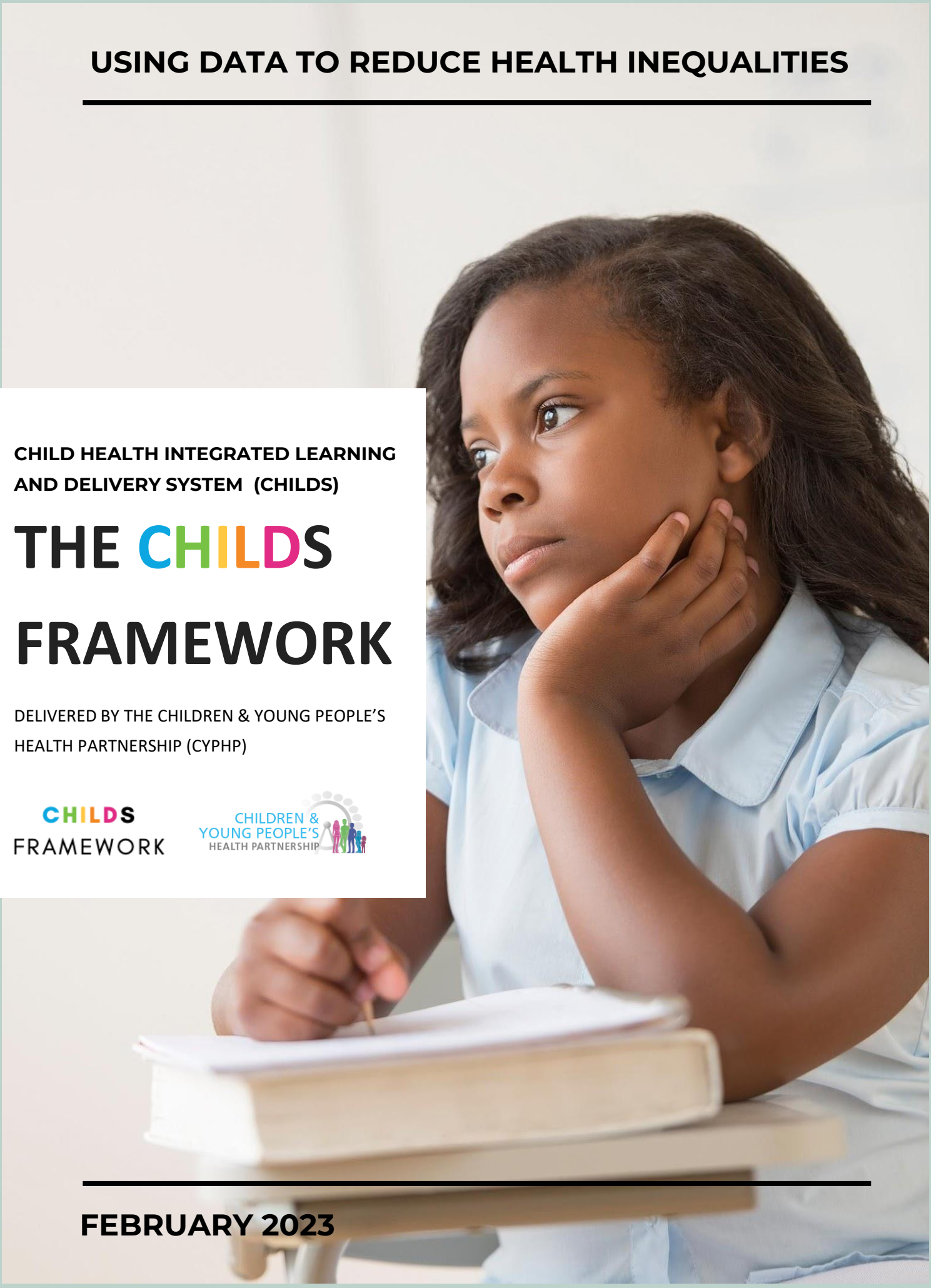
USING DATA TO REDUCE HEALTH INEQUALITIES



CHILD HEALTH INTEGRATED LEARNING AND DELIVERY SYSTEM (CHILDS)

THE CHILDS FRAMEWORK

DELIVERED BY THE CHILDREN & YOUNG PEOPLE'S HEALTH PARTNERSHIP (CYPHP)

CHILDS FRAMEWORK

CHILDREN & YOUNG PEOPLE'S HEALTH PARTNERSHIP

FEBRUARY 2023

OVERVIEW OF THE PROGRAMME

The CYPHP (Children & Young People's Health Partnership) programme is an initiative that is designed by clinicians and researchers in order to deliver better care for children and families, especially those who need it most. It has been a labour of love and we've spent a decade developing and testing our approach to deliver this service. **The CHILDS framework is the result.**

The CHILDS framework is built on a strengthened health system, uses population health tools and methods, enabling a holistic and integrated care model for children and young people delivered in primary care and community settings. The core model comprises local child health clinics and targeted early intervention care for children with long-term conditions.

The CHILDS framework was developed for selected long-term conditions, as proof of concept, but can be adapted to other long-term conditions or risk factors. The CHILDS framework delivers early intervention care for physical, mental and emotional problems, in the context of a child's family and social circumstances.

Since prevention is better than cure, care includes health promotion and supported self-management. Families receive a health pack relevant to the specific conditions of their child, which signposts them to locally available resources.

The CHILDS framework is effective. It improves outcomes, delivers high quality care, reduces inequalities, and saves money.

The CYPHP programme's smarter use of data and holistic approach enables personalised, family-centred care delivered by expert child health teams working in local primary care and community settings. Shared learning between clinicians, researchers, and families, continuous improvement, and building the evidence base for child health, are key to success.

OUR AMBITIONS

THE CHILDS FRAMEWORK WAS BORN OUT OF A COMMITMENT TO DELIVER BETTER, SMARTER CARE FOR CHILDREN AND THEIR FAMILIES.

The boroughs of Southwark and Lambeth have some of the highest deprivation scores in England. We know that 31% of individuals in Southwark and 30% of individuals in Lambeth live in poverty. Poverty can affect health negatively when financial resources are insufficient to meet basic living needs, such as adequate heating, food or clothing. Poverty and health challenges are linked, and it is often the case that children with physical health conditions also experience social, mental or environmental challenges as well.

We have shown that health inequalities reduction can be achieved by using data to deliver a proportionate universal approach to care. This means proactively identifying and delivering resources and services at a scale and intensity proportionate to the degree of need in a population. We do this by using NHS data and advanced analytics to help identify children in the local population who may benefit from the CYPHP service (early intervention using a call-recall method), and gaining a deeper understanding of children's physical, mental, and social health needs so that we can tailor a personalised care package.

Our ambition was to develop an equitable approach to care for children, delivered by a multi-disciplinary child health team.

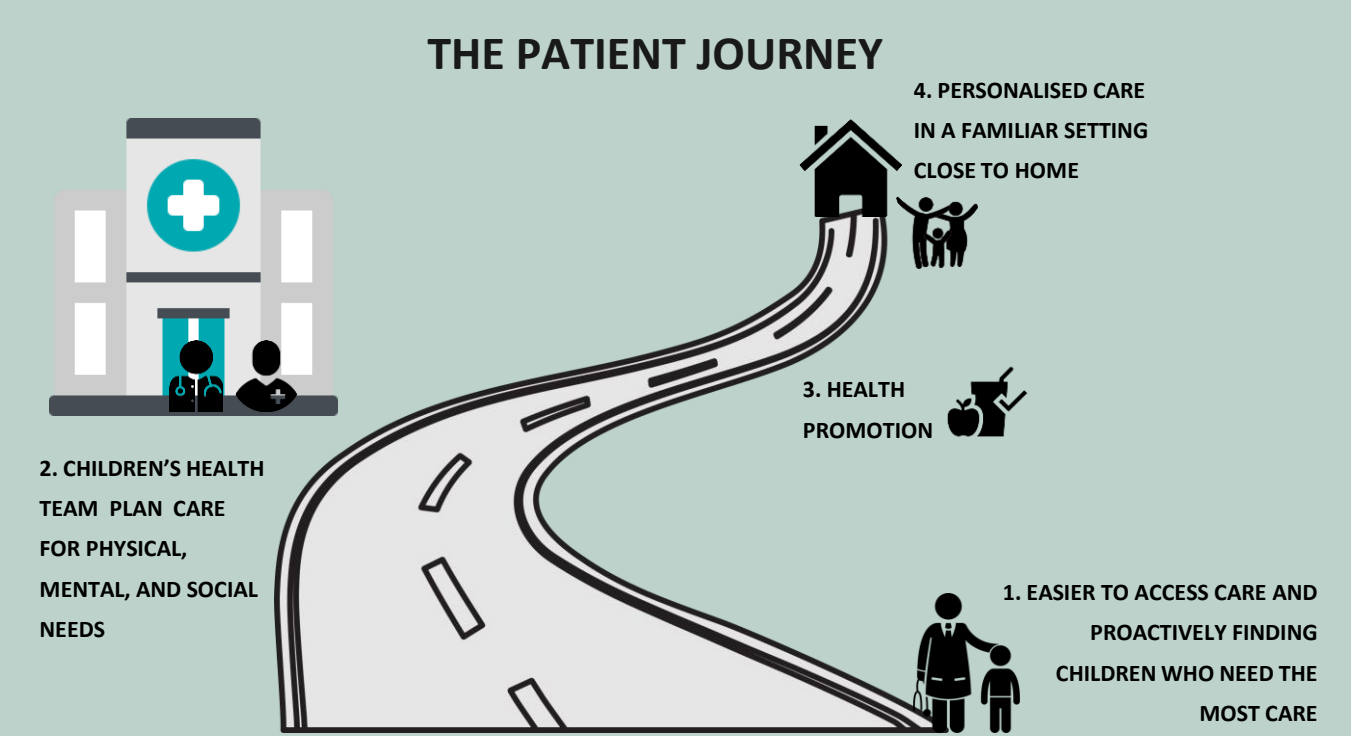
The success of the model shows that better health outcomes for children are possible, if different parts of the healthcare system work together to deliver better care and empower patients and their families. In particular, the improved health outcomes delivered by our programme are as result of its data-driven, 'whole child' and proactive approach to care delivery. This CHILDS Framework was delivered by a clinical-academic partnership approach to the programme.

PATIENT'S JOURNEY OF CARE

To achieve our goals, we developed a care pathway that prioritises the needs of the child and family and delivers early intervention and care for those who need it the most.

Our population health management tools allow us to identify children and young people in the community who could benefit from early intervention.

Pre-assessment data means we can deliver a tailored package of care in line with children and families' health needs and reduce health inequalities.



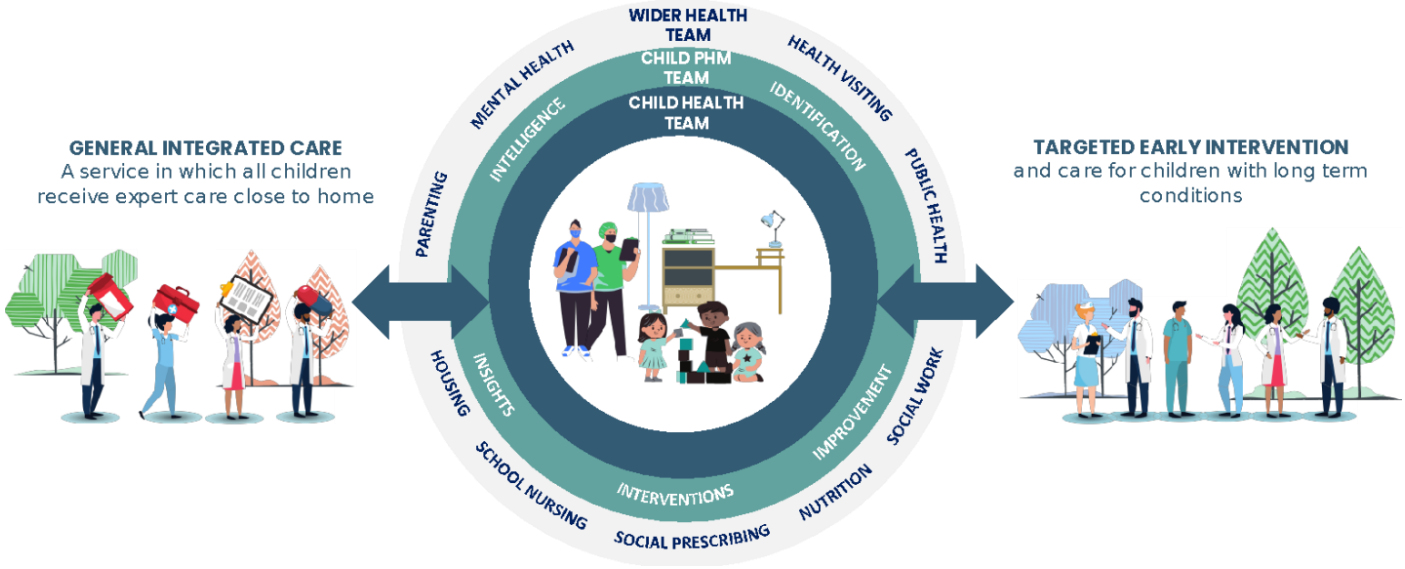
1. ACCESS TO CARE: We invite children with long-term conditions in for early intervention and personalised care, using NHS data and advanced analytics to help identify children who may benefit. Children with any childhood condition or problems can of course also be referred via their GP or another health professional, and importantly parents can self-refer their children.

2. CARE PLANNING: We gain a deeper understanding of children's physical, mental, and social health needs so that we can tailor a personalised care package. Treatment is delivered by a multidisciplinary team, designed to meet the child and family's holistic needs.

3. HEALTH PROMOTION: Since prevention is better than cure, we include health promotion and supported self-management as part of each child's care. Families receive a health pack relevant to the specific condition of their child. This pack supports health and wellbeing, and signposts local resources for support with broader social determinants of health, such as housing or parental mental health.

4. PERSONALISED CARE: Ongoing personalised care is delivered in a familiar setting, such as GP centre, school, or youth centre. The Child Health Team continue to identify and respond to the needs of patients and populations.

OUR MODEL OF CARE

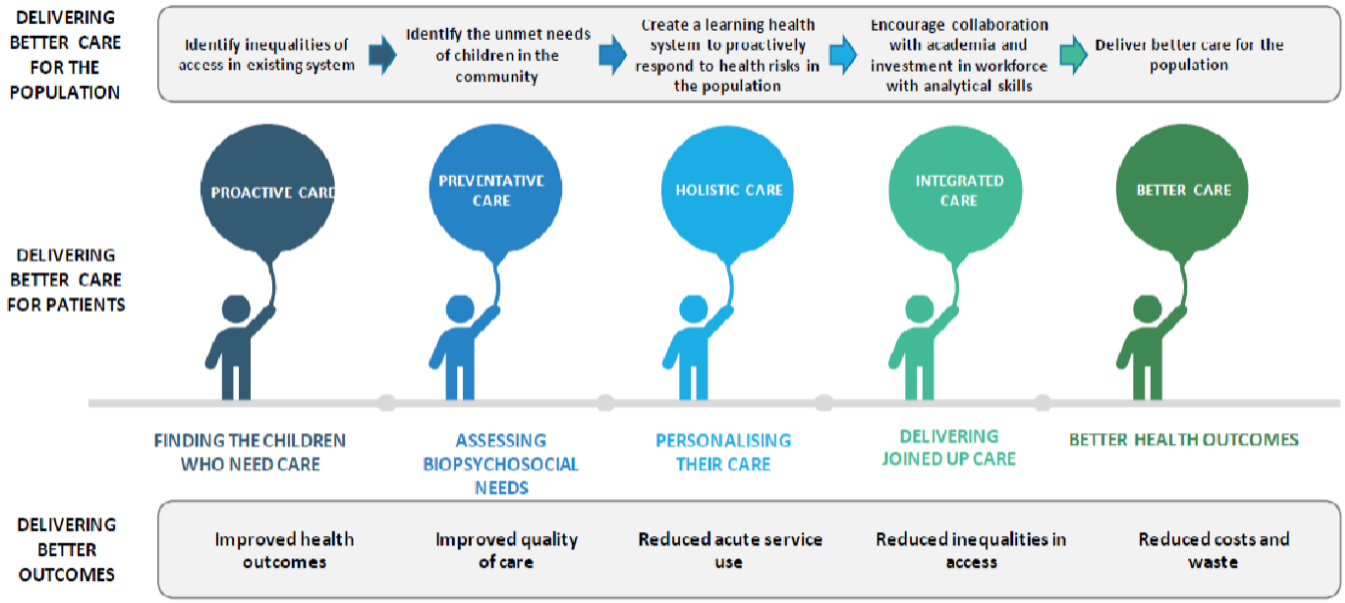


OUR APPROACH TO CARE

Our model of care was developed iteratively, working closely with patients, partners in primary care, acute care and mental health and commissioners. The core processes that deliver our innovation include:

- **Proactive and early identification of risk** – We use data to invite patients in for early intervention. Data can be collected from electronic health records, pre-assessment health checks, disease registries and public health datasets. The ability to identify at-risk individuals helps to reduce health inequalities by increasing access to care for those most in need of support, but who may not seek out care;
- **Holistic assessment** – We use bio-psycho-social assessment to explore different factors relating to living and family conditions that may be affecting health. This helps us to understand and focus on children and families that are the most in need;
- **Precision-care planning** - Pre-assessment data means we can triage and tailor a personalised care package including early intervention, supported self-management, and health promotion.
- **Using data to target areas with greater health inequalities** - Smart use of data to map population level needs and system performance means the local CYP team can make decisions about priorities and services, and commissioners can target services to areas of high need in very specific geographies.
- **Shared healthcare data set to increase efficacy** - Child health intelligence team, linked at hospital, borough, and Integrated Care System level, with population child health team working between NHS, Local Authorities, and Institute for Women and Children's Health.
- **Demonstrable impact via data insights** - High quality evidence of system impact through a service evaluation comparing before and after the new services, together with a research evaluation comparing intervention vs control, enables continuous learning and improvement
- **Economic and quality of care evaluation** – Understanding the cost-effectiveness and value of services, as well as the mechanisms through which the quality of care delivered can be improved.

POPULATION HEALTH MANAGEMENT



WHAT IS POPULATION HEALTH MANAGEMENT (PHM)?

Population health management is about re-balancing care to provide both a 'health service' and a 'sickness service', using data to deliver early intervention and care to children who need it most.

PHM is the process of improving clinical and health outcomes using data to enhance care for patients and populations. It recognises that clinicians have a responsibility to their patients and to the community.

In order to be effective, the system must reach those who would benefit from care – not just those who are already in touch with the system, in order to anticipate and meet needs. PHM leverages existing data to understand the local population and their needs, and then to proactively reach out and engage with them.

PHM as part of a clinical team and active learning partnership enables all parts of the system to work together– to co-produce and deliver solutions, and to continuously improve outcomes.

UNDERSTANDING POPULATIONS

A core feature of PHM is the use of data and advanced analytics to understand andmanage specific conditions and risks within a population. Data can be collected from electronic health records, pre-assessment health checks, disease registries and public health datasets.

The ability to identify at-risk individuals helps to reduce health inequalities by increasing access to care for those most in need of support.

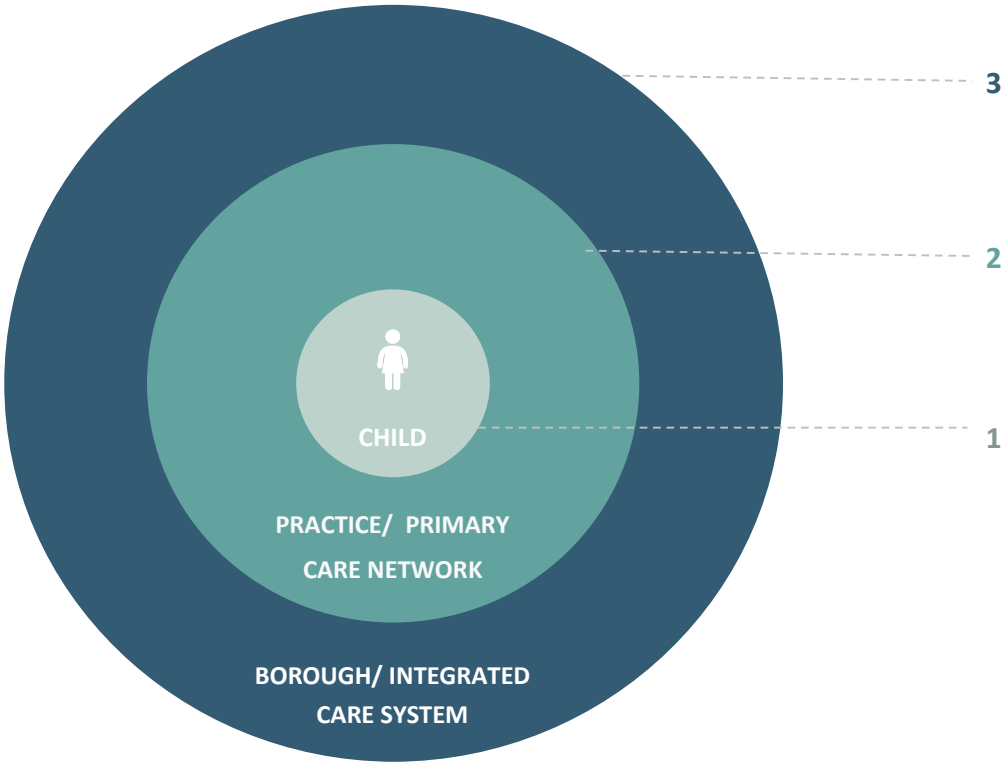
ENGAGING IN NEW PARTNERSHIPS

Engaging with a strong and diverse group of partners is crucial to the success of any population health initiative.

A strong child health team of clinicians and population health professionals is needed to better coordinate and target services to meet needs. Close working with local authority public health and other community-based professionals and organisations helps to address social determinants of health, coordinate complementary services, and smooth transitions of care.

PHM helps prevent people from becoming patients.

PLACE-BASED INTEGRATED CARE



The CHILDS framework can be scaled up or down to support child health at different levels of the system. By working at both an individual and community level, we can work with local partners to deliver joined-up, community-centred approaches that improve health outcomes.

1. CHILD

At its most basic level, the CHILDS framework can be used to provide better care to children at an individual level. This means delivering early intervention by identifying the child in the community providing a holistic biopsychosocial assessment and delivering whole-child care, in the context of their family and community.

2. PRACTICE/ PRIMARY CARE NETWORK

At a broader level, the CHILDS team uses more granular level data to understand the needs in the population and adapts the system to meet those needs. This means doing more targeted intervention in areas of the community where there the data has shown limited access to care.

For example, if children from a particular housing estate are showing high rates of asthma due to damp, we may work with local care providers and housing departments to resolve these issues – both at a medical level, as well as socially, by addressing the wider determinants of this population's health.

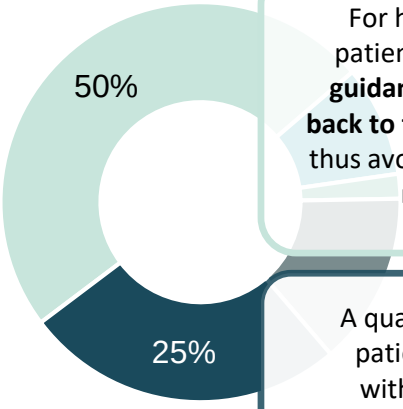
3. BOROUGH/ INTEGRATED CARE SYSTEM

At a Borough/ ICS level, this approach allows us to gain a better understanding of the local population and to set priorities according to what we know the systems pressures are. It means that health and care providers can work together taking collective responsibility for the care and support offered to improve outcomes.

At its core, the CHILDS framework is about providing tailored care to people in the local community, in a setting as close to home as possible.

CHILDS IMPACT: PERFORMANCE

Benefits of the Model on Patient Care



For half of triaged patients, **advice and guidance is provided back to the referring GP**, thus avoiding outpatient referrals.

50%

What this means:
- GPs receive better training and guidance

A quarter of triaged patients are seen within **'in-reach' clinics**, led by patch paediatricians.

25%

What this means:
- Children receive the most appropriate care close to home
- Unnecessary hospital referrals are reduced

Benefits of the Model on Usage and Cost

49%

Reduced usage

Reduction in emergency department contacts for asthma patients seen by the service

45%

Reduced usage

Reduction in non-elective admissions to hospital for asthma patients seen by the service

40%

Reduced attendance

Reduction in no. of primary care appointments in 6 months following in-reach clinic

30%

Savings Achieved

Savings achieved when 30-40% population coverage is achieved

Benefits of the Model on Reducing Inequalities and Enhancing Care

100%

Health Promotion

Of children who completed a health check are supported with **health promotion** materials and **supported self-management** tools – delivered through a technology-enabled patient portal

Health checks are undertaken by the same age, gender, ethnicity profile as for the local CYP population

Equal

Ethnicity

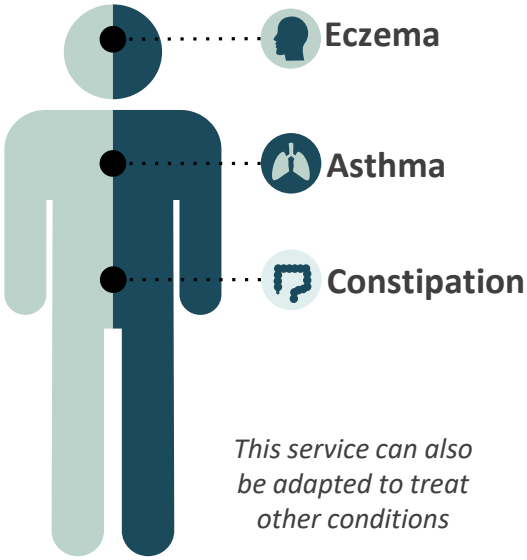
The ethnic profile of CYPHP patients matches that of Southwark and Lambeth and where possible, materials are translated into main non-English speaking languages

50-60%

Reduced health inequalities

Of CYPHP patients who complete a health check are in the two most deprived deciles of the population compared to 45% of the CYP population in these deciles across Southwark and Lambeth

CHILDS IMPACT: PATIENT OUTCOMES



This service can also be adapted to treat other conditions

NB for patients who disengage with the service, or self-discharge, more will still have 'uncontrolled asthma'.

93% of patients with moderate to very severe eczema who completed treatment were discharged from the service with symptoms that were clear or mild (i.e. below threshold)

90% of patients who had uncontrolled asthma at their initial assessment were discharged with reasonably or well controlled asthma.

38%

85% of children treated for constipation have levels above threshold when they enter the service, and after 6-10 weeks only **38%** still have symptoms above threshold.

Feedback From Patients

Friendly and targeted advice, all relevant, well explained and listened to all my questions, so helpful. Also amazingly quick at getting in touch after first diagnosis. Wonderful service.

She listened and gave me loads of advice and set me a basic plan around how my daughter is. She has helped make a change in my daughter's life in 2 weeks and I've been going to doctors with the same problem for the last 3 years.

Very individual and personal to each child. Fantastic knowledge and advice given.

I was listened to, given good advice and made me feel I could come to them when needed

20-25% of children with long-term conditions also have moderate to severe mental health needs. Our system improves mental health scores, moving up the scoring system by 2-3 bands when mental health services were provided – a significant improvement.

USING DATA TO REDUCE HEALTH INEQUALITIES

THANK YOU FOR YOUR INTEREST IN THE CHILDS FRAMEWORK.

Join us to help children get the care they deserve!

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