest Scottish practice data is available on the Public Health Scotland site - General Practice¹⁰⁷. Some academics feel the evidence supports considering percentage in the most deprived decile a better measure for health service planning.

3.2 NCDs (Non-Communicable Diseases) and Multi-morbidity

Jeane Freeman (Cabinet Secretary for Health and Sport) visited Craigmillar, and spoke to one of my GP partners, who has run our in-house multi-disciplinary Diabetes Clinic for a quarter of a century. He said to her that managing diabetes is straight forward. But managing diabetes in those with mental health problems is hugely difficult, with the added complexity that mental ill health adds, applying across all long-term conditions. Having worked in Craigmillar for almost 30 years, he felt that the single biggest change for the better in the Practice during all that time is our new practice-based mental health nurses.

His perceptions are supported by the evidence - mental health difficulties are the norm in diabetes and:

*"All mental illnesses can negatively affect a person's ability to self-manage and self-management is the central tenet of diabetes care. It is not surprising then, to learn that addressing mental health difficulties not only improves mental health outcomes but diabetes outcomes too"; and of the 70% who feel overwhelmed by their diabetes "three-quarters said that their self-management was affected by their emotional struggle"*¹⁰⁸.

We estimate that around half of our patients with cardiovascular disease are poor responders, either in terms of coming to appointments or feeling unable to make even basic lifestyle changes. This echoes Tudor Hart's 'rule of halves' (where half of those with hypertension are diagnosed, half of those treated, half of those successfully). We know that many of those who did attend for checks year on year, were also those with the best health, who probably did not need that level of monitoring. The ending of QOF has meant that

¹⁰⁶ https://www.gcph.co.uk/assets/0000/6242/Deep_End_FINAL_WEB.pdf

¹⁰⁷ <https://www.publichealthscotland.scot/>

¹⁰⁸ Editorial: 'Mental Health in Diabetes: can't afford to address the service gaps or can't afford not to?'. Sachar, A et al; British Journal of General Practice, January 2020.

we can now focus more on those who are in need, but we cannot reach them with standard approaches and would like to develop a programme of outreach and inclusion around those who are missing out on basic healthcare opportunities, reflecting Marmot's principle of 'proportionate universalism'. These patients can be undemanding, with low expectations, and the poorest health outcomes, the 'unworried unwell'¹⁰⁹. Some of our patients are functionally housebound, rarely leaving the home for psychological or emotional reasons, rather than those of age or physical disability. All this is a readily identifiable need, which with resource we believe we can address. The WHO now estimates that in public health terms addressing NCDs in young and middle age is the key to improving prospects¹¹⁰, and yet the heavy weighting of the contract towards the elderly makes this difficult for us to achieve: our patients do not live long enough to benefit from that funding.

Two of the four pillars of GP are contact and comprehensiveness. Like Tudor Hart we also need to consider these in terms of omission. Increasingly that focus needs to be on those most affected by poor health as a consequence of their socioeconomic circumstances, those who do not currently engage with the mitigating effect of General Practice and what it has to offer.

NCDs (Non-Communicable Diseases).

NCDs are the 'building blocks' of multimorbidity. Being pragmatic, we can consider the four big drivers for premature mortality and ill health relating to *physical* disease in Scotland. Cardiovascular, respiratory diseases, cancer and diabetes are now responsible for the majority of global deaths, and that dominance is true in Britain, too. However, in 'high income' countries such as our own, NCDs disproportionately affect vulnerable and disadvantaged groups. The WHO paper outlines that they should no longer be seen as simply affecting the old.

Yet again, though, Deep End patients are further adversely affected. The public health evidence is that socioeconomic deprivation is an INDEPENDENT risk factor for mortality risk and impaired physical functioning, comparable to that of smoking, alcohol and obesity¹¹¹. This is irrespective of behavioural risk factors, with adverse trajectories established by the age of 3, the important factors being those associated with blanket deprivation.

The other big drivers of NCDs relate to smoking, alcohol consumption, diet, physical activity and obesity. Smoking and alcohol have been admirably tackled by Scottish Government at a national level, involving brave and sustained battles, including against industries with vested interests. The Government also now focuses on a much stronger approach to diet, particularly reducing sugar and highly processed food consumption¹¹². But the real and difficult work around most of this in terms of behavioural change, and helping patients, takes place in primary care. Deprived practices will have patients with poor diets, higher levels of smoking and obesity, and more alcohol-related harm. We could look at any one of these and the potential for change, in terms of addressing unmet need, but will use diet as an example. Smoking remains the strongest risk factor in terms of Scottish mortality: reducing or stopping cigarettes or alcohol brings financial benefits to the poor. Improving diet does not.

¹⁰⁹ Dr Peter Cawston, GP, Garscadden Burn Medical Practice.

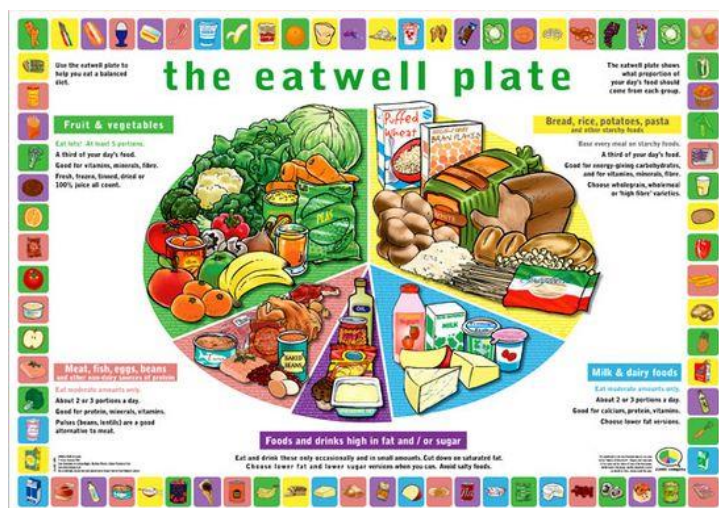
¹¹⁰ Life course approach to prevention and control of non-communicable disease. The WHO. BMJ 2019;365: Suppl 1.

¹¹¹ Socioeconomic status should be seen alongside smoking as mortality risk, say experts. Iacobucci, G. BMJ 2019;364:l1450 doi: 10.1136/bmj.l1450 (Published 27 March 2019)

¹¹² Scotland to clamp down on junk food promotion in order to tackle obesity. Bryan Christie. BMJ 2017;359:j5012 doi: 10.1136/bmj.j5012 (Published 2017 October 30).

DIET – a Case Study.

In her annual report¹¹³, a previous Scottish CMO highlighted the deprivation relationship with obesity, “with women in the most deprived quintile in 2014 having obesity rates 16 percentage points higher than women in the least deprived quintile”. These differences are projected to worsen, also related in her report, but she did not seek to suggest resource mechanisms to address this in Primary Care. In terms of NCD prevalence we know that the following are especially beneficial: high consumption of whole grains, reduced processed and ultra-processed food intake, reduced red meat consumption, increased fruit and vegetable intake and reduction in sugar-sweetened drinks¹¹⁴.



In 2019 Scottish Government published its strategy for prevention, earlier detection and management of Type 2 diabetes¹¹⁵. It highlights that excess weight is the main modifiable risk factor for diabetes. A quarter of a million Scots now live with diabetes and half a million are at high risk of developing it. Diabetes treatment accounts for 9% of the NHS budget.

The strategy describes the deprivation-associated additional morbidity:

“... obesity, physical inactivity and an unhealthy diet are associated with deprivation. People in social class V (unskilled manual) are three and a half times more likely to be ill as a result of the complications of diabetes than those in social class I (professional). Moreover, short term mortality risk from type 2 diabetes is higher among those living in more deprived areas”;

AND:

“Prevalence of type 2 diabetes is 40% higher among people in the most deprived areas compared with those in the least deprived areas”

The document highlights that in our homes, communities and work, “we must together make it easier to eat well and be active”. The report does emphasise “that there is a complex relationship between mental health problems, diabetes, obesity and those vulnerable to health inequalities. This therefore should be taken into account when planning the delivery of services”. Yet the interventions largely cater to the ‘shallow end’ population, with a focus on written patient resource and risk assessment. Those with higher risk scores are

¹¹³ Chief Medical Officer’s Annual Report 2014-15 REALISTIC MEDICINE

¹¹⁴ Food based dietary patterns and chronic disease prevention. The WHO. BMJ 2018;361:j2396.

¹¹⁵ Improving Scotland’s Health. A Healthier Future – Framework for the Prevention, Early Detection and Early Intervention of type 2 diabetes. Scottish Government, 2018.

then inevitably directed to their GP. Meanwhile, food from food banks does not lend itself to a good diet, won't include fresh fruit and vegetables, and compounding this further is that deprived areas have more fast food shops, with their calorie-dense products¹¹⁶.

There are tiers of weight management intervention, but many in the most marginalised groups will struggle to engage with those, and to eat well in an everyday sense. We have medicalised the process, when what we needed was supportive facilities in our highly deprived areas to ensure basic food provision, with cooking and cafes, healthy and affordable. Having said that, an intensive 9-month, individualised programme has been shown to be helpful and acceptable, but as always depended on health literacy¹¹⁷. It will be interesting to see where Boards elect to place emphasis and resource, as there is potential within the framework to be radical, to move upstream and: *"Improve access and opportunities to make healthier food choices using a community development model to increase engagement, capacity and skills to support local food initiatives including practical cooking"*. This should be prioritised above all else, again filling the pool from the deep end. Only once we have done this should we consider 'measuring' people, also increasing GP workload.

Food and the poor.

Food insecurity can be defined as when a household faces periods during which it does not have enough money to acquire food or cannot buy the full variety of food needed for a healthy diet¹¹⁸. It is considered a severe form of material deprivation, and the mental and physical health consequences go beyond the dietary. Britain now has amongst the worst food security in Europe: 19% of under 15s live with an adult who is moderately or severely food insecure¹¹⁹. With food poverty rising, Public Health representatives have argued that an affordable nutritious diet is a pre-requisite for health and that reliance on food aid should not be part of any modern society-wide, evidenced-based approach to Public Health policy. 'Nothing Left in the Cupboards' makes sobering reading¹²⁰.

Our practice Care Co-ordinators are trained to give out food bank vouchers and this is what our lead, Gillian Anderson, recounts:

"I am one of three members of staff here at Craigmillar who are authorised to issue foodbank vouchers. We hold a supply of vouchers which covers the foodbank at Craigmillar and the whole of the Leith area. In order to be able to complete the voucher we do have to ask the nature of the crisis at the time of issuing. More often than not, it is benefit delays and sanctions to benefits. This is such a vicious circle for our patients. They are sanctioned when they are unable to attend appointments – often this is due to having no money to get there. Benefit delays are often due to the move from an existing benefit on to the universal credit system and this can take a long, long time.

When you only have, perhaps, £5 left after all other bills have been paid, it's an awful choice to have to make, whether to feed your family or put the £5 in your gas or electricity meter. During these difficult times,

¹¹⁶ Britain's deprived areas have five times as many fast food shops as rich areas. Jacqui Wise. BMJ 2018;363:k4661 doi: 10.1136/bmj.k4661 (Published 2 November 2018).

¹¹⁷ Exploring the experience of a 'diagnosis' of pre-diabetes and factors influencing uptake of a lifestyle intervention programme in areas of socio-economic deprivation. Hodges et al. British Journal of General Practice 2018; 68 (suppl 1): bjgp18X697325. DOI: <https://doi.org/10.3399/bjgp18X697325>

¹¹⁸ It is crucial we know which UK families cannot afford to buy food. BMJ Opinion. Anna Taylor. BMJ 365: 64-65. No 8195. 13 April 2019.

¹¹⁹ Food insecurity in UK is among worst in Europe, especially for children, says committee. BMJ 2019;364:l126 doi: 10.1136/bmj.l126.

¹²⁰ <https://www.hrw.org/report/2019/05/20/nothing-left-cupboards/austerity-welfare-cuts-and-right-food-uk>

we have to remember that the rent and council tax doesn't go away either – these will usually start to mount up to significant amounts of debt which, if and when benefits are finally sorted out, have grown to a sum which is quite unmanageable.

I have had people come for vouchers who have had no money for quite a few weeks and, quite honestly, resorting to the foodbank is the very last straw for them – there is just nowhere else to turn”.

After extensive investigation, Professor Philip Alston, the United Nation's Special Rapporteur on extreme poverty and human rights, blamed austerity policies and Government complacency for a rise in UK poverty, predicted to reach 36% by 2022¹²¹. Already outlined is that young people are especially affected with nearly one in five UK children under 15 living in a home where the parents cannot afford to put adequate food on the table. It has been shown that sub-optimal diets in children are associated with cognitive impairment and poor academic achievement as well as the well-known increases in poor growth, being overweight and obese, and the growing incidence of coronary heart disease, type 2 diabetes, and cancers. Many have parents who go hungry in order to feed them¹²². Marmot estimates that *“households in the bottom income decile in England would have to spend over 70% of their income to follow healthy eating guidelines”*¹²³.

We know that standard dietary advice is generally ineffective, and obesity in the poor will relate not just to access to appropriate foods, but also because eating habits are frequently driven by emotional factors, again outlined by Marmot:

“Healthy eating interventions targeted at individual behaviour change, such as dietary counselling, have greater benefits for individuals of higher socioeconomic position, thereby tending to increase inequalities. It is unlikely to be helpful for general practitioners simply to give patients diet sheets on healthy eating and expect them to follow them. Individual choices are constrained by social, environmental, economic, political, and cultural factors. In addition, constraints on choices vary by social position, rendering unequal choices. Many other influences on food choice exist. Lack of money is an important one”.

The rise in childhood obesity, will mean that our health inequalities will continue in the decades to come. The Royal College of Physicians has now asked that obesity be recognised as a chronic disease, and emphasised that it is not a lifestyle choice caused by individual greed but a disease caused by health inequalities (and other factors)¹²⁴.

So, where does that leave multimorbidity management in our General Practice? We use progressive evidence-based models including House of Care, where patients have tests done in advance, with explanations of what to expect at their appointment and what these tests might mean. Despite prompting, non-attendance rates are high, and our nurses manage complex multiple issues, often relating to mental

¹²¹ Food insecurity in UK is among worst in Europe, especially for children, says committee. BMJ 2019;364:l126 doi: 10.1136/bmj.l126.

¹²² Child food poverty requires radical long term solutions. O’Connell et al; BMJ 2018;362:k3608 doi: 10.1136/bmj.k3608 (Published 28 August 2018).

¹²³ Social determinants and non-communicable diseases: time for integrated action. Marmot et al; BMJ 2019;364:kl251 <http://dx.doi.org/10.1136/bmj.l251>

¹²⁴ Recognise obesity as a disease to reduce prevalence, says RCP. Zosia Kmietowicz. BMJ 2019; 364:l45 doi: 10.1136/bmj.l45 (Published 3 January 2019).

health, which are intertwined with chronic disease management. We embrace the modern approaches of co-production and self-management plans but all those rely on literacy, health literacy, and a patient not overloaded by other pressing things in their lives, most often simply one life crisis after another. All this makes such work difficult and time-consuming. We do not have enough nurse resource to undertake all this and would very much like to develop the 'Behavioural Health Consultant' model of NUKA, where mental health and psychological approaches are integral to case - and chronic disease - management. We were once a 'Keep Well' practice, and whilst that did not show improvement in outcomes at national level, we still see patients who were started on statins or anti-hypertensive treatment as a result and doing well. Patients used to particularly appreciate its associated Counterweight programme, again because it was in-house, and the new alternatives involving external referrals and a big emphasis on bariatric surgery seem intimidating. Those also have a 'one DNA only' rule. Such services were never designed for Craigmillar.

Our senior mental health nurse, employed by the HSCP with new contract monies, is now also a part time Practice partner. She has contributed hugely to our thinking around health inequalities and is fully NUKA trained: there is much in the model (from SCF- South Central Federation, Alaska) which chimes with Scottish evidence and approaches¹²⁵:



Primary Care

- ▶ The largest part of the SCF healthcare system is the primary care service. Prior to 1990s this provision was virtually non-existent. Native Alaskans would travel for days and their only healthcare provision was to be treated within the emergency room.
- ▶ **Hubs and Clusters**
- ▶ Multidisciplinary teams providing integrated health and care services in primary care centres
- ▶ **Hub- A practice based on locality**
- ▶ Care co-ordinators- non clinical
- ▶ GPs
- ▶ Nursing Team
- ▶ Behavioural Health Consultants- Mental Health and Psychological health
- ▶ Administrative staff
- ▶ All co-located – promote shared understanding and respect for disciplines
- ▶ All work on a case management model based on relationships and needs

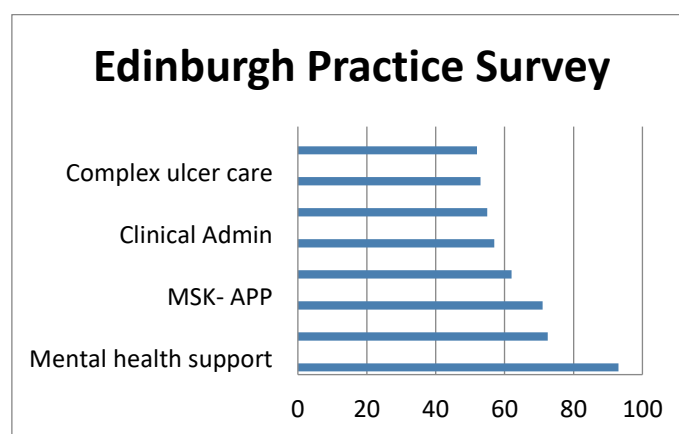
We are using the NUKA model in conjunction with the evidence base around personality disorder. We have agreed as a practice to undertake care planning for our most chaotic and vulnerable patients. We held practice workshops and were able to agree criteria and identify these patients. The whole team was involved, including District Nurses, GPs, Practice Nurses and Care Coordinators. We found common ground, not surprising as we see the same patients and were all able to visualise how standard health care models failed them. However, we are unlikely to find the resource within the Practice to fully manage all these patients differently even though we are optimistic that we could, and believe that would bring benefit. Instead we will build on a small case load initially. But we need to make more overt these instances of falling short of full implementation due to our own version of resource poverty. What makes this all more difficult

¹²⁵ Kat Paterson. Senior Mental Health Nurse, Craigmillar Medical Group.

is the understanding that we now have about horizontal rather than vertical health programmes. The international evidence base is that the latter are inherently limited. Health care provision offered horizontally is much more effective in these settings - the generalist approach.

3.3 Mental health

A survey of Edinburgh practices relating to new contract funding identified this as a priority even for those serving non-deprived populations:



X-axis – counts for preferred options expressed at practice level

Further, we have inadequate and delayed support from specialist services: referral pathways are often restricted, with long waiting times, patient appointment systems do not support the most vulnerable and there are high levels of DNAs. We have systems which are variable, come and go, involve delays, and can be distant from the patient's home. Follow-up is often inconsistent and late. Inadequate responses from specialist services to mental health emergencies often leave the GP in very difficult situations, managing suicidal or psychotic patients with little or no help. The appointment systems require opt in letters – and there are no text reminders or other contact. In deprived settings many GPs will simply not refer as they assess that the patient will not engage.

In Edinburgh, our practice has LOWER referral rates to mental health services than many others, despite our high prevalence of mental ill health. That represents an unmet patient need, addressed by practice staff, as best we can. Our DNA rate for 'accepted' referrals was over 40%, only exceeded in Edinburgh by that for Niddrie, our sister practice in the health centre. Our referral rate to the emergency mental health service is the highest in Edinburgh.

“Community clinical mental health professionals (eg nurses, occupational therapists), based in general practice, will work with individuals and families assessing their mental health needs, providing support for conditions such as low mood, anxiety and depression. The outcome sought is improved patient care through rapidly accessible, appropriate and timely mental health input”.

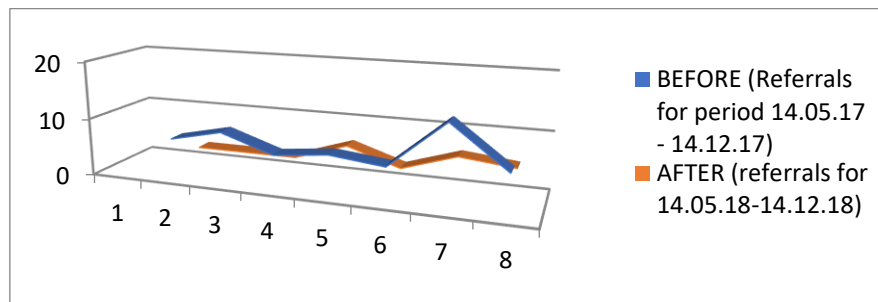
The 2018 General Medical Services Contract in Scotland.

The practice has mental health nurse provision under the new contract arrangements, and it has been transforming. But – as is so often happening with our new contract – there is so much more work than

external services ever envisaged, previously (and still) done by GPs. There is unmet need here, too. But we have shown that this new mental health provision is highly effective. However, that team too, is now saturated, with considerable waits for patients to be seen and we are having to revise our model.

Once our Senior Mental Health Nurse started working in the practice:

- referral rates to secondary care dropped significantly:



- people were seen by her team with a wide range of conditions (in keeping with comprehensive, generalist services) including anxiety, depression, substance misuse, alcohol misuse, hypomania, suicidality, stress and mood swings, bereavement, coping with trauma, anorexia, panic attacks, gender-based violence, ACE, ADHD assessment, anger issues, PTSD, self-harm.
- 44 complex patients were reviewed in detail. In the year prior to the arrival of the Senior Mental Health Nurse, GPs saw these patients 457 times in the previous year – a tremendously high workload. After she started, this dropped to 199, but *overall, their mental health consultations went up*. Interventions and patient satisfaction were both high. We interpret that such patients have unmet need, that need is addressable, and there are savings of GP time. However, an even higher workload has been established, though undertaken by the new workforce.
- Many of those patients had multiagency input too, and the new nursing service helped GP workload by undertaking the liaison work required, much with statutory services.



Last year the Royal College of Psychiatrists (Scotland) produced its excellent report on Personality Disorder (PD)¹²⁶ outlining the cost of this condition both to patients and to health services, which are ill-equipped to help. It is estimated that the prevalence of PD among those in contact with services is 25% for Primary Care and 50% for those attending specialist psychiatric services. Associated morbidity is high:

- 75% of those with Borderline Personality Disorder (BPD) will deliberately self-harm
- 8-10% will commit suicide
- multi-morbidity is common
- overall, lifespans shortened by 18-19 years.

These patients do best with care planning, continuity of carer, consistency across services, but rarely receive these systematically. Traditionally specialist mental health services have often felt they have little to offer, and yet there is clear evidence of benefit with structured support, including the giving and discussion of the diagnosis. We could do so much to change things in General Practice: when we identified patients for our NUKA care plans, many had BPD. It is difficult for us to take this work forward with our current workloads, despite recognising that it is a valid, cost-effective approach to patient management. Crucially the evidence is that it would help those patients who struggle most and are least functional at engaging with services constructively, as outlined in the Royal College's presented evidence. That evidence also shows high levels of psychiatric co-morbidity associated with a history of multiple and severe Adverse Childhood Experiences, another area in which we have engaged at a practice level with educational initiatives. Most sad about this unaddressed need, is that it is unaddressed by other services too, particularly in Lothian which does not have some of the specialist teams and approaches developed in other Boards¹²⁷.

As GPs, we continue to consult with these patients ourselves, and our clear view is that, for all such patient groups, care is improved if they are seen by a mental health practitioner in the practice. They bring cost-effective specialist mental health skills, in slightly longer appointments, where multiple issues of physical health are not being addressed at the same time. However, our Mental Health Nurses are now over-run with work (despite active approaches to control that, including that only GPs can refer to them). We are now having to find additional ways to reduce access and followup. In summary it is clear in our practice that there is unmet mental health need, which is identifiable, and could be addressed by new GMS contract resource.

3.4 Cancer and palliative care

Detecting Cancer Early

People living in circumstances of poverty, present later with cancers, which are less amenable to treatment. The average GP practice (list size 5,881) is likely to see only about 35 new cases per annum: the equivalent figure is 55 in our Craigmillar practice. Lung cancer accounts for a quarter of Scottish cancer deaths, twice that of the second cancer (colorectal), and both heavily influenced by lifestyle factors. There is a worrying rapid increase in liver cancer, with mortality rates increasing by 47% for males and 93% for

¹²⁶ Personality disorder in Scotland: raising awareness, raising expectations, raising hope. Royal College of Psychiatrists. 2018

¹²⁷ Presented at Personality Disorder in Scotland: raising awareness, raising expectations, raising hope – launch event. 9th October 2018.

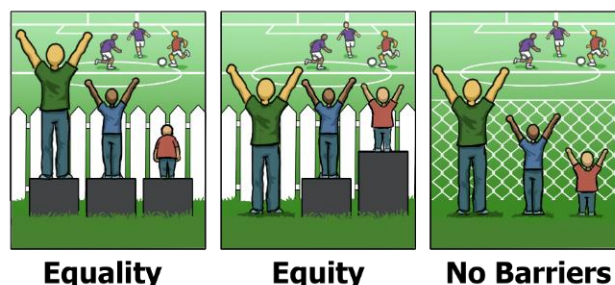
females over the last ten years (ISD; October 2018)¹²⁸ - a concern for our practice patients with their disproportionate rates of Hepatitis B and C infection, harmful alcohol use and obesity.

And of course, screening uptake is lowest where it is needed most:

- for cervical screening, *“uptake of screening was highest in women from the least deprived areas and fell with increasing deprivation”* (ISD; 2017-18). This is compounded by the lower HPV uptake in the most deprived in Lothian: *“The picture is not so good for completion of HPV by end S3. There is a very steep gradient with a 12% difference in uptake between the most and least deprived quintiles. Only 74% of girls in the most deprived quintile have received two doses”*¹²⁹.
- The Detecting Cancer Early (DCE) programme for breast, colorectal and lung cancer HAS been associated with a small rise in detection at the earliest stage (1), but still fails to meet its 25% target. The stages of presentation (1-4) essentially have straight line gradients with deprivation (the least deprived having the highest proportion of stage 1 presentations, the most deprived the highest stage 4 presentations)¹³⁰.
- The same report summarises: *“patients diagnosed with breast, colorectal or lung cancer in the most deprived areas of Scotland, the highest proportion were diagnosed at the most advanced stage of disease; stage 4 (30.3%) while for those living in the least deprived areas, the highest proportion were diagnosed at stage 2 (29.5%)”*.

Lothian palliative care leads have been progressive, targeting deprived populations for several DCE pilots. Of note is that Lothian Health Board did better than any other in terms of positive percentage change for the three cancers since the DCE programme began. ISD data demonstrates lower rates of bowel screening in more deprived populations. We participated in a pilot to give out FOB testing kits. Although overall changes were small, it seems that a discussion with a clinician did make a difference. In a cohort of previous ‘non responders’ considered ‘hard to reach’ 1 in 3 collected a FOB testing kit, a significant change¹³¹.

A further pilot (in Midlothian) included in-depth health interviews with men in vulnerable groups not responding to bowel screening invitations. Again, for a ‘hard to reach’ cohort there was reasonable uptake (30% attendance) and the men often had poor levels of knowledge and confidence round the screen itself, and bowel cancer, but also high levels of alcohol intake and low levels of exercise, bringing opportunities for extensive health promotion interventions. One new case of bowel cancer was detected in this group. This did involve an intensive, long consultation, but the aim was also research and improved understanding of health status, attitudes and barriers. The team did identify barriers and looked at ways to remove them, taking the standard imagery for the need for equity over equality a step further:



¹²⁸ <https://www.isdscotland.org/Health-Topics/Cancer/Publications/index.asp>

¹²⁹ Lothian Immunisation Coordinating Group (LICOG) Annual report 2018/19.

¹³⁰ Detect Cancer Early Staging Data report, ISD; July 2018.

¹³¹ Dr Lorna Porteous, GP DCE Lead NHS Lothian.

Both pilots were considered successful; neither has received ongoing support or funding.

GPs and early cancer diagnosis.

“I now realise that here age doesn’t matter.....” is what our Nurse Practitioner said after 3 months working with us. She concluded that the ‘normal’ age rules of when to anticipate significant pathology, and particularly cancer, do not apply in our practice. Her nursing background is in cancer, with extensive experience in specialist oncology services. Cancer diagnosis is difficult at the best of times, particularly for those presenting with “low-risk-but-not-no-risk symptoms”¹³², and a whole host of factors contributes to increasing or reducing diagnostic acuity on the patient journey.

We now have good evidence round the diagnostic process which is of relevance to deprived General Practice:

- Late presentations do (as we would expect) have a worse prognosis – though the extent of the effect is difficult to quantify¹³³
- When a patient presents is determined by an *“interplay of social factors...strongly influenced by psychological and organisational factors....including personal models of cancer”*
- National referral guidance generally brings low positive predictive powers for cancer – and GPs see large number of similar symptoms in a low-prevalence context
- Much referral guidance is now based on risk assessments including age. This makes decisions more difficult for GPs caring for patients in deprived settings where there are much higher prevalences of risk factors and cancer presenting in the unexpectedly young.
- GP consultations in very deprived practices are more stressed, shorter and have a larger number of issues to manage.
- The Hamilton paper also outlines that (italicised phrases mine):
 - Worsening cough and dyspnoea (much commoner presenting symptoms than haemoptysis) can be difficult to distinguish in those who already have those symptoms. *(How much more difficult in populations with higher rates of COPD and smoking?)*
 - For lung cancer – our commonest malignancy – there may be patient nihilism, with people presenting late with feelings of guilt round what could be perceived as a self-inflicted illness. *(How much more likely is that in patients already facing emotional hardship?)*

Having been referred, those who are deprived are least likely to attend appointments. Our appointment systems are designed for those patients in the shallow end of the pool, relying on literacy, mail correctly received and opened, and often with little notice. GPs receive a letter indicating that the patient has not attended, with no indication on the letter of the serious and urgent nature of the referral. Specialists are NOT meant to automatically discharge in this situation but do so in breach of national guidelines. Failure to attend secondary care adds to health inequality, not just for cancer but for specialist help with multiple aspects of diagnosis and clinical management. A research group has now investigated some of the factors contributing to non-attendance at 2 Week Wait (suspicion of cancer) appointments¹³⁴. This qualitative study

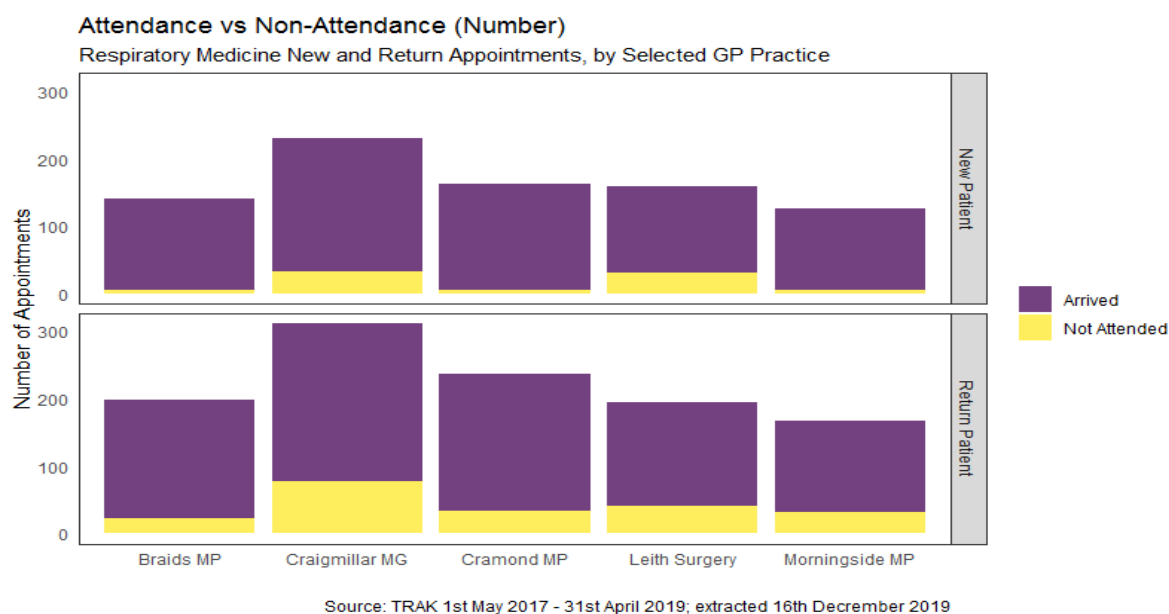
¹³² Cancer Diagnosis in Primary Care. William Hamilton. BJGP; February 2010.

¹³³ Editorial BJGP: Improving Cancer Outcomes: better access to diagnostics in primary care could be critical. BJGP. May 2011.

¹³⁴ Non-attendance at urgent referral appointments for suspected cancer: a qualitative study to gain understanding from patients and GPs. Jefferson, L et al; British Journal of General Practice, December 2019.

describes the detailed and time-consuming explanations needed by GPs to help support people's understanding and address their fears. It also showed that the most socio-economically deprived, and those with other vulnerabilities, including multi-morbidity, were least likely to attend.

Respiratory medicine is a specialty where our referrals relate to more advanced or serious illness, or cancer. And lung is Scotland's commonest cancer. As with diabetes (where we also refer only if patients need complex care), the higher Craigmillar numbers reflect excess morbidity, more notable as we have a young population. Those who do not attend (DNA) are not only deprived of specialist input, but their care also then defaults to the GP, adding to that workload, and in this case a difficult one. It is at new patient appointments that crucial diagnostic assessments are made. The data relates to those practices delineated earlier (p25):



The data shows that the non-attendance for return appointment is even higher.

Instead, why not design-for-the-Deep-End with patient-friendly information, text reminders, phone calls for the very high risk, adequate notice of appointments? – which would bring our systems into the 21st century and benefit patients generally. Filling the pool in from its deep end would help everyone, and benefit outpatient capacity, too.

Finally, the Royal College of GPs, with others, now recommends safety netting of patients as a 'diagnostic strategy' in those at higher risk where no definitive cancer has been diagnosed¹³⁵ and recommend their Early Cancer Diagnosis toolkit¹³⁶

Recommendations are to:

- *“Actively monitor symptoms in people at low risk (but not no risk) to see if a patient's risk of cancer changes;*

¹³⁵ SAFETY NETTING IN PRIMARY CARE. NHS England, RCGP, MacMillan Cancer Support.

¹³⁶ <https://www.rcgp.org.uk/clinical-and-research/resources/toolkits/early-diagnosis-of-cancer-significant-event-analysis-toolkit.aspx>

- *Consider a review for people with any symptom that is associated with an increased risk of cancer, but who do not meet the criteria for referral or other investigative action*
- *Track patient attendance and outcomes for blood tests/ imaging/ endoscopy/ suspected cancer outpatient appointments using the relevant software, e.g. ICE software, Tquest list management or other robust electronic safety netting system(s)".*

This makes clinical sense, but when GPs working in blanket-deprived practices are surrounded by a sea of such patients, how could we possibly begin to do this with current resource? All GPs will see patients with missed cancer diagnoses, whom this safety net might have saved. This is not mythical need beyond definition, it is palpable and important and could be addressed with appropriate resource.

Palliative care

Our Practice, like so many others, attempts very active approaches to Palliative Care, with named first and second GPs for all patients on our Palliative Care Register. Those doctors then undertake agreed review, anticipatory care and support work. We have regular multi-disciplinary meetings, and our Care Co-ordinators are aware of our most vulnerable patients. Many with a terminal illness become housebound early on their palliative journey, often simply because they have no access to cars, cannot afford taxis, and no longer manage buses or walking, which is how they would normally get to the surgery. Much of our programme therefore is home-based. The burden on deprived practices is higher, not just because of higher rates of cancer, but because of late presentations, multi-morbidity, poor life circumstances and lower treatment success. There are high needs for non-cancer palliative care too. The terrible price paid by both patients and the staff that look after them is having to manage young and middle-aged people who are dying.

In our society, a 75-year-old, dying of cancer, will be rightly seen as a huge loss, particularly to that person's family and friends. But that individual may feel that they have had a life of worthwhile work, and rich family and social relationships, and that they can die peacefully. It can feel very different to someone in their thirties and forties, struggling with addiction and mental health problems, with a young family, often diagnosed late in the illness trajectory and having to come to terms with that loss. What we need is community-based nursing teams with more time to look after these very ill patients, without the severe workload stress that currently limits this work. For many of our working days in the practice, palliative visits form the majority of our housecalls. This, above all, is where we work not face-to-face, but side-to-side, to quote Tudor Hart again. We would like more GP time, too, to help patients in their understanding and – critically – ability to accept what is happening to them. And to support those left behind - the large number of young people who are bereaved and have suffered losses early in life, with ongoing impact on future emotional health.

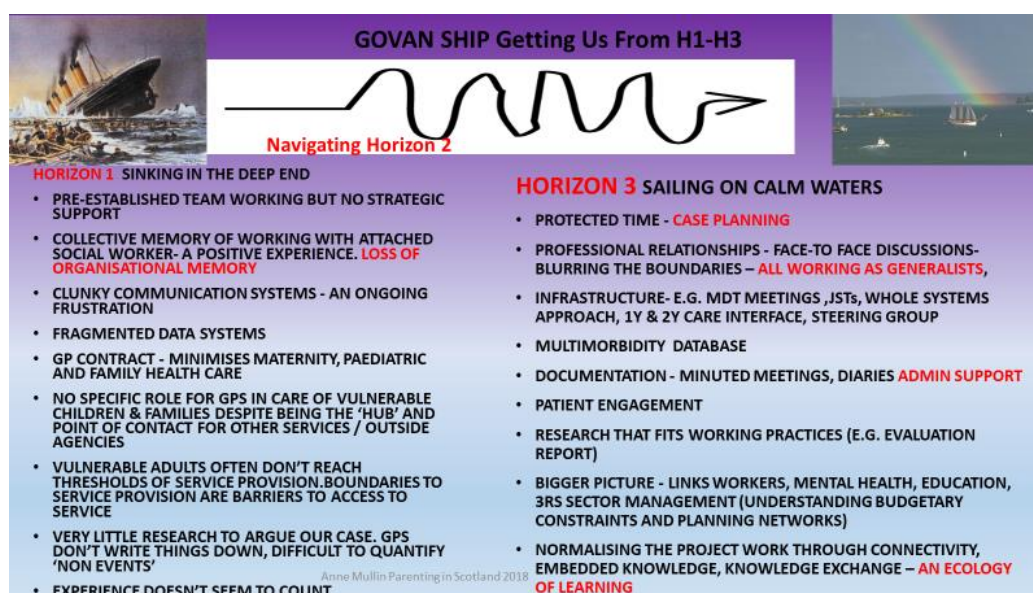
3.5 The Multidisciplinary Team

General Practice has always placed great emphasis on multidisciplinary team working and its strong emphasis in the new Scottish GMS contract is very welcome. Whilst we have seen great strides at a national level in terms of joint health and social care working, this has simply not happened at ground level. Years ago we had a visiting Social Worker in the practice, but that service was withdrawn due to cost pressures, even though we felt it beneficial and cost effective in terms of joint working. A Health Visitor and GP used to meet after every child vaccination and development clinic, which was held jointly and weekly. We have had to withdraw that due to lack of GP capacity. We used to have a GP who undertook weekly antenatal clinics with the Midwives, with a 3-disciplinary meeting, at which the GP, Health visitor and Midwife would consider

all new bookers and all high risk patients (including in terms of substance misuse, child protection and so on). That work was done at the time when the Confidential Enquiries into Maternal Deaths in the UK reported that reduced multidisciplinary communication contributed to some maternal and infant deaths¹³⁷.

Our GP/HV/Midwife meetings have now ceased completely, initially due to lack of GP capacity. We explored re-establishing them, but under the new 'Best Start' arrangements, that sort of meeting is no longer possible, with multiple (and often distant) teams providing antenatal care. This loss of continuity and communication is an unintended, but predictable, consequence of that programme. Previously a small midwifery team provided long term carer continuity for pregnant women and their families. This did not just mean seeing a patient through her antenatal care, but knowing the women over multiple pregnancies, and in some cases, generations. The requirement for continuity in intrapartum care diverts community midwives from their previous approaches to communication and continuity. This is damaging in the deprived setting, where the long-term relationships and knowledge are crucial. Now, midwives who for decades have been co-located with us, no longer provide antenatal care to some of our patients, amongst some at highest risk in Scotland. Also concerning is that the midwife age profile reflects that of GPs - an ageing one - and some very experienced staff in their mid to late fifties are now retiring earlier than they would have otherwise – in part because of this programme. There has also been a long history of inadequate weighting of caseload for deprivation, despite Lothian evidence of a higher workload in that group, another failure of central planning.

The Govan SHIP multidisciplinary meeting model was able to offer what we aspire to¹³⁸. We have been able to achieve Horizon 3 for some of our work, but only by fitting it into already-pressurised, long clinical days:



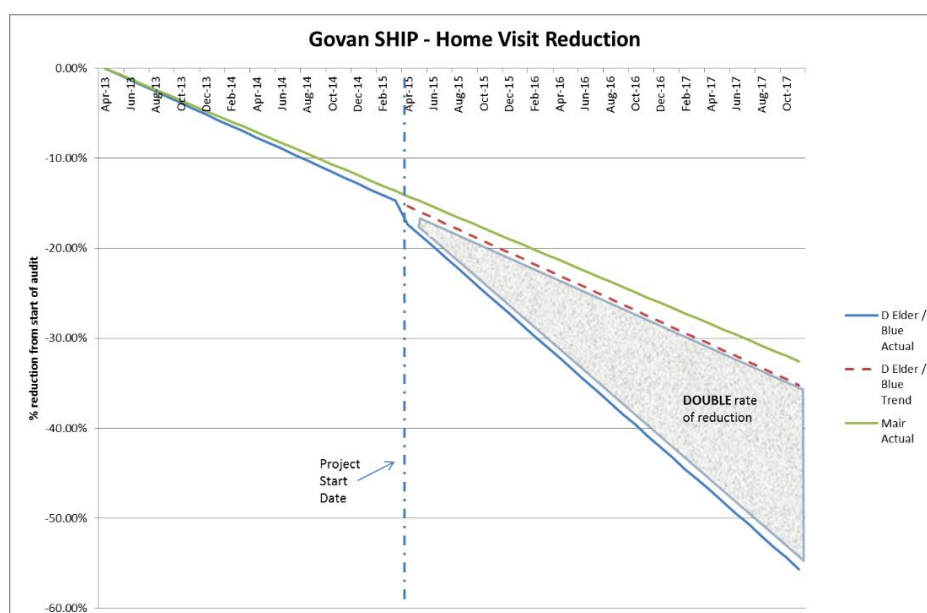
Those involved in the Govan SHIP project reported some initial difficulties due to the strict eligibility criteria, largely relating to social workers. Some time was needed to develop mutual understanding of the role of both the GP and the SW to achieve a more flexible approach. These challenges – the time that is needed to develop functioning multidisciplinary teams that have a shared language of integrated working - were

¹³⁷ <https://www.hqip.org.uk/resource/cmace-and-cemach-reports/#.XgisVm52s2w>

¹³⁸ With thanks to Anne Mullin, GP, Govan, Glasgow and Chair, GPs at the Deep End

documented in the qualitative evaluation of the SHIP project¹³⁹. Subsequently the team was able to also support those patients who would benefit from a new model of social care worker, addressing patient needs below existing referral thresholds¹⁴⁰. This is meeting unmet complex need and shows that given basic support at practice level, and by demonstrating integration with other frontline services, GPs can address that. SHIP showed benefits, including a reduction in GP workload (though only at the very end of the pilot project), and then funding was withdrawn. GPs working in SHIP practices now report that the meetings are no longer feasible, that communication has already withered, and there is rapid erosion of benefit¹⁴¹. This is not surprising as it is activity which requires organisational and professional time. However, it further underlines the damage of pilot projects, with not just loss of service but of morale, too. At the time some of the attached GPs had elected to stay and older partners continued to work beyond their initial plans to retire because of the perceived benefits of the project.

Others have considered the project expensive, but it would be good to know the cost of *not* undertaking this in terms of children's care now, accumulated harm for the future, GP retention and escalating GP workload. The practices' home visit rate dropped twice that of the comparator practices:



GP consultation rates which had been rising, stabilised during the SHIP project and subsequently dropped, again when compared to similar control practices¹⁴². The project allowed highly proactive management of complex health care and the often-chaotic use of health services in the community and emergency settings (for both out of hours General Practice and hospital emergency settings). Patients and staff and teams will have benefited from those two years, but it would be interesting to see the costs and outcomes for establishing similar models in some of the most deprived practices in Scotland, and relating that to the 'unaccounted' £170 million of the Audit Scotland report.

¹³⁹ http://www.sspc.ac.uk/media/Media_587366_smx.pdf

¹⁴⁰ Anne Mullin, personal communication

¹⁴¹ Anne Mullin. Chair, GPs at the Deep End. Personal communication.

¹⁴² Evaluation of models of integration in Primary Care – The Govan SHIP Project. Vince Garry et al; Glasgow City HSCP. [Health inequalities in Scotland: A GP View](#)

A further harm of project withdrawal is that of not being able to establish what works and how well. Each such project needs both start-up time and time to show benefit. Data collection is never easy, but one of the strongest conclusions of the Scottish School of Primary Care assessment¹⁴³ of the new contract pilots, was that it was difficult to assess multiple small pilots, and that a short duration was a huge factor in not being able to demonstrate the evidence around outcomes.

3.6 Future generations – children and young people

UK-wide there are predicted further falls in life expectancy for our future generations – again disproportionately for the very poor, with infant mortality in that group actually rising¹⁴⁴. Care of children and young people should be central to all our planning, the bedrock of all we do and aim to achieve. Trajectories for ill-health and premature mortality are *“already well-established by the age of three”*¹⁴⁵.

The State of Child Health 2017 - Recommendations for Scotland - summarised by Anne Mullin (the emphases are hers) include the following:

- The Scottish Government should publish and implement the Child and Adolescent Health and Wellbeing Strategy - “a clear accountability framework setting out responsibilities for professionals, the public and civil society as well as details about resources and funding to implement it”
- Reduce the number of child deaths (each year between 350 and 450 infants, children and young people die in Scotland)
- **Develop integrated health and care statistics**
- **Develop research capacity to drive improvements in children’s health**
- Reduce child poverty and inequality
- **Maximise women’s health before, during and after pregnancy**
- Introduce statutory sex and relationships education at all schools
- Strengthen tobacco control
- Tackle childhood obesity effectively
- **Maximise mental health and wellbeing throughout childhood**
- **Tailor the health system to meet the needs of children, young people, their parents and carers – “a joined-up approach by health and other agencies”**
- **Implementing guidance and standards.**

Under the SAF, one 80-84 year old man equates to eleven 5-9 year-olds. This may reflect conventional workloads, but in deprived areas with younger practice populations, and children and young people with high levels of need, this is inadequate.

And yet we see the consequences of poverty on health and the deterioration of both, described in the Lancet:

“Growing up in the grip of poverty has far-reaching and long-lasting repercussions: children born into poor households tend to have lower birthweight and are more likely to die in the first year of life.”

¹⁴³ <http://www.sspc.ac.uk/reports/>

¹⁴⁴ Death rate now rising in UK’s poorest infants. Taylor-Robinson, D. *BMJ* 2017; 357 doi: <https://doi.org/10.1136/bmj.j2258>

¹⁴⁵ Socioeconomic status should be seen alongside smoking as mortality risk, say experts. Iacobucci, G. *BMJ* 2019;364:l1450 doi: 10.1136/bmj.l1450 (Published 27 March 2019).

Notably, infant mortality rose in the UK in 2015 and 2016 after more than 100 years of continuous decline. Children living in poverty are more likely to be obese at age 4–5 years, to have a chronic illness, to die from an accident, and to experience mental ill-health. Adverse outcomes are lifelong, with disadvantaged children having a higher risk of death in adulthood from cancer, coronary heart disease, respiratory disease, and alcohol-related illness”¹⁴⁶

The editorial goes on to highlight the need to support Public Health and HVs in particular. Scotland, to its immense credit, is doing just that. But these initiatives will be weakened without the multidisciplinary team, and the relationship with, and input from, GP practices which provide multi-generational care.

“Children in the most deprived areas have significantly worse health compared to children living in the least deprived areas. They are more likely to have a lower birthweight, poorer dental health, higher obesity levels and higher rates of teenage pregnancy. They are also less likely to be breastfed, which is associated with a healthy start in life”. **Audit Scotland 2012**

The Multi-Disciplinary Team chapter outlined the loss of meetings in our practice over time. We do still manage a cut-down weekly MDT meeting with one representative each from the GP, HV, DN and the practice Mental Health Nurse teams. This is to consider patients with pressing issues, a minimum in terms of safety. We all know the models which worked for General Practice in the past – when practices could afford to take those approaches.

Professor Phil Wilson’s proposals chime exactly with those recommended by SHIP and reflect much lost to our own practice over the past two to three decades¹⁴⁷:

- *“Re-engage GPs with scheduled antenatal care. Follow the Danish model and have three regular reviews, with data sharing with midwives and HVs. The reviews should explicitly involve assessment of parental mental health.*
- *Re-engage GPs with scheduled child health surveillance, with a greater focus on parental mental health, family functioning and child neurodevelopment. Again this could follow the Danish pattern of visits at 5 weeks, 5 months and then annually to age 5. Full 2-way data sharing with HVs.*
- *And – crucially - have regular meetings, hosted in general practice, where the needs of all the vulnerable children on the practice list are discussed. Should involve attendance from midwifery, health visiting and social work and possibly voluntary sector, early years education and links workers. The aim should always be to find a way to provide joined-up care to support the parents wherever possible”.*

Vince McGarry, who managed the SHIP project, outlined that the MDT meetings were structured, separated into four ‘care’ groups with one being vulnerable children & families. He reports that the *“core of GP/HV/SW connectivity was effective in identifying vulnerability and addressing risk where this might not have occurred otherwise.....I recall several instances of implementing parental support for issues of mental health”¹⁴⁸.*

¹⁴⁶ Britain is broken: poor child health proves it. Editorial. The Lancet. Vol 393 February 2, 2019

¹⁴⁷ Professor Phil Wilson, Professor of Primary Care and Rural Health, University of Aberdeen; Professor of child health in general practice, University of Copenhagen. Personal communication.

¹⁴⁸ Vince McGarry, Project Manager, Glasgow City Health and Social Care Partnership, South Locality. Personal communication.

We must also be wary of further fragmentation. One potential adverse unintended consequence of the transfer of childhood vaccinations to a team out-with the practice (which in general we support), is loss of engagement and of the working knowledge of very vulnerable families. The ideal is for vaccinations to remain under the Health Visitor team (though not necessarily delivered by HVs) and in Lothian, where several models have operated over the years, this has been the one which has delivered the highest vaccination rates.

Child Health- What's It Got to Do With General Practice ?

Health Promotion Supporting Parenting Child and Youth Friendly
 Services Transitional Care Safeguarding Managing Sick Children
 End of Life Care Disability and Complex Needs Mental Health
 Medicines and Prescribing

'The RCGP firmly believes that general practice occupies a central position in children and young people's health, particularly in the diagnosis and management of illness and the promotion of health and wellbeing. We are concerned that unless the profession acts now to protect this important and trusted role, it will become eroded and lead to serious fragmentation of care for this vulnerable group of patients' (RCGP Child Health Strategy 2010-2015)

RCGP Child Health Strategy 2010-2015

Children, young people and mental health.

Yet again, mental health dominates, despite our knowledge that early experiences and development are key to mental health in later life. One in ten children and young people has a diagnosable mental health condition, and half of all mental health conditions begin before the age of fourteen. Yet specialist provision in Scotland is woeful, and simply not fit for purpose, particularly for older children, not covered by the Health Visitor programme. Those services in highly deprived communities are particularly pressurised. Because of its resource allocation, CAMHS has highly restricted referral criteria, and GPs report many referral rejections: Scottish Government is now investigating this further and has asked that these be audited, with findings acted on¹⁴⁹. If this is being done it is not visible to us. It also means that there is a large workload presenting both to schools and GPs for an age group where early intervention and adequate support might not only alleviate suffering, but also help reduce adult difficulties and morbidity.

The Scottish Government Strategy document also states that *"children and young people who have mental health problems but are not ill, or who have behavioural or emotional issues, may benefit from preventative or less intensive services. Improved support at tiers 1 and 2 could have the potential to tackle such issues earlier and stem the flow of referrals to the more intensive tiers 3 and 4"* (tiers 1 and 2 involving community and primary care services). But our patients rarely receive support at that level, with work coming back to General Practice and much need left unaddressed. Mental health worker support for children and young people in practices would be invaluable, and bring the potential for improved health in future generations.

¹⁴⁹ Mental Health Strategy: 2017-2027. Healthier Scotland; Scottish Government. March 2017 – Action 18.

3.7 Can General Practice make a Difference? - only if it is still there!

“Everything depends on leaders at practice level, demanding media attention, gaining public support, and insisting on material resourcing from governments, in return for which they can guarantee immensely greater efficiency of care generated by people who know each other.”

Julian Tudor Hart

General Practice needs a robust future workforce and the case for that in Scotland has already been well established¹⁵⁰, RCGP Scotland’s ‘From the Frontline’ report also outlining the changes required for that. Support at national planning level is crucial, but not sufficient. What the evidence tells us is that for doctors to want to become GPs requires early exposure to General Practice in a supportive, inspiring setting, from medical school on. But also, that the perceived severe pressures currently facing GPs and their practices are putting people off joining the profession. This is very expertly documented by the John Gillies report on undergraduate teaching¹⁵¹, helpfully endorsed by Scottish Government.

Doctors are more likely to stay in the type of practice in which they are trained, be that deprived or remote and rural. Deprived practices are less likely to be training ones, and whilst that has improved, it still holds in Scotland¹⁵². This helps sustain an inverse health *carer* law. The worry must be that as we have increasing pressures and a GP shortfall affecting all practices, those working in stressful deprived settings will be attracted elsewhere. We hear that GPs are preferring to become locums or salaried doctors after training (though many would like to be partners in the longer term). They are daunted by, and anxious about, the workload and responsibilities of partnership, particularly as GPs undertake ever-more complex clinical and leadership work in the community. This situation would surely be helped by 4-year training and by more post-graduate support.

The Pioneer Scheme¹⁵³ in Glasgow has been hugely successful: GP Fellows not only provide the backfill for protected sessions for host GPs, but are also actively engaged with, and part of, service development. The effect has been not only to retain some older partners who were thinking of leaving, but several Fellows have now elected to join as partners some of the most deprived practices in Scotland. Running alongside is a day release programme bringing learning to areas seen every day in Deep End practices, but rarely covered in standard curricula: migrant health, chronic pain, obesity, marginalised patients and so on. The needs are summarised by trainers working in deprived settings¹⁵⁴:

“The relative lack of access and exposure may result in GPs who lack confidence or competency in dealing with the complex health and social issues that deprivation brings: higher levels of addiction and child protection; dealing with third sector agencies; and managing multimorbidity in the context of social complexity”.

¹⁵⁰ From the Frontline. The Changing Face of Scottish General Practice. RCGP Scotland. 2019.

¹⁵¹ Undergraduate medical education in Scotland: Enabling more general practice-based teaching. Oct 2019.

¹⁵² Is there an association between socioeconomic status of General Practice population and postgraduate training practice accreditation? A cross-sectional analysis of Scottish General Practices. McCallum et al; Family Practice, 2019, 1–6 doi:10.1093/fampra/cmz071.

¹⁵³ <https://www.gla.ac.uk/researchinstitutes/healthwellbeing/research/generalpractice/deepend/deependpioneer/>

¹⁵⁴ GP speciality training in areas of deprivation: factors influencing engagement. A qualitative study. McCallum, M et al; BJGP Open 2019; DOI: 10.3399/bjgpopen19X101644.

And yet we also know, from the same paper, that GPs are keen to work in areas of socio-economic deprivation.

What is striking about the Pioneer programme is that it would surely benefit ALL General Practice, where time to consolidate GP skills and leadership also helps secure both retention and recruitment. Like some other successful Deep End projects (this one is double-award-winning!) - its long-term funding is not secured. If we cannot learn from excellent pilot projects which are successful on multiple levels, what hope is there for us?

There are far more discussions to be had. The Yorkshire and Humber Trailblazer project has been successful too and pioneered the concept of 'Fairhealth' with a curriculum to match¹⁵⁵. There could be much shared learning across the disciplines¹⁵⁶, and there are now radical examples of GPs learning by working alongside people living in the most desperate of situations. Dr Austin O'Carroll, with colleagues, has developed the North Dublin training scheme¹⁵⁷ specifically to train GPs to work with those most affected by social inequity¹⁵⁸. The GPs in training, and their patients, say it all and brings both inspiration and hope.

Our General Practice has been immeasurably enriched by trailblazers, many also producing hard evidence to support their assertions of what works. Numerous innovative ways of working have originated in Scotland, some referred to in this document. They have provided us with the tools for effective General Practice. We now need to make use of this once-in-a-generation opportunity to resource those and make them work.

Scotland's reputation is for its health inequalities, its drug-related deaths, its premature mortality. Let's seek and implement solutions and instead be known as a country, and a profession, addressing the leading health issue of our time.

¹⁵⁵ <https://www.fairhealth.org.uk/yorkshire-and-humber-trailblazers-2018>

¹⁵⁶ <https://www.aomrc.org.uk/statements/inclusion-health-academy-faculty-homeless-inclusion-health-joint-position-statement/>

¹⁵⁷ <https://vimeo.com/141778095>

¹⁵⁸ https://www.icgp.ie/go/become_a_gp/training_programmes/B6A4FA53-19B9-E185-83CAFD6FC0B651A8.html

4 SOLUTIONS and PRIORITIES.

4.1. Funding.

1. “Increase the proportion of NHS spending allocated to general practice to 11% to fully support the highest possible standards of patient care”¹⁵⁹.
2. Assess through a small number of pilot sites what is the APPROPRIATE level of resource for a blanket-deprivation GMS practice: the urgent and pressing need is in practices whose populations are overwhelmingly socioeconomically disadvantaged. This will also allow for: easier clarification of processes, aims and objectives as we start on this work; a smaller number of practices to account for, supporting more uniform approaches; potential for rapid feedback and change (plan-do-study-act writ large); less initial resource (with potential to build if it is successful). Too often in the past initiatives shown to work in deprived settings have subsequently been rolled out diluting the resource. Suggest in the first instance that ‘transformation funding’ be offered to all those with 60% or more in the most deprived quintiles - though other measures might need to be considered. Such practices would get additional support but would have to demonstrate internal change in line with the agreed model. Work on funding assessments should not delay the additional resource. Consider a Scottish enhanced service, or equivalent.
3. The Community Link Worker scheme is welcome but essentially means that those HSCPs with larger numbers of deprived practices (where they are mandatory) have to fund the programme from their PCIF allocation, ensuring that those covering eligible (including more deprived) practices received LESS funding for all other work. This is a very clear example of the Inverse Care law. In Edinburgh Link Workers cost over £1m p.a. Link Workers could be centrally funded for this programme and the money thereby ‘saved’ by HSCPs be used solely to give additional support to those practices for other work. This is particularly important as the early evidence is that Link Workers bring no reductions in health care utilisation¹⁶⁰.
4. Should Phase 2 proceed, ensure an inequalities assessment (and if need be adjustment) for workload assessments. The evidence is that consultations in deprived GP are more complex, stressful, involve more issues and are shorter. If we are committed to changing the future approaches to health inequalities in Scotland, this needs to be actively and transparently accounted for in any phase 2 calculations. The baseline premise should be that in deprived consultations workload is likely to be under-estimated by standard ‘bean counting’ approaches.

4.2. A New Kind of Practice

4.2.1. Co-ordination – Multidisciplinary Team working

1. Recognise that MDT working is crucial to develop care and maintain safety in highly deprived communities. SHIP secured 1 additional GP session for every 800 patients registered in the most deprived 15% data zone. That allowed longer consultation times for patients needing those. Again, as with SHIP, there would need to be definition of necessary processes: MDT meeting time; assigned Social Care Worker time and agreed attendees. The ideal is both adult and child/family SW input.
2. Disseminate learning from SHIP & find ways of creating new quality indicators through Cluster working.

¹⁵⁹ From the Front Line. The changing face of Scottish general practice. RCGP Scotland. June 2019.

¹⁶⁰ Evaluation of the Glasgow ‘Deep End’ Links Worker Programme. Stewart Mercer et al. NHS Scotland. May 2017.

3. Instigate a preventative, co-ordinated childhood programme, across the disciplines with:
 - GP time for antenatal care liaison: three reviews, with data sharing with midwives and HVs, and each explicitly reviewing parental mental health.
 - Agree on schedule of GP review with HV of child health, parental mental health, family functioning and child neurodevelopment.
 - Regular meetings (SHIP) to discuss the needs of all the vulnerable children on the practice list; with involvement from midwifery, health visiting and social work, early years education and Community Link Workers.

4.2.2. Contact and Comprehensiveness - Meeting need.

1. **Implement the GPs at Deep End recommendation** of additional clinical capacity - providing one extra GP (or ANP) session per week per 1,000 patients in blanket deprivation practices, with assured provision of 5/1,000 patients evidence-based 30mins 'CARE appointments' per year.
2. **One extra PN session per week** per 2,000 patients to review vulnerable or housebound multi-morbidity patients and address unmet NCD need.
3. **A new PN team-based practitioner (senior nurse / pharmacist)** for behavioural change support with those with NCDs who are not doing well, and new approaches to chronic pain. This would require a psychologically informed approach.
4. **An additional in-house mental health worker** per 5,000 patients.
5. **In-reach psychiatric services** with a liaison psychiatrist allocated to each transformation practice.
6. **Transport and buddy system** to take patients to appointments (both hospital and General Practice).
7. **Additional Clinical Administrative staff** – capacity for appointment co-ordination and tracking high risk patients (including those identified as being at risk of cancer).

4.3 Improving Primary-Secondary Care interface working.

1. **Primary-Secondary care interface groups** to be mandatory in each Board. And each to consider any issues discussed specifically in terms of health inequalities
2. **New Out-patients targets** for: implementing text reminders; patient-appropriate letters, reducing DNAs of those in the most deprived SIMD groups; appointment enabler staff who will also track patient progress
3. **All DNA letters** to GPs to indicate indication for referral (SCI Gateway text)
4. **Urgent Suspicion of Cancer** DNAs reviewed first by secondary care and not automatically discharged.
5. **Hospital at home** for any age in those with blanket deprivation.
6. **In-reach psychiatric services** (see above).

4.4 Public Health

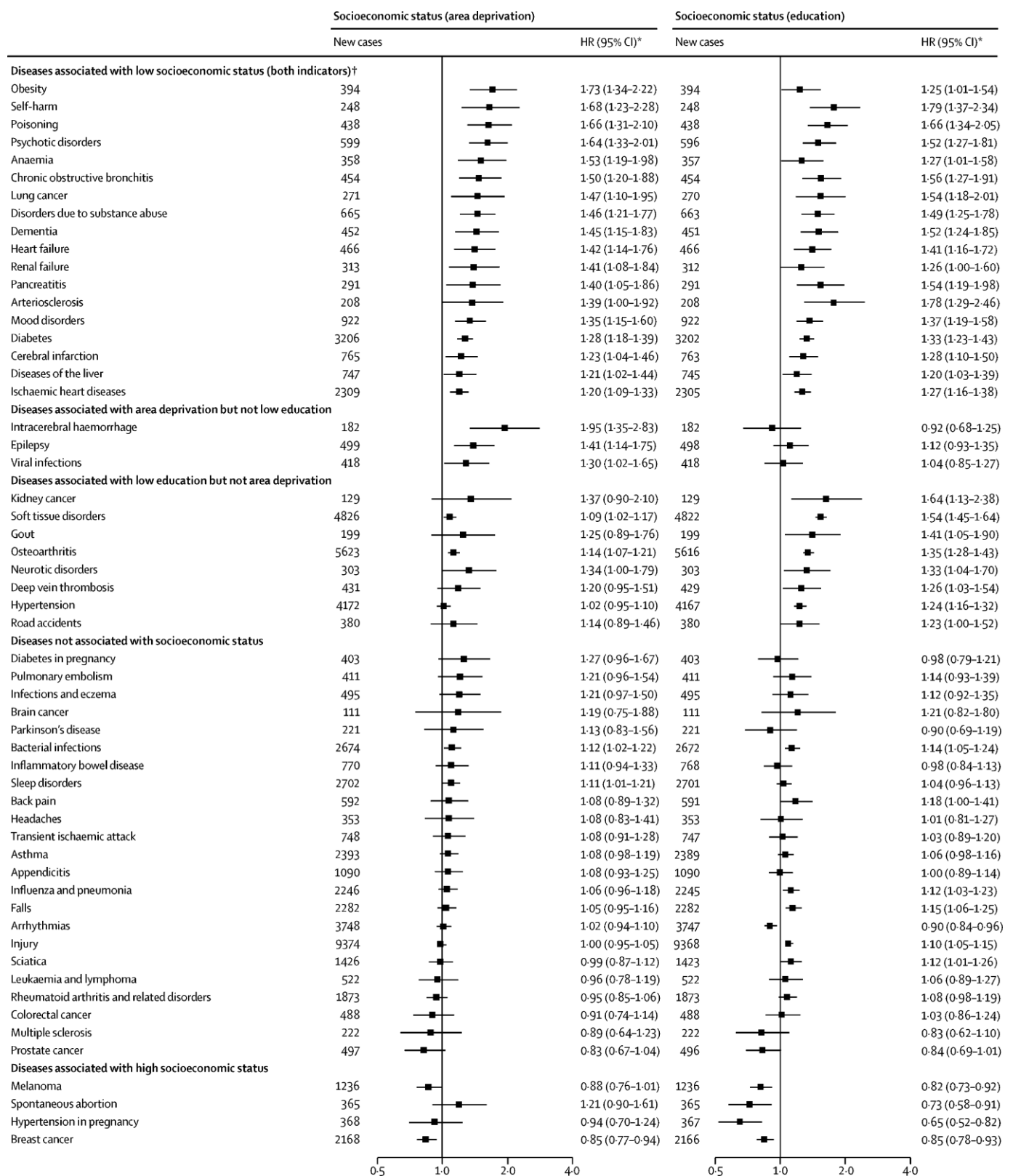
1. **Establish formal links between Public Health Scotland**, Cluster Groups and deprived practices – with a specific remit to develop and monitor outcomes in the transformation practices. Produce annual report on this and health inequalities progress at HSCP level. We need to develop a new 'Epidemiology of General Practice'.

2. **Maintain funding for the Scottish School of Primary Care** – its pioneering middle ground research is crucial to developing and maintaining the evidence base for cost-effectiveness of all our new General Practice work (deprived or otherwise).

4.5 Workforce planning – holistic overview

1. Young GPs commonly start their professional lives working in out-of-hours or as locums: many will be reluctant to join practices (in any capacity) because of the challenges outlined in this document. The longevity of general practice depends on investment beyond an income - GPs need to be emotionally and intellectually invested in General Practice. We need up to date workforce planning - to predictively plan where GP numbers should be boosted. This applies to other members of the extended team too.
2. Fully implement the John Gillies report with a *stated timescale* for doing so.
3. Introduce the Pioneer Project to all the transformational practices, but consider it for all Scottish General Practice too.

Appendix 1 – socioeconomic association with disease¹⁶¹



¹⁶¹ Association between socioeconomic status and the development of mental and physical health conditions in adulthood: a multi-cohort study. Kivimäki et al; Lancet Public Health. January 30th 2020. [https://doi.org/10.1016/S2468-2667\(19\)30248-8](https://doi.org/10.1016/S2468-2667(19)30248-8)

Appendix 2 – Edinburgh SAF uplifts (all figures Edinburgh HSCP in consultation with ISD):

| % of Population in Q1 | No. of practices | Population in Q1 | Practice | % Q1 | GS uplift* (nearest £) |
|-------------------------|------------------|------------------|---|-----------|------------------------|
| >70 | 2 | 9,417 | Craigmillar | 72.9 | 0 |
| | | | Niddrie | 72.6 | 13,443 |
| 60-69 | 2 | 16,909 | Muirhouse | 68.3 | 0 |
| | | | Crewe | 64.3 | 0 |
| 50-59 | 2 | 6,104 | Gracemount | 54.2 | 45,401 |
| | | | Dr Sharpe & Co | 50 | 34,477 |
| 40-49 | 3 | 12,304 | Sighthill | 47.5 | 73,565 |
| | | | Ferniehill | 45.8 | 22,675 |
| | | | Whinpark | 43.8 | 5,165 |
| 30-39 | 4 | 9,220 | Southern Medical | 36.9 | 41,345 |
| | | | Inchpark | 34.4 | 58,246 |
| | | | Liberton | 31.1 | 18,100 |
| | | | Milton | 30.5 | 33,776 |
| 20-29 | 9 | 15,572 | Summerside | 29.9 | 13,286 |
| | | | Southfield | 25.2 | 36,654 |
| | | | Leith Mount | 25.1 | 0 |
| | | | Mackenzie | 23.9 | 0 |
| | | | St Leonard's | 23.4 | 41,047 |
| | | | Firrhill | 23.1 | 7,442 |
| | | | St Triduana's | 21.2 | 79,609 |
| | | | Durham Road | 20.4 | 13,813 |
| | | | Baronscourt | 20.3 | 40,700 |
| SCOTTISH AVERAGE | | | | 20 | |
| 10-19 | 10 | 10,390 | Victoria Practice | 18.7 | 20,059 |
| | | | Davidson's Mains | 17 | 11,374 |
| | | | Leith Surgery | 14.7 | 0 |
| | | | Steve Allan & Partners | 14.7 | 1,302 |
| | | | Slateford | 13 | 64,246 |
| | | | Dalkeith Road | 12.9 | 14,834 |
| | | | Craiglockhart | 12.6 | 0 |
| | | | The Long House | 11.5 | 42,874 |
| | | | Brunton Place Murrayfield Medical Centre | 11 11 | 0 26,213 |
| 5-10 | 4 | | Springwell | 9.9 | 3,366 |
| | | | Marchmont | 7.8 | 12,626 |
| | | | Ladywell East | 7.1 | 42,237 |

| | | | | | |
|---------------|-----------|---------------|------------------------------|-----|--------|
| | | | Ladywell West | 5.3 | 48,750 |
| 2-5 | 14 | | South Queensferry | 4.9 | |
| | | | Blackhall | 4.6 | 5,185 |
| | | | Dr Gray & Partners | 4.1 | 0 |
| | | | Boroughloch | 4.1 | 17,296 |
| | | | Dr Ferguson & Partners | 4.1 | 0 |
| | | | Meadows | 3.4 | 14,651 |
| | | | Murrayfield Medical Practice | 3.2 | 46,340 |
| | | | West End | 2.9 | 0 |
| | | | Hopetoun | 2.9 | 0 |
| | | | Eyre Group Practice | 2.6 | 36,326 |
| | | | Green, Stockbridge | 2.6 | 0 |
| | | | Leven, Tollcross | 2.6 | 0 |
| <2 | 7 | 321 | Gilmore | 2.5 | 0 |
| | | | Colinton | 2.5 | 0 |
| | | | Cramond | 1.5 | 30,743 |
| | | | Braids | 1.2 | 68,717 |
| | | | Dr Shaw, Stockbridge | 1.2 | 16,388 |
| | | | Grange | 0.4 | 36,431 |
| | | | Morningside | 0.3 | 18,807 |
| | | | Bruntsfield | 0.1 | 0 |
| | | | Pentlands | 0 | 64,870 |
| TOTALS | 56 | 86,897 | | | |

**As per original new contract allocation of 2017*

The table does not include the following (GS uplift follows practice name) as either outliers, 2C practices or recent transition from 2C where full data not currently available (*):

- Challenging Behaviour - £938
- The Access Practice - £0
- Riccarton - £0
- The University Practice - £47,085
- Hermitage Medical Practice - £17,697
- Barclay Medical Practice*
- Ratho Medical Practice*
- Southside - £18,671
- Restalrig - £0
- Wester Hailes - £0
- Dr A Millar - £0
- Mill Lane Surgery - £19,019
- Links Medical Centre - £0
- Eastcraigs - £14,489
- Parkgrove - £50,860

Appendix 3 – patient account of living with multi-morbidity.

Living with Chronic Conditions

I was first diagnosed with C O P D, around 2004/5 aged 41 ½. I had been suffering for a while with constant chest infections and a cough that would just not go away; I was a smoker at this time although I have never been a heavy smoker never any more than 10 a day. I was then referred to the Local Hospital (Edinburgh Royal) where after quite a few tests they diagnosed the problem as being C O P D. At this time the doctors then checked for a Gene Deficiency (not sure of name) as they had thought it was very unusual but not heard of, for someone my age to actually have C O P D. Once this test was ruled out C O P D was confirmed. I didn't actually stop smoking at this time instead cut down as the only symptom apart from concurring chest infections which cleared up each time with medication was a little bit breathlessness.

I then developed a pain in my left leg when I walked on hard ground (outside) this pain got worse and my muscle seized up each time even after just a few steps, this was eventually checked at Hospital and after tests they diagnosed a slight blockage in one of the arteries (again I can't remember the actual name of this) although this was diagnosed, no treatment was needed at that time and I was given a daily 75mg dose of aspirin and was told to do plenty of exercise (especially walking) to help relief the pain, it eventually subsided and then stopped altogether unless I tried to tackle a hilly street when the pain would sometimes flair up.

I carried on with life and (exercise apart to toughen up leg muscle) I didn't at that time make any more changes to my daily routine as I have always been a very active person and carried on as normal as I could.

After a few years my Breathlessness got worse and now at this time was starting to have an effect on my daily and working life which meant unexpected time of work without much or any notice. I returned to my GP who gave me Steroids and Antibiotics as they had helped in the past, this time nothing helped and although my symptoms were very similar to what I experienced on first developing C O P D, something told me this was different and eventually another GP asked if I thought it may actually be coming from my Heart I said at the time I wasn't sure but couldn't rule it out, so I was referred immediately to Hospital for a Stress Test, this picked up a suspected blockage. I was booked in for an Angiogram and told to refrain from work until it was checked. This was done about 6 weeks later, a blockage was found and a Stent was put in to unblock and keep the Artery open. I felt immediately better with less breathlessness and carried on with life.

This was the point I put my life into perspective. Smoking ended there and then and I went back into fitness mode to make life easier for myself. I was a fitness fanatic when I was younger even late into my 20s and beyond doing Marathons annually, playing Football most weekends and any sport I liked at the time. I am unable to do many of the things I done back then as some can make me very breathless so I now aim for what I know I can do comfortably. I have a daily (well most days) routine of lifting hand weights (Dumbbells), exercise bike/cross trainer for 15 min each time, I try and do cardio stuff but as my job involves heavy lifting I need strong arms/legs more to be able to do my job, I prefer to go down this road, I changed my Diet to cut out foods that bloat me as this caused pressure on the lungs making breathing more difficult, walk most nights after or before tea trying to average at least 10k steps per day this is sometimes reached at work just walking about the kitchen.

I have been in my Job as a Chef for Local Council for almost 30yrs, and although I have many Chronic Illnesses, my job isn't easy I am not just the Chef, I actually self manage the whole kitchen and also do food for delivery to another unit all by myself (cutbacks) I carried on with my duties as best as I could without much problem and hardly any time off due to my illnesses.

Early this year (Feb 2019) after returning as fit as I had been in a long time from my Annual holiday (which I changed to winter months to suit the weather abroad due to breathing problems) I became very unwell, my breathing was out of control and I had next to no energy levels at all. I couldn't climb any kind of stairs as I would almost pass out before I reached the top and would then panic which made the symptom 10 times worse and would actually scare me, thinking nothing from the chest upwards was working, so made me panic more.

I was sure my Heart problem had returned as the symptoms of both can very similar. My GP then took me to the stairs in the surgery and after just a few steps she was able to determine it was my Oxygen Levels dropping which was make my heart rate elevate that's why I was panicking more, thinking I was taking a heart attack, but any more heart problems where quickly ruled out at Hospital, which left the C O P D as the main problem for me, I take my regular medication faithfully including daily Inhalers and stick to a regular fitness routine, at the moment I am still in Full Time Employment and working with my HR have been allowed extended periods off work if it is related to any of my Illnesses, this takes the pressure of a bit. I have been in my post almost 30 yrs and have set a goal to work till am 55 which is next July then reevaluate where my health stands and take it from there.

Living with any Chronic Illness can be tough to deal with at times and although I have a few, I won't (If I can help it) let it stand in my way and try and go on as best as I can.

I have started Pulmonary Rehabilitation, and my main goal from that is to be able to master stairs without panic this is working out well.

I lost both my Parents young due to Cancer and Diabetes problems, and am determined to live my life as best as I can, considering my illnesses I am managing well.

I now know when I need to see my GP when I become unwell and do so immediately. I purchased a Finger Oxygen meter which I use most days to keep an eye on oxygen levels and know what levels are good and when I need to seek help. Having illnesses like mine can be managed if you are prepared to put in the effort that the medical team put in, no good sitting back and doing nothing, it just won't work, It can't be cured but it CAN be managed!!.

I have lost so many friends at a young age from this area with the same or similar illnesses but many of them in my opinion may still be here today if they helped the Doctors who are trying to HELP them but many didn't and carried on their bad ways,

You only get one shot at life and as ill as I may be or get, I definitely won't or try not to let it stand in my way.....

As an addition to what I have written above. I have just returned from a girls week in Benidorm to which I came home feeling very Congested, seen my GP and all regular checks seemed fine at this point, and we both put it down to leaving air Con on in apartment and also air Con on Plane. My symptoms worsened over the weekend (I had to go to late night Pharmacy for prescription) and for the 1st time in my life the following day, I found myself calling an ambulance, checks they did at home didn't seem to relate to my C O P D at the time as my lungs where at that point still strong and Oxygen fairly ok so they didn't think I needed to go into Hospital but made me make an appointment with GP for next day over the phone while they were in my house, I did this and got an emergency app there and then.

The GP I seen had suspected a Blood Clot due to Flying home a few days earlier as my breathing became very erratic and Oxygen levels dropping fast, this was eventually ruled out at hospital and

after more bloods etc they decided it was in fact a flare up of my C O P D and a change of Antibiotics and another course of Steroids was prescribed to help sort this out along with 3 ltr of Oxygen overnight. I am home now but once again off work, the medication is now working my breathing has stabilised and Oxygen levels back to normal, I am beginning to gain strength back slowly.

As this set back occurred again after being abroad, it got me thinking about actually Flying whilst having Chronic/Lung issues, Air con on planes along with cabin pressure changes, has set me thinking if its worth the hassle even Flying as my big two flare ups recently have occurred on return flights home. Something for me to think about before my next planned (fully paid) holiday for next January!!

July 2019.

Appendix 4 - A day in the life of a Deep End GP.

I shadowed a GP working in one of Glasgow's most deprived areas. She arrived at 7.20 am on a Monday morning to deal with 38 items of correspondence, all needing to be checked and prescriptions altered, a patient phoned, or arrangements made, before the day even started. The telephone calls to patients all began the same way: 'This is Dr xxxxx, Hello John, Hello Helen etc'.

As the on-call doctor on a busier day than usual, she completed seven house visits that morning, each taking 30 minutes. It took an hour to enter all the details back in the practice and make the necessary arrangements, leaving 5 minutes for lunch. A colleague who took over the on-call for the afternoon made three more home visits, dealt with 22 telephone consultations and six emergency appointments.

The afternoon surgery ran for 3 hours, and would have lasted longer if all the booked patients had attended. Problems addressed included: cancer, depression, agoraphobia, asthma, self-harm, bereavement, domestic violence, heart failure, alcohol abuse, dementia, social neglect, and so on, often in combination. She left for home after a 12-hour day, with 61 items of correspondence yet to deal with.

I didn't see any short or trivial consultations. There were no 'worried well' patients, but a worried doctor leaving no loose ends when dealing with a series of patients with complicated health issues and other problems, all of whom she knew well. One patient said 'Dr xxxxx' is the only person I can relate to'. Another came in grim-faced, avoiding eye contact, almost in tears, but left 15 minutes later, beaming a smile.

I was struck by the intensity of the day, every patient getting the same attention. The doctor was too busy to put on an act: 'We have to focus on every single patient and listen. A lot feel they bother us and we cannot fob them off by being stressed or not dedicating time'. The practice has learned from experience that it is unsafe to assume that if problems are serious, patients will consult in time.

There are three GP partners and none work full-time: 'You cannot work fully concentrated for a whole day without recovery time'. The practice is wondering whether it might attract more students to their list to dilute the clinical load. Burn-out is an ever-present hazard. The level of work is hard to sustain.

The consultations I observed showed a GP at the top of her game. Previous contact, shared knowledge, and trust were fundamental to what could be achieved in a short space of time. Despite the pressures of practice in a deprived area,¹ the GP was ambitious for what she could achieve with, and for, her patients.

One seldom gets the opportunity to observe a GP through a whole working day. What I saw in Glasgow reminded me of working with Julian Tudor Hart at Glyncorrwg in South Wales. He is best known for research on high blood pressure, but his daily practice and longterm achievements were characterised by his unconditional approach to all patients, whom he came to know well, whatever problems or combinations of problems they had. In the BBC documentary series on the NHS Pioneers, Mary Hart said 'Many people sentimentalise us, but we were just doing our job, for which we were paid, providing the NHS for our patients.'²

In an article with Paul Dieppe, Tudor Hart described the poisonous effects which can arise when, for whatever reason, health professionals become indifferent to what happens to the patient in front of them.³ I remember him talking of the importance of finding something to like about every patient. There was no-one about whom there wasn't something to like.

In the 1950s, Collings described poorly-resourced areas of general practice as 'sufficient to turn a good doctor into a bad doctor in a short period of time.'⁴ Such gross effects are less common today. A more subtle effect is whether practitioners set the bar high or low when dealing with patients.

The incentives of the Quality and Outcomes Framework, involving only 12.7% of GP consultations,⁵ have little to do with this aspect of practice. Professionalism and caring for patients are what matter, and both are at the discretion of individual practitioners.

Consultation rates are used as crude measures of practice activity and proxy indicators of health need. Such data convey nothing of the duration, content, quality, or consequences of consultations, and their use sustains the inverse care law.⁶ What I saw in 1 day in one practice in one part of the country goes unrecorded in the scheme of things, reflects poorly on the NHS commitment to equitable resource distribution, but spoke volumes for the professionalism of one GP.

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