North East
North Cumbria
Health & Care
Partnership

Child Health and
Wellbeing Network
North East and North Cumbria

Core20PLUS5 Framework for Children and Young People: A North East and North Cumbria Regional Perspective

A Practical Guide for Using the Framework in a Variety of Settings

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Foreword

I am delighted to see that the Network's founding focus on poverty and inequalities for our most vulnerable young people and their families continues to progress with this practical North East and North Cumbria specific toolkit to apply the CYP Core20PLUS5 to benefit our most under-served communities.

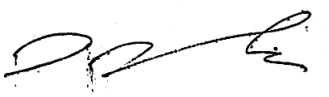
It was this commitment to addressing inequalities that led Dr Mike McKean and Heather Corlett (Clinical and Programme Leads) to develop advisor roles specific to Inequalities and a Delivery Manager role focused into under-served communities.

I thank the Delivery Manager, Jen Hicken, and Health Inequalities Advisors to the Network, Luke Bramhall, Dr Jenna Charlton, and Dr Will Tasker, for their continued focus to develop something that will enable the spread of improvement work to reduce inequalities for children and young people in the NENC.

We have for many years understood the high levels of poverty in our region, but the added impact of the pandemic and the cost of living crisis makes this work of immense importance to our children of today, and will provide lifelong benefits to our communities in the future.

I ask that you not only read and review their work, but that you actively use and share the toolkit for the benefit of your local communities, and continue to engage with Jen and the team to further progress and improve this work and maximise the impact it can achieve.

Best wishes



David Purdue
ICB CYP Executive Lead

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Introduction

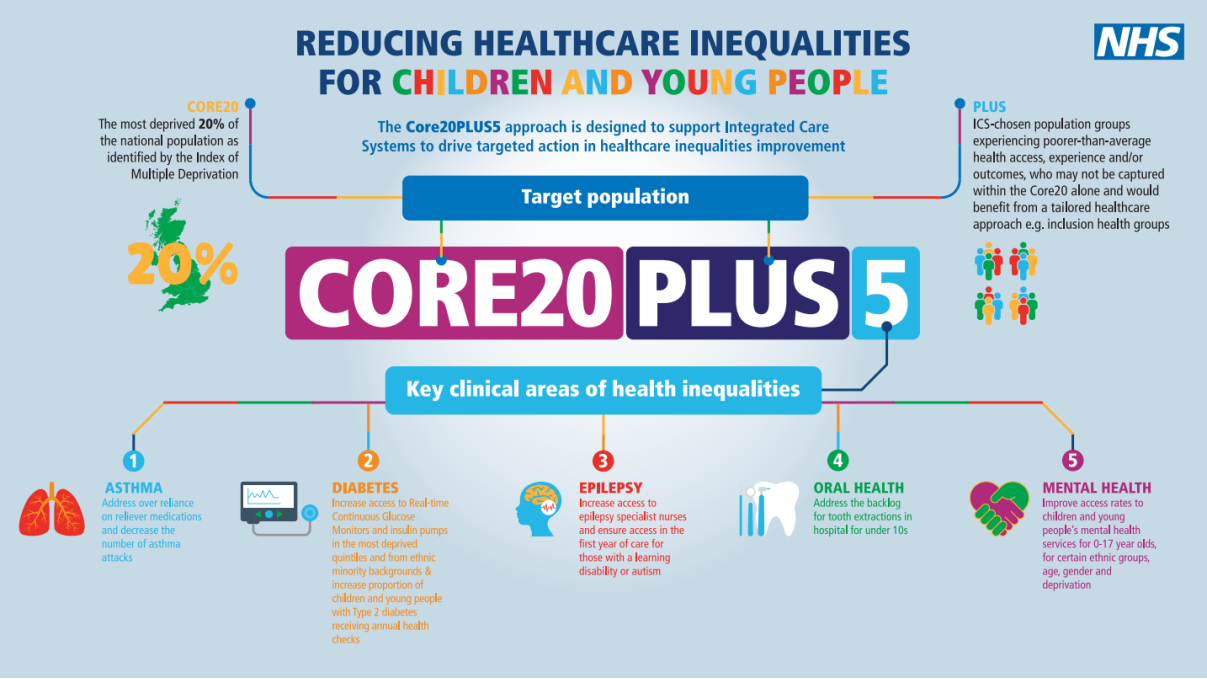
The National NHS England Core20PLUS5

In November 2021 NHS England launched the framework ‘Core20PLUS5’, an approach to support Integrated Care Systems to reduce health inequalities at both national and system level. The approach defines a target population cohort and identifies ‘5’ focus clinical areas requiring accelerated improvement.

The original framework focussed on healthcare inequalities experienced by adults, and so included clinical areas that were less relevant, or not applicable to, the health needs of children and young people. Recognising the importance of addressing health inequalities in childhood and adolescence to reduce inequality later in life, the framework was adapted for children and young people (CYP).

The national NHS England Core20PLUS5 for Children and Young People was launched in November 2022 and was designed to reduce health inequalities for children and young people. The infographic below represents the National NHS England Core20PLUS5 CYP approach.

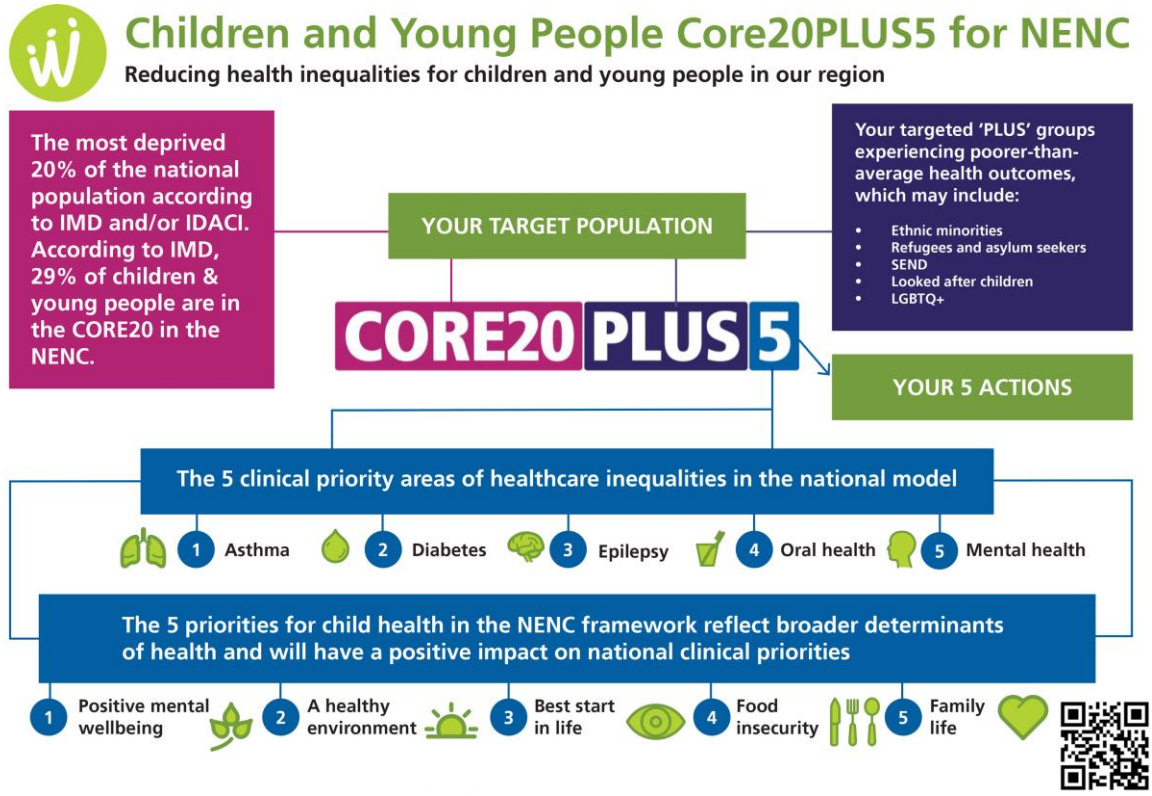
Figure 1. NHS England’s Core20PLUS5 for Children and Young People framework



The North East and North Cumbria Core20PLUS5 for Children and Young People framework

The North East and North Cumbria (NENC) Core20PLUS5 for Children and Young People framework has been developed in collaboration and consultation with the NENC Child Health and Wellbeing Network (CHWN) and the the Network's Young Advisors. The NENC framework does not intend to replace the national framework, but to complement it by applying a regional lens, and offering workstreams addressing health inequalities the opportunity to consider and align support with regional priorities. Figure 2 below provides an overview of the NENC Core20PLUS5 for CYP.

Figure 2. NENC Core20PLUS5 for Children and Young People framework



Find out more: www.nenc-healthiertogether.nhs.uk/professionals/education-and-training/core20plus5-children-and-young-people-nenc

This briefing document aims to support the application of the NHS England Core20PLUS5 by adopting broader regional priorities. The NENC Core20PLUS5 presents an overview of both the national and regional frameworks and details the shared and differential components.

Overview of the Core20PLUS5 for Children and Young People Framework

Who is the framework for?

The Core20PLUS5 for Children and Young People framework is intended for organisations, agencies, commissioners and professionals with a role or interest in addressing inequalities in child health. The NENC perspective presented in this briefing document was designed to be relevant to multiple and cross-sector approaches, including health, education, and voluntary, community and social enterprise (VCSE) organisations, allowing for broad application and adoption, and the facilitation of integrated approaches to child health.

What does the framework aim to do?

The NHS England framework aims to help service providers and commissioners to:

- Target the most deprived 20% of the national population as identified by the national Index of Multiple Deprivation (IMD).
- Target population groups that may suffer from poorer health or be at risk of poorer health outcomes.
- Target five health areas of focus which are part of wider actions for Integrated Care Board and Integrated Care Partnerships to achieve system change and improve care.

The NENC framework aims to help service providers and commissioners to:

- Target the most deprived 20% of the NENC population as identified by the national Index of Multiple Deprivation (IMD) and/or Income Deprivation Affecting Children Index (IDACI).
- Target NENC population groups that may suffer from poorer health or be at risk of poorer health outcomes.
- Target five health areas of focus informed by regional data to enable broad cross-sector application, integrated and collaborative approaches, and improve care. These areas consider some of the broader determinants of health facing children and young people across the region.
- Align efforts by all members of the CHWN to tackle inequalities that have been prioritised regionally and nationally.
- Provide guidance across the NENC Integrated Care Board (ICB) considering a more localised adoption of priorities.

In the following 4 sections of this briefing document, we will provide an overview of each component of the Core20PLUS5 CYP framework (national and regional perspectives), and how the NENC framework may be applied in practice:

- Section 1: The **'Core20'**
- Section 2: The **'Plus'**
- Section 3: The **'5'** priorities
- Section 4: **Applying** the NENC Core20PLUS5 CYP framework

Look out for the light green case examples and dark green action boxes to guide you through each stage of the process.

Section 1: The ‘Core20’

The ‘Core20’ - the target population

In both the NHS England and NENC framework the ‘Core20’ represents the most deprived 20% of the national population as identified by the national Index of Multiple Deprivation (IMD), a standard measure of community need, and deprivation that considers persons of all ages. IMD includes 7 domains of deprivation: Income, Employment, Education, Health, Crime, Barriers to Housing and Services, Living Environment.

The ‘Core20’ across the NENC Region

The NENC region as a whole has a higher proportion of children and young people (29.4%) living in the 20% most deprived areas of England than the national average (20.2%). Like the NHS England framework, the NENC framework also focuses on the IMD as a primary identification of the 20% most deprived areas in the region. However, in addition to the IMD, and as the NENC framework is designed specifically to address inequalities in child health, the regional framework allows users to take into consideration the most deprived 20% of the region's population as defined by the Income Deprivation Affecting Children Index (IDACI). The IDACI is a supplementary index of the IMD and measures the proportion of all children aged 0 to 15 years living in income deprived families in different local areas (called 'lower-layer super output areas', or ‘LSOAs’) across England. Income deprived families are defined as families that receive:

- Income Support; or
- Income-based Jobseekers Allowance; or
- Income-based Employment and Support Allowance; or
- Pension Credit (Guarantee); or
- Working Tax Credit or Child Tax Credit with an equivalised income (excluding housing benefit) below 60% of the national median before housing costs

There is some overlap between the most deprived 20% according to IMD and IDACI however there will also be some differences. This is exemplified by Figure 3 below which shows that based on IDACI, 4 out of the 20 most deprived areas nationally are in the NENC region. In comparison, when we consider IMD, 2 NENC Local Authorities fall within the top 20 most deprived Local Authorities nationally.

Figure 3. Top 20 most deprived local authority areas identified by IDACI and IMD

Rank	Income Deprivation Affecting Children Index (IDACI)		Index of multiple deprivation	
	Local Authority District	Score - Proportion of children living in income deprived households		
1.	Middlesbrough	32.7%	1.	Middlesbrough
2.	Blackpool	30.7%	2.	Liverpool
3.	Knowsley	30.3%	3.	Knowsley
4.	Liverpool	29.9%	4.	Kingston upon Hull
5.	Kingston upon Hull	29.8%	5.	Manchester
6.	Nottingham	29.8%	6.	Blackpool
7.	Manchester	29.7%	7.	Birmingham
8.	Hartlepool	28.3%	8.	Burnley
9.	Birmingham	27.6%	9.	Blackburn with Darwen
10.	Islington	27.5%	10.	Hartlepool
11.	North East Lincolnshire	27.4%	11.	Bradford
12.	Wolverhampton	27.1%	12.	Stoke-on-Trent
13.	South Tyneside	26.7%	13.	Halton
14.	Tower Hamlets	26.6%	14.	Pendle
15.	Hastings	26.5%	15.	Nottingham
16.	Sandwell	26.3%	16.	Oldham
17.	Walsall	26.1%	17.	North East Lincolnshire
18.	Stoke-on-Trent	25.7%	- .	Hastings
19.	Redcar and Cleveland	25.6%	19.	Salford
20.	Burnley	25.5%	20.	Rochdale

When considering Core20 populations in the NENC region, users should be aware that the Core20 for both IMD and IDACI as are based on a national rather than local perspective, therefore the most deprived 20% of the population nationally may make up a higher proportion of a population in certain NENC regions. For example, in Middlesbrough, 57% of neighbourhoods are in the most deprived 20%. In certain cases therefore it may not be practical to focus on such a large proportion across individual workstreams (for example, if you are a smaller local VCSE organisation and want to target your local neighbourhood). Therefore, deprivation data may be explored further (e.g., considering specific Lower-Super Output Areas (LSOA's) and/or changing deprivation threshold to be targeted, for example, focussing on those areas falling within Decile 1 or 2rather than the 20% most deprived). A brief case example is provided in Table 1 below.

Table 1. Case example: refining the Core20 target population

The incidence of hospitalisation for self-harm in Northumberland is the highest in the country. You seek to understand the needs of those from CORE20 localities and aim to connect with primary schools to explore the perspectives of professionals, parents, and children.

There are multiple primary schools in a ward falling in the most 20% and you don't have capacity to target all of them.

You look for the IMD score for each LSOA in the area and decide to focus on the primary schools in the top 10% most deprived LSOAs in order to target your approach.

WHERE are your Core20 populations?

Action: Use the IMD and/or IDACI to inform where your support should be delivered.

Section 2: The ‘Plus’

The ‘PLUS’ – Population groups

In the NHS England framework, the PLUS represents integrated care system-chosen population groups experiencing poorer-than-average health access, experience and/or outcomes, who may not be captured within the Core20 alone and would benefit from a tailored healthcare approach.

Some examples provided in the national framework include (amongst others) those with protected characteristics (e.g., age, sex, race) as well as inclusion health groups e.g. people experiencing homelessness, drug/alcohol dependence, vulnerable migrants, Gypsy, Roma and Traveller communities, people with a learning disability and autism, people in contact with the youth justice system and young carers.

The ‘PLUS’ across the NENC region

In addition to the NHS England PLUS groups the NENC framework also considers PLUS groups that reflect priorities for the NENC region. These have been identified based on the NENC CHWN Facts of life report and in consultation with the Young People’s Advisors and CHWN members.

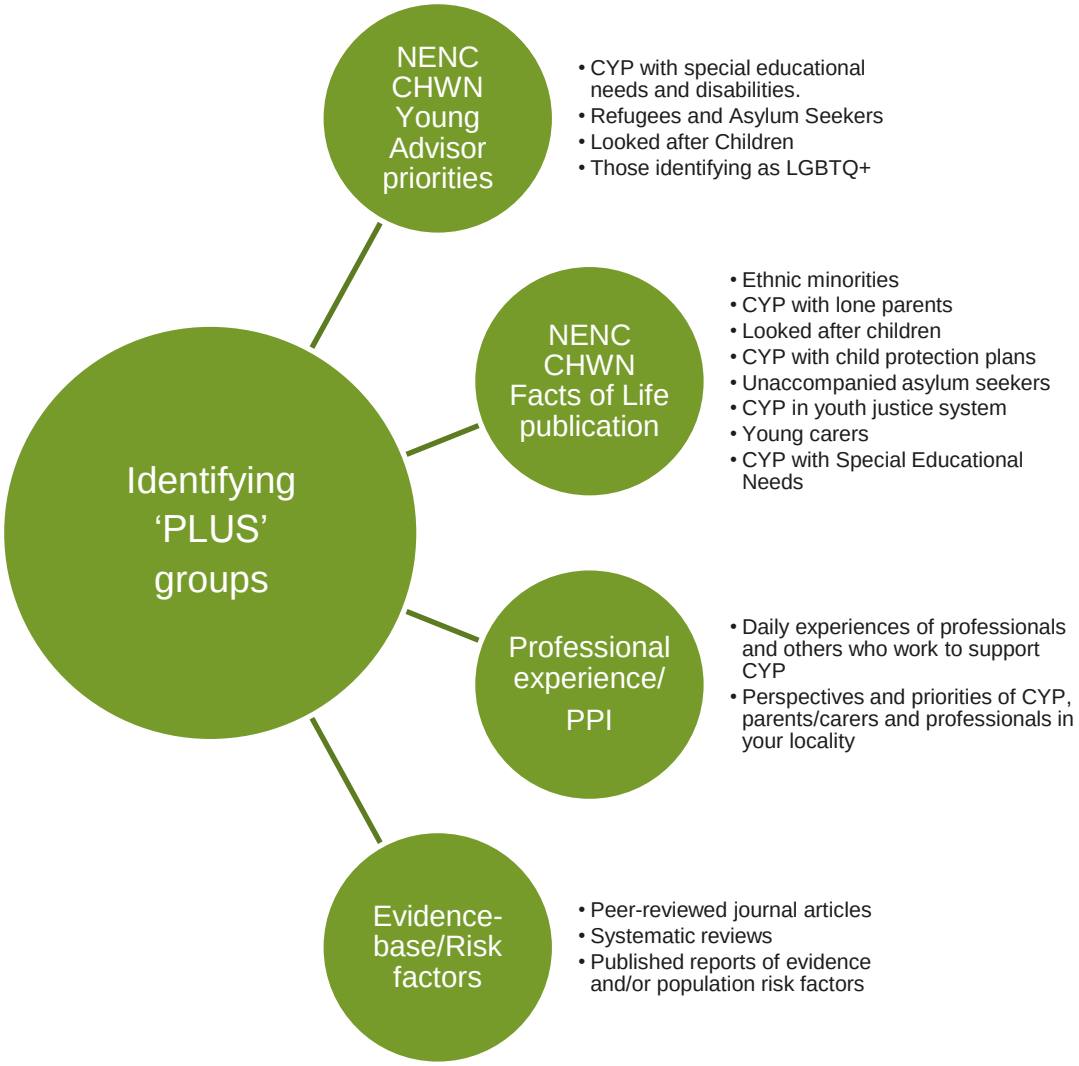
The NENC framework recognises that regionally and locally the specific identification of PLUS groups may depend on the priorities and circumstances of the organisations, agencies, commissioners, and professionals applying the framework to address inequalities in child health. In addition, where users may also consider relevant evidence-base and risk factors for health priorities, and engagement with Public and Patient Involvement (PPI) and focus groups to explore PLUS characteristics. A brief case example is provided in Table 2 below.

Table 2. Case example: exploring PLUS groups in a specific locality

You are piloting the Core20PLUS5 CYP framework and exploring self -harm in Northumberland. You want to further explore who the relevant PLUS groups are for self-harm in Northumberland. To do this, you connect with relevant professionals from a range of sectors in the area working to support CYP mental health and wellbeing using PPI. Professionals identify particular PLUS groups of CYP they see regularly in their day-to-day practice. These PLUS groups include those identifying as LGBTQ+, those with learning disability and/or autism, those whose families originate from other areas of the country and looked after children.

Figure 4 below illustrates the regional priority PLUS groups and other resources users may consider, to identify relevant PLUS groups within their own locality.

Figure 4. NENC priority 'PLUS' groups and resources



WHO are your PLUS groups?

Action: Use PLUS group resources as well as organisational priorities to identify who to deliver your support to.

Section 3: The ‘5’

The ‘5’ – Focus clinical areas of health inequalities

In the NHS England framework, the ‘5’ represents key clinical and specific areas of health inequalities where the NHS can take action. The NHS England ‘5’ are:

1. **Asthma:** Address over reliance on reliever medications and decrease the number of asthma attacks.
2. **Diabetes:** Increase access to real-time continuous glucose monitors and insulin pumps in the most deprived quintiles and from ethnic minority backgrounds and increase proportion of children and young people with Type 2 diabetes receiving annual health checks.
3. **Epilepsy:** Increase access to epilepsy specialist nurses and ensure access in the first year of care for those with a learning disability or autism.
4. **Oral health:** Address the backlog for tooth extractions in hospital for the under 10s.
5. **Mental health:** Improve access rates to children and young people’s mental health services for 0–17-year-olds, for certain ethnic groups, age, gender and deprivation.

The ‘5’ priorities across the NENC region

The 5 priorities for child health in the NENC framework were chosen based on regional data and intelligence and were designed to reflect the broader determinants of health, to allow a range of sectors, users and approaches to engage with the framework, beyond the NHS alone, including health, education, and Voluntary, Community and Social Enterprise (VCSE) organisations (see Appendix A for full justification of each domain).

See below for the NENC ‘5’ priority areas, some key aims and some examples of routinely collected outcomes that could be used to monitor them* (available through the Office of Health Improvements & Disparities (OHID) Fingertips https://fingertips.phe.org.uk/profile/child-health-profiles):

1. **Positive mental wellbeing.** Key aims include:
    - Meeting CYP social, emotional, and mental health needs as well as reducing bullying.
    - Focusing on tackling the high rates of suicidal ideation and self-harm in CYP.
    - Reducing the rates of hospitalisation due to substance misuse and alcohol intoxication in CYP*.
2. **A healthy environment.** Key aims include:
    - Increasing physical activity among CYP
    - Improving outdoor and indoor air quality.
    - Reducing the number of CYP road traffic accidents and household accidents*.
3. **Best start in Life:** Key aims include:
    - Reducing the rates of maternal obesity and smoking at delivery*.
    - Improving breastfeeding rates*.
    - Reducing the infant mortality rate*
    - Improving early development and school readiness*.
4. **Food Insecurity**: Key aims include:
    - Improving CYPs diet.
    - Reducing rates of tooth decay in CYP*.
    - Reducing rates of obesity in CYP*.
5. **Family life:** Key aims include:
    - Supporting families experiencing childhood disability or chronic illness.

- Reducing number of school pupils with social, emotional and mental health needs:
- Reducing the incidence of abuse and childhood neglect.
- Improving outcomes such as school attainment and emotional wellbeing for looked after children*

*Routinely collected OHID fingertips data.

It is important to note that these are main aims and can of course be targeted indirectly. The broader categories within which they fall under are intended to address the wider determinants of inequalities in health, which we intend will have a positive impact on the 5 national clinical priorities.

Both the Regional and National priorities can be addressed simultaneously and should be aligned wherever possible.

Table 3. Case example: aligning regional and national priorities.

A family hub is working to reduce smoking in early pregnancy **(best start in life)**. If smoking in the household is addressed this could improve **asthma** outcomes in the longer term.

The local authority is addressing **food insecurity** among families in a deprived area in the Tees valley, this could impact the incidence of type 2 **diabetes**.

You are looking to address bullying in your secondary school in Cumbria **(positive mental wellbeing)** particularly bullying experienced by those managing chronic conditions such as **asthma**, **diabetes** and **epilepsy**.

Your **epilepsy** clinic has a high 'was not brought' rate among the most deprived 20% and those from non-white ethnicities. You look to find ways to support families in attending **(family life)**.

A '5 actions' approach to implementation

To support users to make effective steps towards addressing health inequalities for CYP, the NENC Core20PLUS5 framework suggests users identify 5 specific and achievable practical goals to work towards over a specific time frame. It is anticipated that these 5 goals will help to simplify and bring into focus a forward plan of action which can be monitored and reviewed over time. A case example applying a '5 actions' approach is provided in Table 4.

Table 4. Case example applying a '5 Actions' approach

You would like to address obesity in children and young people in Gateshead and want to apply the Core20PLUS5 framework.

You use the framework to identify your 'CORE20' and 'PLUS' groups, and recognise your idea sits within one or more of the 5 national or 5 NENC priorities region (Diabetes, Best Start in Life and Food Insecurity).

5 actions to take to reduce health inequalities in your targeted community:

1. Access existing data for Gateshead on related issues such as diet and physical activity.
2. Identify and contact relevant community members and professionals from the identified areas who may be involved in obesity locally.
3. Ascertain whether existing structures for consultation with professionals and the public exists and whether the Core20PLUS groups are represented.
4. If no public consultation exists arrange focus groups (e.g., with CYP/Parents/Professionals) to better analyse obesity amongst the CORE20 and review/add to suggested PLUS groups
5. Identify good practice; In Stockton the prevalence of severe obesity in Reception age children is 1.6%, in Gateshead it is 4%. Seek out Stockton public health contact and review national evidence.

WHICH national and/or NENC regional priorities are you targeting? ★

Action: Choose which of the 5 national or 5 regional priorities you will be addressing.

WHAT 5 achievable actions can you take?

Action: Outline what your 5 actions are that you will take.

Section 4: Applying the NENC Core20PLUS5 framework

The NENC Core20PLUS5 framework for CYP is designed to be used flexibly across different contexts and circumstances.

The 3 core components of the framework, the ‘Core20’, ‘PLUS’, and ‘5’, may be considered all together, or independently to meet the requirements of different contexts and circumstances, and to ensure targeted provision. Table 5 provides examples of how the 3 core components of the framework may be applied in practice. In addition, a pilot of the framework carried out by the CHWN Inequalities Advisors is outlined in Appendix B.

Table 5. Example scenarios of how the Core20PLUS5 framework may be applied

Scenario 1	You may be starting a project or piece of work from scratch, so begin by choosing 1 of the ‘5’ priority health domains to target. You then use the ‘CORE20’ to identify in which local area you should deliver your work and identify the ‘plus’ groups experiencing poorer-than-average health access, experience and/or outcomes for your chosen priority area, informing who you will support.
Scenario 2	You may want to support health inequalities and don't know which area of health to target (the '5') and/or who to target (the 'PLUS').
Scenario 3	You may be already delivering support in one of the 5 priority health areas but would like to target your provision to 'CORE20' localities.
Scenario 4	You may want to connect with other CORE20 localities to enhance the reach of your targeted work, so use the ‘CORE20’ to explore other localities you might work with.

In addition to the 3 core components of the framework, additional considerations should be made to ensure work is:

- Evidence-based, i.e. uses available data and research,
- Meets the needs and priorities of children, young people, and families,
- Utilises expertise across sectors and organisations, sharing best practice where possible.

To support users to implement Core20PLUS5 we have created a checklist that may be adopted to ensure support and provision is targeted and aligned to the framework.

Table 6. Core20PLUS5 Checklist

Core20PLUS5 Checklist

Core elements:

- ❑ **Where** are your CORE20 populations?
- ❑ **Who** are your PLUS groups?
- ❑ **Which** National and/or NENC regional priorities are you targeting?
- ❑ **What** achievable actions can you take?

Considerations when agreeing 5 actions to reduce health inequalities in your targeted community:

- ❑ Is there additional relevant research/evidence available?
- ❑ What data is available and what would be most useful?
- ❑ Are the opinions, values and priorities of children, young people and families' from CORE20plus groups heard? Are they well represented?
- ❑ Are all people working in the relevant domains involved? (cross-sector working encouraged)
- ❑ How can ideas be co-produced with key stakeholders including C&YP?
- ❑ Can you share your practice or seek out existing best practice elsewhere?

Table 7. Applying the checklist- case example

Core elements:

☑ **Where** are your CORE20 populations?

You use the IMD/IDACI to identify pupils in your school living in the most deprived LSOAs in your area.

☑ **Who** are your PLUS groups?

The local food bank, local dentists, teachers and pupil focus groups help identify other people who might be at particular risk of tooth decay.

☑ **Which** National and/or NENC regional priorities are you targeting?

Oral health is a priority identified in the NHS England framework. The NENC priority food insecurity is relevant to oral health given its impact on diet.

☑ **What** 5 achievable actions can you take?

1. Review a toolkit for supervised toothbrushing to help inform how tooth brushing can be incorporated as part of breakfast club.
Relevant research/evidence reviewed

2. Use existing focus groups with children and parents to explore their priorities around oral hygiene, healthy diet and tooth decay, and what support they would like to see in school.
Children, young people, and families' from CORE20plus groups opinions, values and priorities heard

3. Contact neighbouring schools in the neighbouring area to explore other local offers and share experience. Share work with CHWN.
Avenues for sharing best practice and expertise across-sectors explored

4. One plus group identified is looked after children(LAC). Invite contributions from social services and LAC representatives to ensure changes to schools approach to dental hygiene and food availability will benefit looked after children. Monitor public health data for LAC.
Co-production of projects/services developed with key stakeholders
Monitor available data

5. Between focus groups, teachers, lunch staff and local dentists school meals and breakfast clubs are reviewed to reduce the number of sugary snacks available to children throughout the school day.
Expertise of those working in relevant domains collected (cross-sector encouraged)

Applying the NENC Core20PLUS5 framework

Action: Use the NENC Core20PLUS5 Checklist to align your work to the NENC Core20PLUS5 framework.

Broader Considerations

Utilising the NENC Core20PLUS5 framework for CYP is a great opportunity to think strategically about how all professionals can worker closely together to reduce the significant health inequalities that we see for babies, children, and young people across the region. While this toolkit can give some guidance on how to practically use Core20PLUS5 to implement practical action there is a broader strategic lens through which we can use the framework.

As Local Authorities, Combined Authorities, NENC Integrated Care Board and other anchor organisations are considering how they tackle the significant impact of disadvantage, deprivation and poverty it is imperative that the Core20PLUS5 features within the strategic landscape and is a part of the wider strategies being developed, including inclusive economy, anti-poverty, and poverty alleviation strategies that exist across the region.

Another key consideration is how the ICB promotes the CYP Core20PLUS5. While the national framework is key, it is important that there is the overlay of the regional Core20PLUS5 for NENC highlighted within this paper. Practitioners would benefit from seeing one framework that talks to both the national and the regional priorities, and the infographic highlighted in Figure 2 could be adopted as the CYP Core20PLUS5 framework that is discussed across the NENC ICB.

Finally, a dissemination of the Core20PLUS5 should be shared across sectors so that there is a broad understanding of the approach, existing work, and how new work could align within the priorities set out in the framework. This is a promotion that the NENC CHWN Health Inequalities Advisors could adopt within their role.

Next Steps

Applying the NENC CYP Core20PLUS5 framework across our region is imperative in addressing the significant levels of healthcare inequalities that exist. As Health Inequalities Advisors for the CHWN, working across the North East and North Cumbria Integrated Care Board (NENC ICB), it is imperative that we can support and connect organisations and good practice across the region.

If you are working towards addressing any of the priorities highlighted throughout this document then we see it as vital that we get the opportunity to hear about what you are doing, celebrate achievements, and connect workstreams so we can gauge the impact of multiple efforts made in addressing the inequalities highlighted. This intelligence will allow us as a region to really pinpoint and invest in a way that is evidenced to make significant impact. If you are working towards one of these priorities and applying the framework in your approach, please complete the very simple Microsoft form here and tell us about the work you are doing.

Appendix A

Justification for 5 NENC regional priorities

Positive mental wellbeing.

The NENC CHWN Facts of Life document identified ‘Mental health’ as a priority area for children and young people across the NENC region. The prevalence of social, emotional and mental health needs, bullying, substance and alcohol misuse amongst NENC school pupils are significantly higher than national averages:

- School pupils with social, emotional and mental health needs: % of school pupils with social, emotional and mental health needs (8/13 NENC LAs had significantly higher rates than the England average)
- Percentage who was bullied in the past couple of months at age 15 (4/13 NENC LAs had significantly higher rates than the England average)
- Percentage who has been drunk in the last 4 weeks at age 15 (10/13 NENC LAs had significantly higher rates than the England average)
- Hospital admissions due to Substance misuse (15-24 years) (6/8 NENC regions had significantly higher rates than England average)
- Hospital admissions as a result of self-harm (10-24 years) (10/13 NENC LAs had significantly higher rates than the England average)

Inequalities in mental wellbeing may be related to a number of contextual factors, for example, family structure, parental circumstance, having refugee or asylum seeker status, being a looked after child, and sexuality (https://media.samaritans.org/documents/Socioeconomic_disadvantage_and_suicidal_behaviour_-_Full.pdf). In addition, a key aim of the NENC framework is to promote and allow for wide adoption and application of the framework across sectors and workstreams. Recognising that mental health is dynamic and being ‘mentally healthy’ is an ongoing process, and has social and contextual influences and impacts, the term ‘mental health’ has been broadened to ‘positive mental wellbeing’.

A healthy environment.

The NENC CHWN Facts of Life document identified ‘Health promotion’ and ‘Childhood Illness’ as priority areas for children and young people across the NENC region. A large number of NENC local authorities have rates of sedentary lifestyle, obesity, poor diet, road traffic accidents and household accidents that are significantly worse than national averages:

- Percentage with a mean daily sedentary time in the last week over 7 hours per day at age 15 (11/13 LA had significantly higher rates than the England average)
- Reception: Prevalence of overweight (including obesity) (10/13 NENC LAs had significantly higher rates than the England average, Northumberland better)
- Percentage who eats 5 portions or more of fruit and veg per day at age 15 (10/13 NENC LAs had significantly lower rates than the England average)
- Children killed and seriously injured (KSI) on England's road (5/13 NENC LAs had significantly higher rates than the England average, 8 not significantly different)
- Hospital admissions caused by unintentional and deliberate injuries in children (aged 0-14 years) 8/8 NENC regions worse than national average)

These factors are each influenced by, amongst other factors, the environment children and young people reside in and/or are exposed to. This may be their outdoor environment i.e., the community/area they live in, or their home environment. Indeed, the degree to which health is promoted, and children experience illness, is influenced by environmental exposures. Inequalities in environment may be due to reduced access to green space, poor housing, poor indoor and outdoor air quality and may also go some way to explain the high rates of presentations for illnesses such as asthma and respiratory infections. Furthermore, the way children and young people are spending their time is changing, with increasing numbers spending less time outdoors, and more time indoors (Selhub and Logan, 2012), and an increase in the amount of screen time young children are now accessing (Twenge and Campbell, 2018). To account for the strong influence of environment on children and young people's health, the framework includes a broad categorisation of 'a healthy environment' as one of the five priority area.

Best start in Life.

The NENC CHWN Facts of Life document identified *'strong start in life'* as priority areas for children and young people across the NENC region. The majority of NENC local authorities have significantly high rates of obesity and smoking at delivery and low rates of breastfeeding.

- Smoking status at time of delivery (12/13 NENC LAs had significantly higher rates than the England average)
- Obesity in early pregnancy (5/6 NENC areas had significantly higher rates than the England average -2 not reported)
- Breastfeeding prevalence at 6-8 weeks after birth (8/13 NENC LAs had significantly lower rates than the England average, 4 not reported).

It is widely recognised that the first 1001 days of a child's life are critical as this is a time of accelerated development and issues not addressed in early can have significant and long-term impacts on a child's life outcomes. The 'Best Start for Life' policy paper (2021) explains that *'The 1,001 days from pregnancy to the age of two set the foundations for an individual's cognitive, emotional and physical development.'*

While this is a national challenge it is acutely felt in the North East. Calibrating the data highlighted above with the acknowledgement that a healthy pregnancy impacts positively on the child's start in life, and also the support that parents are able to offer within those formative days, months and years. Without a focus on this best start then disabilities and long-term illnesses may not be identified and can have a longer-term impact on the child's health outcomes, therefore this is critical in address the 5 priority areas.

Food insecurity

The NENC CHWN Facts of Life document identified *'Poverty' and 'Health promotion'* as priority areas for children and young people across the NENC region. The NENC has significantly high rates of poor health related to poor diet

- Tooth decay, (12/13 NENC LAs had significantly higher rates than the England average)
- Percentage who eats 5 portions or more of fruit and veg per day at age 15 (10/13 NENC LAs had significantly lower rates than the England average)
- Reception: Prevalence of obesity (including severe obesity) (8/13 NENC LAs had significantly higher rates than the England average, only Northumberland better than England average)

It is a significant issue that is affecting children and young people across the North East and further afield across the country with 14.6% of households with children having experienced food insecurity in the past six months. This includes 2.5 million children, with levels 27% higher than before covid-19 (Viner, 2021).

The consequences of food insecurity are severe with a complex mix of both physical and mental health consequences which are felt by families who are living in food insecure environments. This issue is a key area of concern with the health determinants poorer across children living in food insecurity. Food-insecure children have poorer physical health across a wide range of indicators, from higher levels of asthma and dental problems to higher levels of hospitalisations, as well as lower wellbeing and quality of life and higher levels of homelessness and substance use (Viner, 2021). Therefore, the costs to the NHS are likely to be high. (Post Parliament, 2021).

Family Life

The NENC CHWN Facts of Life document identified *'Additional needs and vulnerability' and 'Family support'* as priority areas for children and young people across the NENC region.

- Children in need due to family stress or dysfunction or absent parenting (10/13 NENC LAs significantly higher than the England average
- Children in care (Persons, <18 yrs, (11/13 NENC LAs significantly higher than the England average)
- Pupils with special educational needs (SEN): (7/13 NENC LAs had significantly higher rates than the England average, only North Tyneside significantly lower)

Family life can look very different in different families and while this should be celebrated there is increasing evidence that negative factors can impact on the development of children and young people. Domestic abuse, poverty, relationship conflict, substance misuse and mental ill health can all contribute negatively on family life (Love matters: Archbishop's commission on families and households), and impact negatively on the outcomes for children. Where young people have clinical needs, and they are facing the impact of any of the challenges faced within family life aforementioned there is possibility that healthcare inequalities can be negatively impacted.

Within a supportive and effective household, it is evident that access to health support is easier and more available. It is more likely for children to attend appointments, receive low level care in the house, and appropriate levels of clinical support where children have lifelong illnesses or a disability. The focus on family life is represented as a critical area that, if addressed effectively, can significantly reduce health inequalities.

Appendix B. Piloting the NENC Core20PLUS5 framework in Northumberland

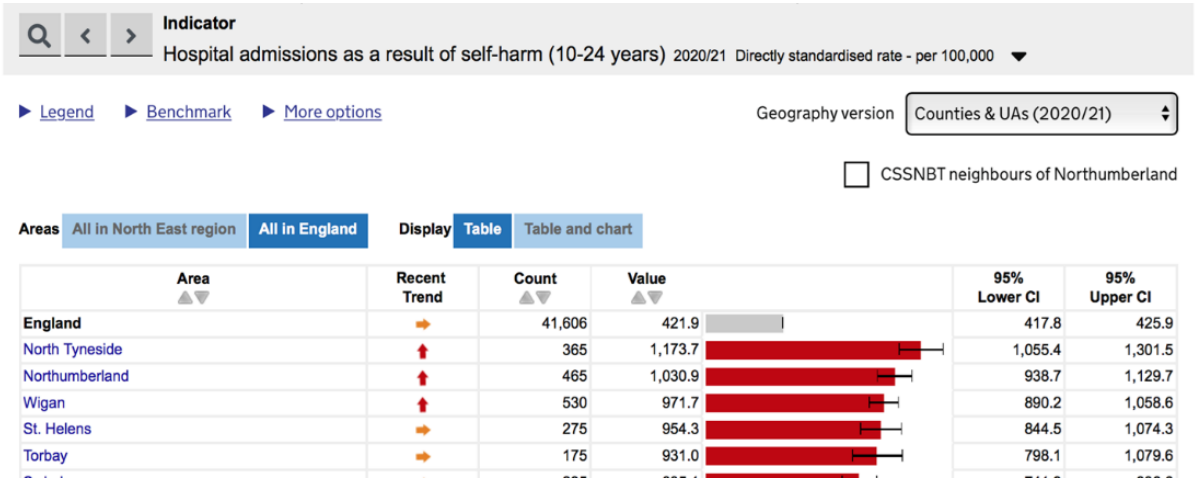
A pilot of the NENC Core20PLUS5 framework was carried out by CHWN Inequalities Advisors to explore feasibility and efficacy of application.

How did we apply the framework?

Selecting which priority area of health to target

Evidence within the Facts of Life report highlighted that nationally, two of the NENC regions, Northumberland and North Tyneside, had the highest incidence of hospital admissions in children and young people aged 10-24 years as a result self-harm (Figure 5). The topic of self-harm falls under the NENC regional priority of 'Positive mental wellbeing' and the national priority 'Mental Health', therefore exploration of this topic aligned with the NENC CORE20PLUS5 framework.

Figure 5. Hospital admissions as a result of self-harm (10-24 years) data take from the Facts of Life report.



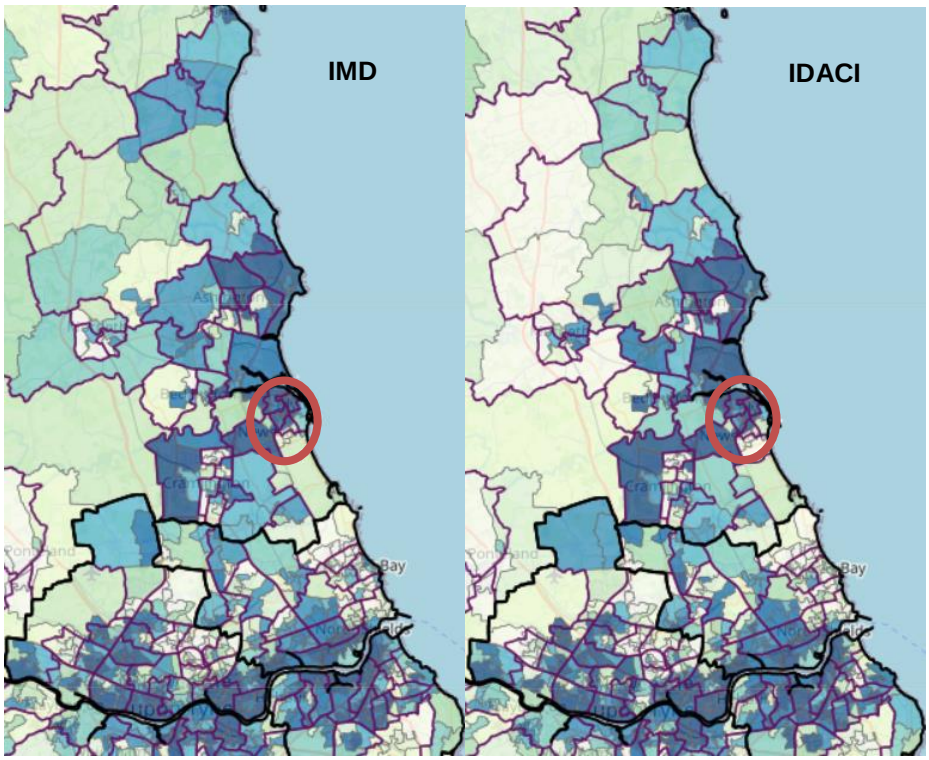
Area	Recent Trend	Count	Value	95% Lower CI	95% Upper CI
England	→	41,606	421.9	417.8	425.9
North Tyneside	↑	365	1,173.7	1,055.4	1,301.5
Northumberland	↑	465	1,030.9	938.7	1,129.7
Wigan	↑	530	971.7	890.2	1,058.6
St. Helens	→	275	954.3	844.5	1,074.3
Torbay	→	175	931.0	798.1	1,079.6

In addition to exploring regional data, NENC circulated a questionnaire across the network exploring what existing practice was in place addressing self-harm in CYP across the region. Based on the responses to the questionnaire, a gap in support for primary school aged children was indicated. It was then identified that Advisors piloting the framework had existing links with schools in the Northumberland area which presented an opportunity to connect with key stakeholders in Northumberland to explore the topic of self-harm further.

Identifying *where* the Core20 population were located

After identifying Northumberland as an area in NENC with high incidence of self-harm, we used Indices of Deprivation 2015 and 2019 (communities.gov.uk) to explore levels of deprivation in Northumberland based on IMD and IDACI. Figure 6 displays the Lower-Super Output Area's falling in IMD deciles 1 and 2 (on the left) and IDACI deciles 1 and 2 (on the right). There was substantial overlap between these.

Figure 6. Lower-Super Output Areas (LSOA's) falling in deciles 1 and 2 (bottom 20%) for deprivation (dark blue areas).



The areas identified in deciles 1 and 2 clustered around Blyth, Cramlington, Ashington. The interactive map allowed us to pinpoint specific neighbourhoods in each decile. Using these data, it was decided Blyth (circled) would be the target area for exploration.

Identifying who the plus groups were

Existing data provided some background information about plus groups for self-harm including higher incidence in girls than boys (NHS Digital, 2023) and those identifying as LBGTQ+ (Jadva et al 2021).

To explore the plus groups further and those that were most relevant for the Blyth area, 4 focus groups were held, one each with:

- Professionals working in mental health services and education,
- Parents of children and young people,
- Children and young people (one Yrs 7 and 8, one Yrs 9 and 10).

The focus groups also provided the opportunity to explore the priorities for CYP mental health and wellbeing from the perspectives of parents, professionals and CYP themselves, and to identify existing support in place within the community, or where gaps in support were.

Exploring mental health and wellbeing and self-harm in CYP in Blyth

Below we outline in brief the findings of each focus group underneath semi-structured questions that facilitated discussions at each group.

Professionals focus group

Seven professionals working in mental health services and education in the Northumberland and Blyth area attended the professional focus group. Professionals were representative of the range of sectors working within the Blyth community and across the Northumberland locality to address the mental health and wellbeing of children and young people, representing health, education, local authority/commissioning groups, and voluntary sectors. Roles included Consultant in Public Health, Crisis Team Manager, Director of Public Health, GP, Specialist Nurse, Commissioning Manager and Head of Community.

We asked the focus group semi-structured questions around mental wellbeing and self-harm, exploring the impact of poverty, the PLUS groups in their area, existing support, and 5 priority next steps for addressing CYP mental wellbeing.

Thinking about our Core20 in Northumberland, what impact does poverty have on young people who self-harm?

- Professionals reported that based on their experience, substance misuse amongst young people and parents was high in Core20 areas, and levels of presentation to hospital from alcohol or substance misuse are relatively high in the area.
- There was a reported sense that more recently self-harm has become a trend amongst young people, with strong influence from social media influences and communication between young people via social media channels.
- Professionals noted the impact of food insecurity and poor sleep on exacerbating mental health problems with emotional health and the subsequent snowball effect of this pattern which young people struggle to break.
- Issues with transport and childcare were reported to have impacted people's ability to accessing service.

Thinking about PLUS groups in your area, are there distinct populations who present differently?

- Based on the experience of the group, self-harm was reported as significantly higher in LGBTQ+, young people aged 16-17 yrs old, looked after children, those with Autism or Learning Difficulties.
- It was noted that there was a need for further data about 'plus' groups and that collating data across services was a challenge as there is variability in how and what data is collected.

What support exists for the Core20PLUS populations?

- Professionals mentioned some existing support services in the area including Trailblazers support for mental health in schools Trailblazer Support | NHS Trailblazers (beyounorthumberland.nhs.uk), the 0-19 school nursing service, MESMAC in Newcastle Mesmac Newcastle | who provide support for the LGBTQ+ community, and Trinity Youth Association Home | Trinity Youth Association.
- There was some uncertainty around what other existing resources within the community there were, and professionals reported they believed there were gaps in voluntary sector support across Northumberland. It was also reported that there were gaps in provision and support particularly for teenagers and those who are Neurodiverse.
- There was recognition of the strengths of evolving Family Hubs and the opportunities for support that these may offer in future.

What could be changed- 5 things?

1. Professionals reported there was a need for more data to understand who the plus groups are.
2. The group stressed that the data needed it that which is easily accessible and can be analysed- for example, a suggestion was to make multiagency referral forms from primary care to school nurses and early help accessible, to gather more data about presentations that are not seen by secondary care.
3. Focus on poverty- poverty proofing acute services was highlighted as a priority need, for example looking at transport and childcare, and support individuals accessing unclaimed benefits.
4. Assess community assets in specific areas. In response to a lack of awareness around what support within communities is available, professionals reported there was a need to explore and document what is available and to share/signpost this with key stakeholders.
5. Finally, professionals commented that it was important that stakeholders ensure work is aligned with and links with the Northumberland Inequalities Plan.

Parent focus group

Eleven parents (10 mothers 1 father) with children aged between 2 and 23 years attended the parent focus group alongside 2 teachers from the school in which the group was held (supporting facilitation).

We asked the focus group semi-structured questions around mental wellbeing and self-harm, exploring the pressures on CYP, existing support, responsibility for CYP mental wellbeing and gaps in support they believe need to be addressed.

Which factors do you think have the most negative impact on CYPs overall mental health and wellbeing?

- Expectations from school, specifically exams/GCSEs were reported by parents as a primary pressure impacting CYP mental health and wellbeing. It was noted by parents that school pressures impact both children and parent mental health as parents try to support their child(ren).
- Social Media was reported as an additional pressure on CYPs mental health and wellbeing with all parents reporting their children used this regularly and usage could be challenging to monitor.
- Parents reported that COVID-19 and lockdown has had a massive impact on CYPs mental health and wellbeing, specifically CYP were more anxious, were reluctant to be away from parents, and were less resilient, for example, the teacher noted children often want to go home straight away if they became upset.

What support is available in your local community for CYPs mental health and wellbeing?

- They reported that in their local community there were ‘lots of young people out on the streets at night’ as there was a lack of community resources and ‘nowhere for them to go’ as many don’t want to be at home. However, parents also believed that children and young people don’t feel safe around the area.
- Parents believed that there was more provision for younger children in terms of services in the community but reported that these were expensive, and only used by parents who could afford for their child to go, therefore many parents don’t use these. Parents felt therefore that there was inequality in access to community resources because of the expense.

Would you know where to go for support for your child or young persons' mental health?

- Parents reported they believed there were 'no joined up services across Blyth' and all reported that they see school as their first point of contact if their child or young person was struggling with their mental health. Only 1 parent mentioned they may go to their GP for advice or support but reported they had experienced that the GP sends them back to school for support. Parents felt that the police were not qualified to deal with mental health crises.
- There was a sense from parents that schools are being asked to deal with things 'typically social services should be picking up', but they believe schools don't have the capacity or budget to adequately address these difficulties.
- Parent recognised that there were long waits for crisis team support and reported that immediate support for CYP and families was missing. It was reported by parents that there is a need for more support for families before crisis points are reached.
- Parents felt that Early Help support was very difficult to get if families don't meet the criteria, noting that they felt the threshold for Early Help support was too high.

Who do you believe is most responsible for CYP mental health and wellbeing?

- Parents believed both 'school' and 'home' were responsible for CYP mental health and wellbeing.

What is missing in support for CYP mental health and wellbeing that you would like to see implemented?

- Parent reported they would like to see someone in school in a specific role to support children's mental health, but that this needs to be properly funded.
- They believed investment in mental health support for children was needed at an area level.
- Improved signposting that is clear, as parents reported they don't know where to go outside of school.
- Parents recognised a need to improve waiting times for secondary services.
- Parents also reported they would like to see greater equality in access to services.
- Parents would also like further support after a clinical diagnosis as they felt 'currently children reach diagnosis then nothing'.

CYP focus groups

2 focus groups with CYP were held; session 1 was with Student Council Members in Years 7 and 8 and session 2 was with Student Council Members in Years 9 and 10. Semi-structured questions were used in both sessions to facilitate discussion exploring the mental health difficulties they observe CYP experiencing, the pressures on CYP mental health and wellbeing, and existing support in their community. Below we provide some example quotes from CYP to demonstrate points made.

Session 1: Years 7 and 8.

Sixteen students from year 7 and 8 attended the first session (10 girls and 6 boys).

What type of mental health difficulties do you think CYP struggle with the most?

- Students reported anxiety was most common amongst their peers, as well as anger and peer relationship difficulties.

What do you think are the main pressures on CYP mental health and wellbeing?

- Male students reported there was a pressure and expectation that boys should not express how they feel, that despite a greater awareness of mental health difficulties in CYP, that this pressure was societal and embedded into culture ‘boys are socially expected to supress feelings, we should all be able to express emotions’, ‘We don’t really talk about feelings in boys' group’.
- Social media was also reported as having an impact of mental health and it was noted that technology enabled a constant stream of content and/or messaging.
- Students reported that bullying and peer pressure had a large impact on their mental health, and there was peer pressure to keep up with current trends (e.g., fashion, technology) and not all families could afford to do this.
- There were many comments about the effects of anti-social behaviour, drug and alcohol abuse within the community. Students reported many people (young people and adults) as being violent on the streets at night, and that they often felt scared within their community because of anti-social behaviour and, ‘violence in the streets, walking with broken glass bottles’, ‘older people (adults) who are drunk make me scared’, ‘fighting in the streets anti-social behaviour’.

If you felt you were struggling with your own mental health, who would you go to, to talk about this, or what would you do to feel better?

- Students reported a mix of people they would go to, to talk about their feelings including their tutors, their best friend(s), and siblings. When asked if they would speak to their parents the response was mixed, some would straight away, others said no they wouldn’t, and one reported ‘maybe after gathering my thoughts, I may speak to my parents’. There was a sense from the students that school was a safer place to speak to someone than home and one student commented ‘parents may take the issues too far, whereas teachers keep a level head and know and understand school issues’, ‘teachers can support you’.
- One student (female) mentioned the therapy website 'Kooth' as a point of access for support.
- When asked if they would go to their GP for support, one student reported they would only go if it was ‘a big issue’.
- When asked what type of things they do to help their own mental wellbeing, students reported ‘relax your mind’, ‘listen to music, colour, hobbies’, ‘some find it hard to talk so write down how they feel’, ‘sports i.e., boxing to take out your anger or dance and painting’, ‘exercise released endorphins’

Session 2: Years 9 & 10

Eleven students from years 9 and 10 attended the second session (8 girls and 3 boys).

What type of mental health difficulties do you think CYP struggle with the most?

- The older students didn’t directly answer this question but reported that most young people their age don’t talk about the mental health out of fear they wouldn’t be understood by peers or parents, ‘most don’t talk about mental health as they (peers) don’t know or understand how you feel’, ‘parents do not understand, there is a generational gap. Parents dismiss your problems and say, 'you're overreacting as you have not had as many life lessons' and they compare themselves to you’, ‘Adults are dismissive’.
- As younger students had reported gender expectations (for males a pressure not to talk about their feelings) older students expressed they believed this had shifted and it was more

acceptable now to be more open about their feelings, however there was still a recognition that ‘boys react differently to girls’ when it came to coping with mental health difficulties.
- Students reported that although there had been an increase in awareness of mental health difficulties, that difficulties were ‘getting worse’ with more CYP experiencing poor mental health.

What do you think are the main pressures on CYP mental health and wellbeing?

- Social media and school were the two main factors reported by students as main pressures on CYP mental health and wellbeing.
- School pressures included exams, behavioural expectations, and getting ready on time in the morning. However, students also recognised the value of school in terms of their social interaction opportunities and the benefit of social interaction on mental health and wellbeing, ‘without school you would have no social interaction like what we saw with lockdown which would also impact on mental health’
- Peer pressure was also highlighted as impact mental health and this was also mentioned in relation to self-harm, ‘people face peer pressure*impacts that cause self-harm, I saw a boy hitting his head off a table as a way to 'fit in' with his peers’, ‘no, no one wants to stand out’.

We then asked the students what the term 'self-harm' meant to them and whether they thought ‘self-harm’ was common in students their age?

- Responses included ‘Inflicting damage intentionally’, ‘self-harm can be physically thinking 'I look bad' self-deprecation’ and ‘intentions to harm yourself’.
- Boys responded that self-harm was not common whereas girls responded that it was, and it was ‘high’.

Who would you go to for support with your mental health and wellbeing?

- This varied amongst the students, girls reported they would speak to their friends about how they felt, whereas boys reported they would go to their parents. However, some students expressed concerns about speaking to their parents out of fear of disappointing them; one boy commented that ‘parents have high expectations for boys rather than girls’.
- Students were concerned about safeguarding and confidentiality but there were differing perspectives on these- some students felt they would be less likely to tell their parents how they felt as school was more confidential, others felt teachers would tell their parents about what they had spoken. One student reported they would be worried about speaking with their friends as if they ‘fell out’ they ‘would tell everyone’.
- As the younger students mentioned, the older students also referenced the website ‘Kooth’ as a resource for support.
- None of the students reported they would go to a GP for support when asked. Going to the GP was reported as ‘too much hassle’ and there was a comment that ‘exercise is better for depression than any pills.
- Within the Blyth community, students referenced the Silx youth club silxteen.com, Isabella centre Home - Blyth Isabella Community Centre (theisabellacentre.org.uk) and ‘youth groups, but all local ones know my parents so wouldn't go there’.

What do you think is missing in terms of mental health and self-harm?

- Students reported that mental health needed to be ‘destigmatised’

- They also reported they though parents needed to be education further about the current pressures on CYP mental health and their experiences, ‘educate parents as they are constantly comparing their experiences to ours’
- Students expressed they would like someone to speak to who wasn’t a teacher or parent but rather removed from these roles and could therefore ensure non-judgemental, confidential support, ‘we need someone we can have open conversations with who's independent and wont judge’.

References

Jadva, V., Guasp, A., Bradlow, J.H., Bower-Brown, S., and Foley, S. (2021) Predictors of self-harm and suicide in LGBT youth: The role of gender, socio-economic status, bullying and school experience. J Public Health (Oxf),14;45(1):102-108.

Love Matters. (2023). Report of the Archbishops’ Commission on Families and Households. [online]. Available from H&F report DIGITAL SINGLE PAGES.pdf (churchofengland.org) Accessed June 27 2023

NHS Digital. 2023. Hospital admissions relating to self-harm - NHS Digital

North East and North Cumbria’s Child Health and Wellbeing Network. (2021). The Facts of Life for children and young people growing up in the North East and North Cumbria. Cumbria, Northumberland Tyne and Wear and South Tees Hospitals NHS Foundation Trusts. [online]. Available at facts-of-life-report-final.pdf (northeastnorthcumbria.nhs.uk) Accessed June 27 2023

Post Parliament. (2021). Event summary: Food insecurity and children’s health. [online]. Available from Event summary: Food insecurity and children’s health - POST (parliament.uk) Accessed June 27 2023

Public Health England (2016) Improving oral health: A toolkit to support commissioning of ... - gov.uk, Improving oral health: A toolkit to support commissioning of supervised toothbrushing programmes in early years and school settings. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/574835/PHE_supervised_toothbrushing_toolkit.pdf (Accessed: 28 June 2023).

Selhub, E. M. and Logan, A. C. (2012) Your Brain on Nature: The Science of Nature's Influence on Your Health, Happiness and Vitality. Mississauga, ON, Canada: Wiley & Sons

Twenge, J. M., and Campbell, W. K. (2018). Associations between screen time and lower psychological wellbeing among children and adolescents: Evidence from a population-based study. Preventive Medicine Reports, 12, 440 271–283. https://doi.org/10.1016/j.pmedr.2018.10.003

Viner, R. (2021). Food insecurity is toxic for our children and a threat to the future of our next generation. The BMJ Opinion. [online]. Available from Food insecurity is toxic for our children and a threat to the future of our next generation - The BMJ Accessed June 27 2023