Health and Wellbeing Board
25 May 2022

	Report for Information
Title:	Update on the Nottingham City Place-Based Partnership (PBP)
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Brief summary:	This paper provides an update on the Nottingham City Place-Based Partnership. Included is an update on the governance established to oversee the delivery of the new Joint Health and Wellbeing Strategy and an update on a series of PBP executive development sessions to reaffirm the ambitions of the place-based partnership.

Recommendation to the Health and Wellbeing Board:

Note the update on the work being undertaken by the Nottingham City Place-Based Partnership

Contribution to Joint Health and Wellbeing Strategy:	
Health and Wellbeing Strategy aims and outcomes	**Summary of contribution to the Strategy**
Aim: To increase healthy life expectancy in Nottingham through addressing the wider determinants of health and enabling people to make healthy decisions	The Nottingham City Place-Based Partnership (PBP) is discharged responsibility for the oversight of the delivery of the Joint Health and Wellbeing Strategy (JHWS) 2022 – 2025.
Aim: To reduce health inequalities by having a proportionately greater focus where change is most needed	
Priority 1: Smoking and Tobacco Control	

Priority 2: Eating and Moving for Good Health	
Priority 3: Severe multiple disadvantage (SMD)	
Priority 4: Financial wellbeing	

How mental health and wellbeing is being championed in line with the Board's aspiration to give equal value to mental and physical health
The Place-Based Partnership has a programme focussed on supporting Nottingham citizens to better access preventative support to improve mental health and wellbeing. This programme is aligned with the programmes being delivered as part of the Joint Health and Wellbeing Strategy 2022 – 2025.

Background papers:	**Appendix 1:** **University of Nottingham report: Health Inequalities in Nottingham: historical trajectories of the wider determinants**

Nottingham City Place-Based Partnership Update

Background

1. This paper provides an update on the Nottingham City Place-Based Partnership (PBP). Included is an update on the governance established to oversee the delivery of the new Joint Health and Wellbeing Strategy (JHWS) and an update on a series of PBP executive development sessions to reaffirm the ambitions of the place-based partnership.

Oversight of the Joint Health and Wellbeing Strategy

2. At the January meeting of the Health and Wellbeing Board it was agreed that the Nottingham City Place-Based Partnership would be discharged responsibility for the oversight of the delivery of the Joint Health and Wellbeing Strategy 2022 – 2025.

3. Following approval of the Joint Health and Wellbeing Strategy 2022 – 2025 at the March meeting of the Health and Wellbeing Board, the PBP has established a Programme Oversight Group to oversee the delivery of the Strategy.

4. The overarching role of the Programme Oversight Group is to oversee the delivery of all PBP programmes. The Programme Oversight Group will monitor the progress of the PBP programmes, providing support and challenge to programme leads in alignment with the desired outcomes, key deliverables and related milestones for each programme.

5. Each programme has an executive sponsor from the PBP Executive. Through the PBP Executive, the PBP will report on the progress and delivery of the JHWS programmes to the Health and Wellbeing Board.

6. Initial delivery plans for each of the four JHWS programmes are due to be submitted to the Health and Wellbeing Board ahead of the meeting in July 2022.

Place-Based Partnership Executive development sessions

7. The Health and Care Bill received Royal Assent and became an Act of Parliament on 28 April 2022. From 1 July 2022 Integrated Care Systems will become statutory with the establishment of Integrated Care Boards (ICBs) and Integrated Care Partnerships (ICPs). The new legislation and supporting guidance make it clear that place-based partnerships have a key role to play in supporting and developing effective models for joined-up working at ‘place’.

8. With the expectation that the Nottingham City PBP is to mature to become a key delivery partnership, incrementally taking on greater levels of delegated decision-making it is important that partners consider how the partnership will need to operate going forward compared with its current approach.

9. In the formative years of the PBP, partners have developed the partnership and ways of working through a programme approach. To ensure the effective and sustainable delivery of JHWS and wider PBP programmes it is important that PBP leaders work together to create the conditions and culture that allow staff working in the city to effectively work together and collectively own the improvement of health and wellbeing outcomes of people living in the city.

10. On 10 May, the members of the PBP Executive took part in the first of three scheduled development sessions to consider how PBP leaders will build on the work of the partnership in its formative years to establish a key delivery partnership in the Nottingham and Nottinghamshire Integrated Care System.

11. At the session on 10 May, alongside a review of progress to date, partners discussed the future ambitions of the partnership with particular consideration given to the wider determinants impacting on the health and wellbeing of the Nottingham City population.

12. As part of these discussions, partners considered research undertaken by the University of Nottingham (**appendix 1**). In addition to some of the historical trajectories of the wider determinants which have impacted on the health and wellbeing of people living in Nottingham over several decades, the research highlights the correlation between trust in statutory services and health outcomes.

13. Partners considered the findings of the research in relation to the ambition to reduce health inequalities, discussing the importance of building trust with communities, recognising the power asymmetry in these relationships. Partners will give further consideration to these findings in setting out future plans at the development sessions on 1 June and 22 July.

Recommendations:

The Health and Wellbeing Board is asked to:

14. **Note** the update on the work being undertaken by the Nottingham City Place-based Partnership.

Appendix 1: University of Nottingham report: Health Inequalities in Nottingham: historical trajectories of the wider determinants

Executive summary

Nottingham is subject to significant health inequalities. The typical wider determinants of health inequality are present in the city, though with variable concentration across the city's regions. Factors present in the city also correlate with factors known to correlate with low levels of trust—itself an impediment to improving health outcomes. Interventions to improve financial well-being, diet and physical well-being, and trust are discussed. Plans for future research conclude the report.

1. Introduction

The report considers health inequalities in Nottingham City. Specifically, it explores the historical trajectories of the wider determinants of Health Inequality, recommending a range of possible interventions, and outlining areas for future research.

The first part of the report (section 2) sketches the current general picture of health in Nottingham, alongside known determinants of health inequality and another factor, trust, that may be salient to health outcomes.

The second part of the report (section 3) gives a high-level description of Nottingham's current position with respect to some of the determinants of health inequalities, providing historical context in key areas.

The third part of the report (section 4) draws on the academic literature to suggest particular interventions that may help to reduce health inequalities, also providing relevant historical context where appropriate.

The fourth and final part of the report (section 5) suggests areas for future research.

2. Health Inequalities, wider determinants & other factors

Data from the Office for Health Improvement and Disparities shows that Nottingham remains generally below the national average for health outcomes. Representative data points are listed, below.

Indicator	Period	Nottingham			Region	England	England		
		Recent Trend	Count	Value	Value	Value	Worst	Range	Best
A01a - Healthy life expectancy at birth (Male)	2017 - 19	–	-	56.4	62.2	63.2	53.7		71.5
A01a - Healthy life expectancy at birth (Female)	2017 - 19	–	-	55.6	61.9	63.5	55.3		71.4
A01b - Life expectancy at birth (Male, 3 year range) New data	2018 - 20	–	-	76.6	79.2	79.4	74.1		84.7
A01b - Life expectancy at birth (Female, 3 year range) New data	2018 - 20	–	-	81.0	82.7	83.1	79.0		87.9
A01b - Life expectancy at birth (Male, 1 year range) New data	2020	–	-	75.6	78.5	78.7	73.6		83.3
A01b - Life expectancy at birth (Female, 1 year range) New data	2020	–	-	80.7	82.3	82.6	78.0		87.8
A01c - Disability-free life expectancy at birth (Male)	2017 - 19	–	-	58.3	61.7	62.7	53.4		69.6
A01c - Disability-free life expectancy at birth (Female)	2017 - 19	–	-	55.1	60.2	61.2	49.9		70.3
A02a - Inequality in life expectancy at birth (Male) New data	2018 - 20	–	-	8.4	9.2	9.7	17.0		2.6
A02a - Inequality in life expectancy at birth (Female) New data	2018 - 20	–	-	7.6	7.6	7.9	13.9		1.2

Notably, health relative to the national picture has improved since 2004, with Nottingham dramatically reducing the number of LSOAs that are in the lowest 10% nationally.

Table 12: The Extent of Extreme Health Deprivation and Disability

	2019	*2015*	*2010*	*2007*	*2004*
City LSOAs in worst 10% nationally	55	*63*	*55*	*70*	*85*
City LSOAs in worst 20% nationally	115	*119*	*111*	*122*	*130*

Table 13: LSOAs Most Affected by Health Deprivation and Disability

City rank	Ref	Location	Ward	National Rank 2019	*National Rank 2015*
1	E01013861	Bilborough East	Bilborough	33	*72*
2	E01013814	The Arboretum W	Hyson Green & Arboretum	329	*1107*
3	E01013859	Beechdale Estate	Bilborough	335	*348*
4	E01013948	Radford Flats	Radford	420	*531*
5	E01033411	St Anns Plantagenet Street	St Ann's	503	*689*

Alongside data on health inequality, the wider determinants of health inequality require discussion.

The wider determinants of health inequalities are widely known. They include factors such as the built and natural environment; education; income, work and the labour market; Crime and social capital (Public Health England, 2018: chapter 6).

In addition to these well-known factors, research has demonstrated that there is a correlation between trust and health outcomes (Birkhauer, et al. 2017). It has also been shown that, in some contexts, (for instance, in the US) there is a correlation between low income and low trust in physicians (Blendon et al, 2014). It has also been demonstrated that low levels of trust within an ethnic group create barriers to taking up social and financial opportunities (Smith, 2010). Low levels of trust thus threaten to undermine actions planned to help reduce health inequalities and are, themselves, correlated with less favourable health outcomes.

With this in hand, we then need to know understand Nottingham's current position with regards the wider determinants of health, as well as their historic context.

3. Current and historical position

The wider determinants of health inequality are divided into two, in this section, and are its main focal points. These two tranches of determinants are the economic (and directly economically related) factors and wider demographic issues. The section begins by charting some of the historic context for both.

3.1 Historic Context

Nottingham's recent historical context is a part of wider social and industrial changes across the UK.

In older industrial Britain there has been job growth in the wake of industrial decline but all too often it has been in low-productivity, low-wage activities. In the former coalfields, for example, two of the prime sources of new jobs have been call centres and warehouses. The Yorkshire, Derbyshire and Nottinghamshire coalfields, for instance, have a central location and ready access to the motorway network and have become prime destinations for national distribution depots. A well-publicized example, on the site of the former Shirebrook Colliery in Derbyshire, is the national warehouse of Sports Direct, where most of the workforce is employed on zero-hours contracts and low wages (see, e.g., The Guardian, 2015). Beyond the call centres and warehouses, growth in consumer spending has fuelled job growth in shops, hotels, pubs, restaurants and takeaways. Few of these new jobs are well paid, and many are part-time. It is the weakness of labour demand in older industrial Britain, stripped of its once dominant employers, that has enabled the new employers to get away with paying low wages. The ex-miners and ex-steelworkers may have baulked at the prospect of work in a call centre or warehouse and opted out of the labour market instead, cushioned by redundancy pay, early entitlement to pensions and disability benefits, but their sons and daughters have never faced the same choices (Alcock, Beatty, Fothergill, Macmillan, & Yeandle, 2003; Beatty, Fothergill, Houston, Powell, & Sissons, 2009a). With little possibility of remaining on JSA for long periods they have had to accept whatever work they can find, particularly as some employers have been quick to turn to migrant workers from Eastern Europe as an alternative supply of low-wage labour (Dench, Hurstfield, Hill, & Akroyd, 2006). Women's growing involvement in the labour market adds a further twist (Beatty et al., 2009b). In the places once dominated by heavy industry the tradition used to be that male wages supported whole families. Relatively few women with children held paid employment, especially on a fulltime basis. That more women in these places now look for paid employment should be welcome progress but they do so in some of the most problematic labour markets in the country. Local economies have to grow very fast indeed if they are to not only replace the jobs that have been lost but also keep up with new labour supply. In practice, the growth has been insufficient and the result has been worklessness, part-time employment and low wages. (Beatty, C. and Fothergill, S. 2017)

These themes are played out in Nottingham.

Up until the early 20th century, textiles dominated Nottingham's economy, at which point there is evidence of diversification, with brewing, tobacco and coal becoming more significant (see Rossiter and Smith, 2017). Later, declines in textiles and coal were offset by the rise of Boots, Imperial Tobacco and Raleigh. This group, 'was to sustain the local economy through the difficult years of decline in traditional industries' (Chapman, 2006: 480). By the 1960s, each of these companies had around 10,000 employees.

Recent reporting highlights the shift away from light industry and manufacturing, with the following given as the top 10 largest employers in Nottinghamshire (estimated figures of employed staff members included)

1. Nottingham University Hospitals Trust - 13,600
2. Nottingham City Council - 8,928
3. Nottinghamshire County Council - 8,155
4. Nottinghamshire Health Care Trust - 7,500
5. Boots UK Limited - 6,000
6. University of Nottingham - 5,000
7. E.On - 5,000
8. Sherwood Forest Hospitals Trust - 4,558
9. Nottingham Trent University - 3,309
10. Nottinghamshire Police - 3,200 (Nottingham Post, 2018)

These changes to the economy flow from the cease of major manufacturing operations (including by both Raleigh and Players prior to the start of the millennium. Boots prospered for a little longer, but as the figures reveal employment now is significantly lower than it once was).

The turn of the millennium is an interesting point to review. Redundancies in Boots around 2001 followed closely the closure of the last Raleigh manufacturing plant in Nottingham; another major manufacturing plant in the city, Royal Ordnance, owned by British Aerospace, had also recently closed. This significant industrial decline is indicative of a very particular trajectory within the City.

This shift in industrial focus in the city is highly significant. During the middle of the 20th Century, Economists (Wells, 1966: 405) were able to describe Nottingham as an outstanding example of an economy with 'a well-balanced employment structure'. By 2005, this picture had changed significantly, not just away from manufacturing, but towards Business Administration and Support Services.

Nottingham's specific blend of commerce and industry left it vulnerable to the effects of the 2008 recession. In 2019, Lawton et al. reported that,

> Although employment in both the UK and the East Midlands region has recovered from the recession that started in 2008 – and is now at or close to record high levels – this does not apply to Nottingham. In 2017, Nottingham was the only one of the eight English large and medium-sized 'Core Cities' which had an employment rate below the pre-recession level. Nottingham had the lowest employment rate out of the eight cities in 2017.

They further noted that

> [t]he structure of employment by industry reveals a very significant over-representation of employment in "Business Administration and Support Services", which accounts for almost a quarter of Nottingham's employment.

This shift, to a lack of balance in employment structure, and relatively low employment, is accompanied by high levels of economic inactivity and low levels of productivity within the city. In Nottingham, the average earnings of people working in the city (but potentially living elsewhere) significantly exceeds the earnings of those living in the city. Further, the economic structure of Nottingham means that the available jobs are less likely to be 'good jobs'; with (relatively) low levels of educational attainment in the city the preponderance of good jobs, requiring higher skill levels, are more likely to be held by skilled commuters travelling into the city and into the minority, more productive workplaces (see, Lawton et al, 2019).

As a part of this change, and as indicated by the identity of the major employers, given above, Nottingham has become home to a significant body of employment in health and bioscience. The opening of QMC in 1977 constituted a significant addition to the city's science—and healthcare—base. One of the largest teaching hospitals in England, QMC has helped stimulate demand for health-related bioscience services and expertise (Rossiter, 2017). These industries bring with them a combination of highly skilled and well remunerated roles, that attract talent nationally, as well as lower skilled and less well remunerated roles, that tend to recruit more locally. This narrative is well supported by the data, which has a higher % of the city's population in elementary occupations than one would expect, given the county and national picture (see, Lawton et al, 2019).

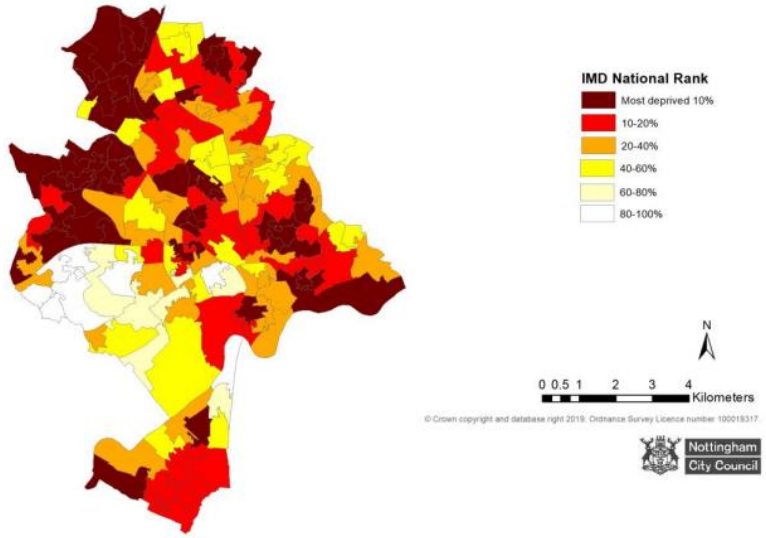
3.2 Current Economic Position

With that context in mind, the current economic picture for residents is unsurprising.

Nottingham is ranked at the 11th most deprived area in England in 2019 (also as the 8th in 2015 and 20th in 2010), but there is a clear difference across the city (see map below).

There has also been a change since 2004, as fewer areas of the city now rank with the most deprived areas of the country – only four areas are in the most deprived 10% compared to 13 areas in the past.

Map 1: National Ranking of City Super Output Areas, 2019



Interactive map for seven domains of deprivation by postcode: https://fryford.github.io/imdmap/

The remainder of this section (3.2) of the report focuses exclusively on the economic factors of income and employment. Other dimensions of deprivation are described in the section (3.3) that follows.

3.2.1 Income

We can chart some of the issues around income, both by region and impact on specific age profiles within the city.

To illustrate some of the changes at a region-level, in 2019, Aspley dropped to the 91st most deprived areas for income, out of 32,844 areas in the country, from 13th in 2015, and the area is in the lowest 10% for income deprivation.

Table 7: LSOAs Most Affected by Income Deprivation

City rank	Ref	Location	Ward	National Rank 2019	*National Rank 2015*
1	E01013818	Broxtowe Estate NW	Aspley	91	*13*
2	E01013948	Radford Flats	Radford	100	*268*
3	E01013861	Bilborough East	Bilborough	124	*223*
4	E01013877	Bulwell Centre S	Bulwell	142	*125*
5	E01013817	Broxtowe Estate NE	Aspley	366	*124*

The impacts of low-income on specific age profiles can be illustrated by considering the position of children living in the City. At present, more than 40,700 children in Nottingham, more than half of the child population) live in families where one or more adults have no work. Within this figure, over 18,800 (27% of children in the City) live in workless families, and 21,900 (31.5% of children) live in families receiving tax credits. Nonetheless, the data across the locale vary hugely

Table 1 Children in workless and 'low income' families, 2017-18

	Children					
	Workless No.	'Low Income' No.	Total No.	Workless %	'Low Income' %	Total %
Nottingham City	**18,800**	**21,900**	**40,700**	**27.0**	**31.5**	**58.5**
Broxtowe	2,700	3,500	6,200	13.0	16.9	29.9
Gedling	3,200	4,600	7,800	13.9	19.9	33.8
Rushcliffe	1,600	2,700	4,300	7.5	12.6	20.0
Greater Nottingham*	**26,300**	**32,700**	**59,000**	**19.5**	**24.3**	**43.8**
% In City	*71.5*	*67.0*	*69.0*			
East Midlands	153,100	213,300	366,400	15.6	21.7	37.2
England	1,802,800	2,513,500	4,316,300	15.6	21.8	37.4

*Source: HMRC Child and Working Tax Credit Statistics, Finalised Awards 2017/18. * Excludes Hucknall.*

In the data available from 2012, ethnicity is a significant factor, as nationally children from black and minority backgrounds are twice more likely to live in relative poverty. Severe poverty is likely for 30-35% of children from Pakistan, Bangladesh and Black African households and only 11% for white British children. We did not locate local data that provides a break-down of the above by ethnicity.

The data below shows the wards that contain the highest number of children of workless families in 2017.

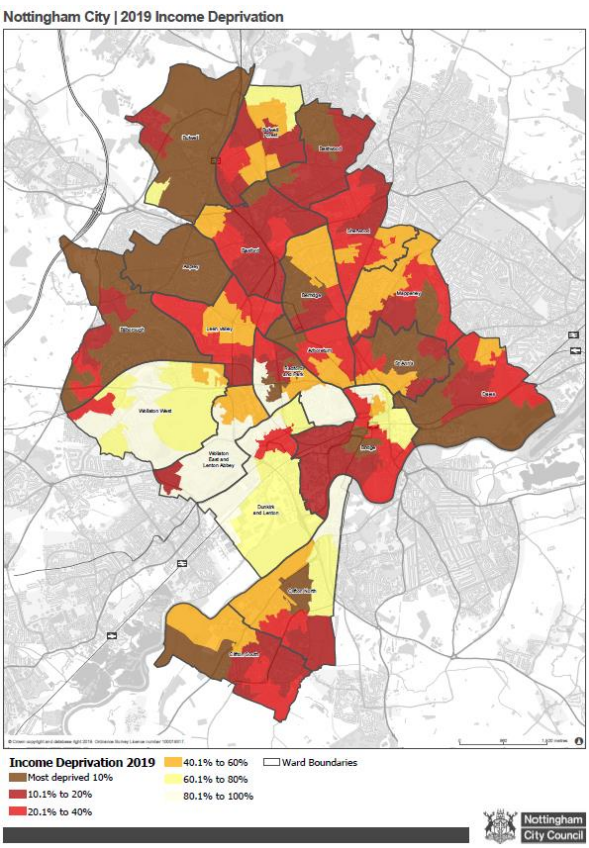
Table 5 Wards with the highest rates of children in workless or low income families, August 2017

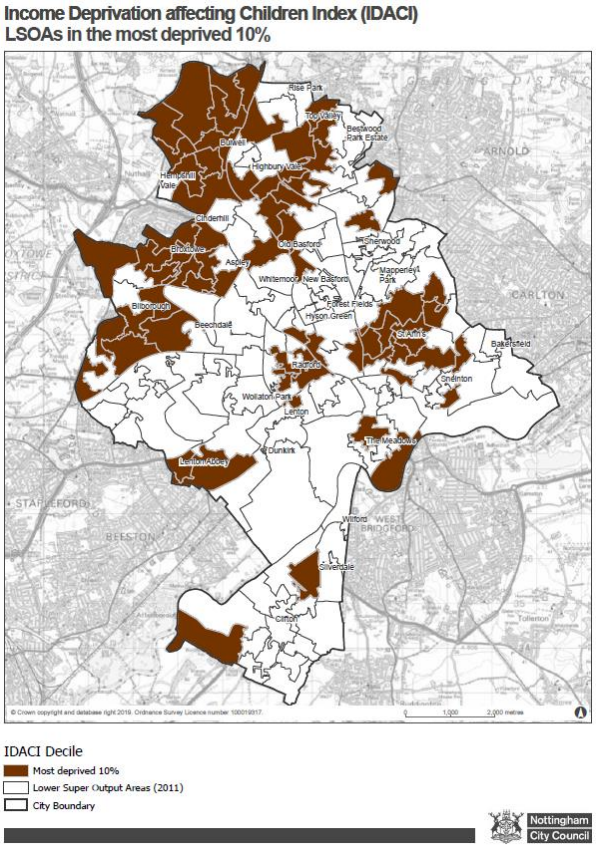
Rank by rate	Ward	Rate %	Children No.
1	Hyson Green & Arboretum	74.5	3355
2	Radford	73.5	1265
3	Aspley	72.5	4990
4	St Ann's	70.0	2810
5	Bulwell	65.9	3030

Source: HMRC Child and Working Tax Credit Statistics, Small Area Analysis.

The picture is highly uneven across the City.

A clearer view of the geographical patterns of child poverty can be seen in the maps below. On the left is the Income Deprivation data of the general population in Nottingham City, and on the right is the areas that contain families of the worst 10% of income deprivation who have children.





3.2.2 Employment

For employment, 31% of the city's areas are in the lowest 10% nationally, and over 50% of the areas are in the lowest 20% nationally.

Table 10: LSOAs Most Affected by Employment Deprivation

City rank	Ref	Location	Ward	National Rank 2019	*National Rank 2015*
1	E01013861	Bilborough East	Bilborough	23	*37*
2	E01013948	Radford Flats	Radford	64	*187*
3	E01013877	Bulwell Centre S	Bulwell	208	*146*
4	E01013818	Broxtowe Estate NW	Aspley	378	*179*
5	E01013960	St Ann's Wells Road N	St Ann's	577	*558*

Out of 182 LSOAs, 56 areas are among the lowest 10% nationally (40 in 2004) and 94 areas are among the lowest 20% nationally (90 in 2004), showing a fluctuating picture. The fluctuations are also evident in the measures of Extreme Employment Deprivation, where Nottingham City has an increasing number of LSOAs in the lowest 10%.

Table 9: The Extent of Extreme Employment Deprivation

	2019	*2015*	*2010*	*2007*	*2004*
City LSOAs in worst 10% nationally	56	*54*	*34*	*35*	*40*
City LSOAs in worst 20% nationally	94	*92*	*72*	*73*	*90*

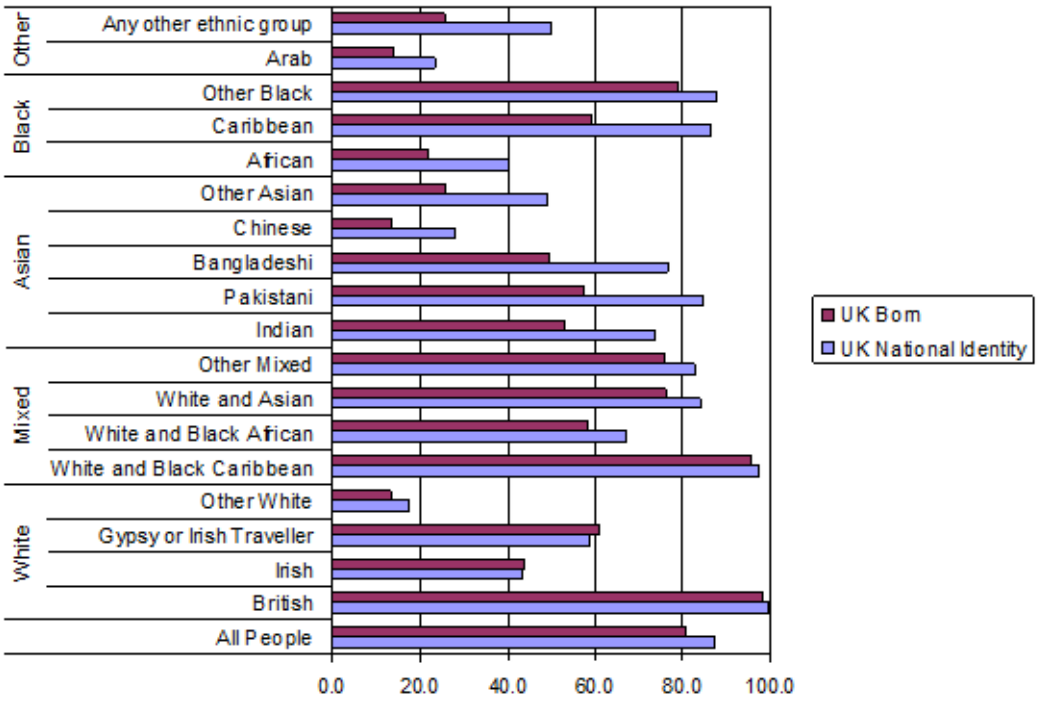
3.3 Wider demographics.

Between the 1990s and the present there have been significant changes to the population of Nottingham that are not directly associated with the economic picture. Between 1991 and 2011 the population of the city increased by around 9%, from 263k to 306k. There have been other noteworthy changes to the population with respect to ethnicity, age, and education.

3.3.1 Ethnicity

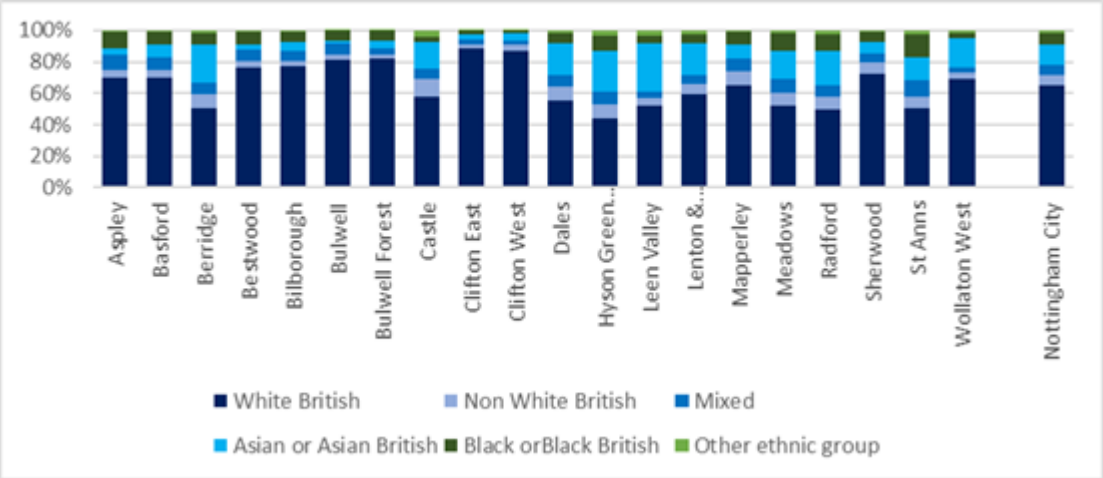
In the 2011 Census, 65.4% of the population were in the 'White British' group, placing the city as the 39th highest percentage of BAME out of 348 regions in England and Wales. Asian Pakistani makes up to 5.5% of the population, and Mixed White and the Black Caribbean takes up to 4% of the population.

Country of Birth and National Identity by Ethnic group in Census 2011



This compares with the 1991 census, at which the around 89% of the City's population were in the 'White British' group, with other ethnic groups present in correspondingly smaller numbers. This is a rapid change to the ethnic profile of the city. For context, in the same time period Leicester saw a change from around 70% of the population in the 'White British' group to around 45%.

Ethnicity also varies significantly across parts of Nottingham, as indicated below.



3.3.2 Age Profile

The city of Nottingham is home to an increasingly ageing population, projected to increase by 15% by 2025, and 50% by 2035.

Coupled to this high-level picture of the age-profile of the city it can be noted that the age profile of the city is uneven. The City can broadly be categorized into three area types:

- Those with a concentration of younger adults, including students – primarily the city centre, Lenton, Dunkirk, Radford, The Arboretum and Hyson Green.
- Those with a concentration of older people, many of whom have lived in their houses since they were built – primarily Bilborough, Beechdale, Clifton and parts of Wollaton.
- Other, more mixed areas, including Aspley, which has notably more children.

3.3.3 Education

The educational situation in Nottingham city has been improving from a low base. As shown in the data below, the number of regions in the lowest 10% nationally has dropped steadily since 2004.

Table 15: The Extent of Extreme Education, Skills and Training Deprivation

	2019	*2015*	*2010*	*2007*	*2004*
City LSOAs in worst 10% nationally	57	*62*	*60*	*72*	*77*
City LSOAs in worst 20% nationally	100	*102*	*92*	*102*	*105*

However, the data below shows that children are much less prepared to achieve the expected level of communication, language and literacy at the end of their Reception year, which poses risks to the future educational level of the city.

B02c - School readiness: percentage of children achieving at least the expected level in communication and language skills at the end of Reception	2018/19	↑	3,035	81.2%	81.1%	82.2%	71.8%		94.6%
B02d - School readiness: percentage of children achieving at least the expected level of development in communication, language and literacy skills at the end of	2018/19	↑	2,511	67.2%	71.1%	72.6%	63.3%		82.2%

3.4 Summary

As should be predicted in a region with relatively poor health outcomes, the wider determinants of health inequalities that predict such an outcome are present across the city. However, the picture is highly uneven across the city's different regions.

4. Interventions.

Typical recommendations to try and overcome the correlates/determinants of health inequalities are easy to list, if harder to action: e.g.

Reducing poverty
Increasing employment in ‘good jobs’
Improving education
Ensuring the availability of good local services
Training healthcare providers
Specialist outreach
Ensuring that services are provided in appropriate locations
(see NHS, Health Scotland).

Because these recommendations are known and understood, the report explores three other specific spheres of possible intervention, over and above these high-level approaches. The areas concerned are: financial well-being; diet and physical activity, and building trust.

4.1 Financial Well-being.

Approaches to financial well-being are primarily investigated in relation to people in employment because of the effect that financial distress has on levels of absenteeism (for example Kim et al 2006), on levels of presenteeism / productivity (for example, Sabri and Aw, 2020) and on health, especially mental health (for example, Bridges and Disney, 2010)). That being so, their application to a city population is difficult and any recommendations can only be tentative.

The policies most investigated and widespread are financial education, credit counselling and debt management, and employee financial wellness programmes (CIDP, 2021). Financial education, or financial literacy, provides information to better manage individual or family finances, offering information about budgeting, saving, bank accounts for example. Credit counselling and debt management can be considered examples of emergency financial assistance (Glenn et al., 2020) and is more targeted to particular cases. Employee financial wellness programs can include the previous two initiatives plus, for example, pay advances or short term loans (Despard et al., 2020). Other programmes to improve financial wellbeing can include the provision of information about local services and benefits; employment and educational support; support for transportation and housing (Glenn et al, 2021). These services can be considered “community intervention programs” when they are provided in healthcare settings or by non profit organisations and they can include other emergency interventions for example to tackle food or housing insecurity (McGrath, 2021).

A key issue in this literature is a lack of robust studies that could assess the effectiveness of the programmes. Existing studies are considered not to be sufficiently robust, either because of: methodological limitations (for example small sample size, generalisation etc.), not reporting the mechanisms leading to the outcomes, and the evaluation of long-term impacts (Glenn et al, 2021; CIDP, 2021; McGrath et al. 2021).

Nonetheless, a systematic review of the studies is done by CIDP (2021), the professional body for HR and people development. Literature was screened according to the measurement used. Two kinds of study were included in the systematic review.

> (1) studies in which the effect of financial distress on workplace performance was measured or
> (2) studies in which the effect of moderators and/or mediators on financial distress was measured

The primary reported findings are that

> **Financial education** has a small positive effect on financial behaviours (Kim and Garman 200; 2004; Prawitz and Cohart,2014; Postmus et al, 2015; Fernandes et al.,2014). And although some results suggest that the effect does not last over time, there are studies with a control group that support the positive effect of financial education programs (Postmus et al, 2015; Prawitz and Cohart, 2014) on financial behaviour and more in general on financial distress.
>
> Studies on **credit counselling and debt management programmes** report a positive effect on financial wellbeing and health, reducing the incidence of negative financial events (Kim et al ,2003; O'Neill et al.,2005; 2006; Mende and Van Doorn, 2015)
>
> **Employee financial wellness programmes (EFWP)** can have a positive effect on financial wellbeing, according to literature, but the effectiveness of the programs is difficult to evaluate, even if in most of the studies, participants report a reduction in high financial stress and high cash flow stress (Drake et al 2019). An important feature of these programs is that the services offered by the employer can be more targeted to the personal situation.

Thus financial education, credit counselling and debt management programs, and employee financial wellness programs are methods that have been deployed in an attempt to improve financial well-being. However, to this point the efficacy of these programs is unclear. There may be value in pursing these approaches further, but the data does not strongly vindicate such an approach even in employment settings (though nor does it tell against it). More research may be needed to test and understand this kind of intervention as a potential solution in Nottingham City.

Currently, in Nottingham, a number of charities, non-profit organisations and some major employers, like the NHS, offer help to individuals experiencing financial distress. Charities and advice centres offer debt advice and referrals to other services in situations of emergencies.

4.2 Diet and Physical Activity

In the existing literature, the successful strategies, interventions, policies and theories around healthy eating and physical activity take different routes for different groups of the population.

The main approach to categorisation is guided by age and into three age groups:

1) adolescent and school-going population
2) adults
3) older population.

Each age group has different typical lifestyle patterns and hence each age group may require different types of interventions to support improved physical health. However, strategies that can enable 'self-regulation' and 'self-monitoring' appear in the literature repeatedly and appear to increase the efficiency of any intervention (Greaves et al., 2011 & Rose et al., 2017).

Sociologists have suggested that the network structures of human beings impact their behaviour in health, which means the most useful interventions may follow four pathways: social support, social influence, social engagement and attachment as well as access to resources and material goods (Berkman et al., 2000).

For adolescents, interventions studied are mostly targeted to prevent or stop the development of noncommunicable diseases (NCD). As Rose et al. (2017) demonstrated, digital intervention with educational, goal-setting and parental-involvement are more likely to be an effective approach.

For older adults, scholars suggest using behavioural and cognitive interventions to tackle chronic diseases. Behavioural intervention refers to regular physical activity exercise sessions (e.g. 40 minutes exercise over a period of 10 weeks), while cognitive intervention is about maintaining the motivation for the elderly, which might include personal interviews and face to face counselling (Chase, 2013).

For female populations, customised weight-loss interventions are reported to be effective for obese, low-income communities.

Running successful intervention strategies is thought to require a community effort, communicating with stakeholders and employing ethnically, culturally and linguistically

matched staff and tracking the progress of the participants (Caroll et al, 2011). The determinants or 'correlates' of physical activity should concern the demographic, behavioural, cognitive (emotional), cultural, environmental factors in interventions (Trost et al., 2002).

Nonetheless, and despite this considerable variability of impact of most of the above, drawing on an extensive analysis of existing research, Horodyska et al. (2015) devised a checklist of 83 items for successful implementation in improving diet, physical activity and reducing sedentary behaviour.

Given the literature, any interventions in this space should be targeted at and supported by distinct demographic groups, ensuring good levels of community support and engagement and should be sensitive to the 83 items listed in Horodyska et al. (2015)'s meta-analysis that describes implementation conditions for successful approaches to improving diet, physical activity and reducing sedentary behaviour. This is included as an Appendix to the report. Approaches should also focus on promoting and supporting 'self-regulation' and 'self-monitoring'.

4.3 Trust

As described in section 3, Nottingham houses an ethnically diverse population, with low educational outcomes, and high deprivation. Correspondingly, research has shown that, generally, high degrees of ethnic diversity (initially) correlate with low levels of trust (Dinesen *et al*, 2020); low levels of education correlate with low trust (Wu, 2021), and that poverty and deprivation correlate with low levels of trust (Jachimowicz, et al, 2017). Other findings have reinforced the intuitive notion that trust in social 'outgroups' is low (Gundelach, 2014).

Research also shows that there is a correlation between trust and health outcomes (Birkhauer, et al. 2017), that (in the US) there is a correlation between low income and low trust in physicians (Blendon et al, 2014) and that low levels of trust within an ethnic group create barriers to taking up social and financial opportunities (Smith, 2010). In sum, low levels of trust correlate with poor health outcomes and low levels of trust correlate with poverty, low educational attainment and ethnic diversity. This leaves Nottingham facing a significant challenge.

These specific issues should be viewed against a backdrop of generally declining trust in institutions, especially government. The UK has consistently experienced lower levels of trust in government than other liberal democracies. Though there was an uptick in trust during the COVID-19 pandemic, this has now returned to pre-pandemic levels (IPPR, 2021: 15). Despite the national outlook, Adams and Lalot (2021) report higher than expected levels of trust in local government, with this trust proving more resilient than trust in national government.

Contextual factors suggest a number of possible interventions.

Christopher et al (2008) successfully used an approach that looked to build trust by following each of the following steps: Acknowledge Personal and Institutional Histories; Understand the Historical Context of the Research; Be Present in the Community and Listen to Community Members; Acknowledge Expertise of All Partners; Be Upfront About Expectations and Intentions; Create Ongoing Awareness of Project History; Match Words With Actions.

Others (Wilkins, 2018) acknowledge that, strategies that enhance trust require community engagement. Thus: balancing power dynamics, equitable distribution of resources, effective bidirectional communication, shared decision-making, and valuing of different resources and assets (such as the lived experience and knowledge of group norms and perspectives) are all key. This is echoed in the work of Jachimowicz, et al, 2017, where inclusive community-driven governance was used to change the way community-level decisions were made.

> 'This involved representatives from the community working with the local government to make community-level decisions, for example in the distribution of social benefits, the allocation of funds and resources for development projects, and the selection of people to use in publicly funded projects. This led to reduced temporal discounting and greater trust.' (Jachimowicz, et al, 2017)

Delhey and Welzel (2013) have also shown that shared social-movement activity, where individuals come together in common cause around a matter of social import to them, can also help improve trust.

Shifting to the commercial: Deloitte have developed a view according to which there are four signals of trust Reichheld *et al*. Humanity, Transparency, Capability, and Reliability (fused into intent and competence). Their research suggests that *generally*, government institutions should demonstrate *competence* and *intent* to rebuild trust.

Their work on trust, race and health is also interesting and connects to recommendations around diet and exercise. Though drawn from the US, key findings show that: sixty-two percent of participants want their local hospitals to ensure patients have a voice to relay their experiences and take action to address their problems. For Asian (59%) and Hispanic (53%) participants, having a provider who has empathy and is culturally competent is a top priority when choosing a provider. Two out of three participants who identify as Black or African American and half of Asian and Hispanic respondents say it is important to see a health care provider similar to them. Younger participants (aged 18–44 years) are more likely to say that having a health care provider with a similar background is important (this doesn't necessarily mean *doctors*. It's healthcare support generally). This echoes the discussion around intervention that

highlights the importance of matching the cultural, linguistic and ethnic backgrounds of the partners supporting the intervention.

We note, also, that trust is important when considering services aimed at improving individuals' financial wellbeing. For example, Muir et al. (2017) describes how it is important for people experiencing financial distress to trust the people or institutions providing financial advice.

All of these recommended innovations are included because they look appropriate in light of research on the nature of trust, which suggests that to trust someone (or an instiution) to perform an action is to believe that the other party ought to carry out that action and to then rely upon them to carry it out (see,Tallant). This theory both predicts and explains these patterns of behavior.

4.4. Summary of interventions.

Community Intervention Programs, Financial education, credit counselling and debt management programs, and Employee Financial wellness programs are methods that have been deployed in an attempt to improve financial well-being. The efficacy of these approaches is unproven in the literature, but may be worthy of exploration.

Sensitivity to the 83 items listed in Horodyska et al. (2015)'s meta-analysis that describes implementation conditions for successful approaches to improving diet, physical activity and reducing sedentary behaviour is recommended. An approach to intervention that is differentially targeted at different age and cultural and ethnic groups, with support from within those groups, also appears a sensible recommendation.

A blending of behaviour and cognitive interventions may also be advisable and could focus on promoting and supporting 'self-regulation' and 'self-monitoring'.

Community engaged and community led activity might be developed, as could services where users engage with providers and support workers who demonstrate empathy and cultural competence. Ensuring that services are ethnically representative of the community that they serve may also be of benefit.

Engaging community stakeholders in the decision-making processes and valuing their lived experiences and knowledge of norms, will likely also help to build community and improve trust, and may in turn help to improve engagement with efforts to reduce health inequalities

5 Future research

There are a number of avenues for future research that may be valuable, some of which are highlighted here.

First, there are few interviews or surveys available for qualitative thematic analysis that addresses the historical trajectory of health and the overall social development of Nottingham. Moving forward, collecting first-hand data and combining this with the current understanding would vastly improve the knowledge of existing health inequalities and their wider determinants in Nottingham. Simply, qualitative research to help understand the lived experience of residents of the city would be valuable in improving understanding of the barriers to reducing health inequalities.

Second, data generated from the City Council Survey indicates that:

1. Only 58% can easily understand the information provided by the council.
2. Only 63% know where to go for advice.

This indicates an information-flow barrier. Work with the local community on how to improve this flow of information would be valuable, since without the information communities will struggle to engage with efforts to reduce inequalities.

Third, Padellini et al 2022 have argued that it is 'important to continually monitor how different communities are responding [to Covid-19], in order to inform relevant policies aimed at eliminating social inequality in COVID-19 burden'. The data in Nottingham bears this out at the local level. ONS data shows that in the age-group of 9-64 year olds, during the period from 2nd March to 28th July 2020, around 40% of deaths were COVID-19 related among the Non White-British population of Nottingham. This figure is around 14% among the White British population.

Fourth, data suggests a general correlation between the wider determinants of health inequality and trust. However, some questions remain about whether such a relation or correlation exists in Nottingham City. There is no 'trust data' available that focuses on the city itself. Primary research that can test whether this correlation/causation exists and how impacts the health-related behaviour of the population in Nottingham could be both revealing and valuable—especially given the generally reported correlations between health and trust, reported above.

Fifth, any interventions require careful monitoring and study.

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