INSTITUTE of HEALTH EQUITY

ACTING ON THE SOCIAL DETERMINANTS OF HEALTH FOR CHILDREN AND YOUNG PEOPLE: US HEALTH SYSTEM CASE STUDIES

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INTRODUCTION

This document describes the actions being taken by 3 American health systems – Cincinnati Children's, Nemours, and Alameda – to improve the Social Determinants of Health (SDH) for children and young people (CYP).

It also includes reflections on the work, informed by interviews with senior leaders working within each of the health systems (see appendix for a list of interviewees). All quotes within the document are taken from these interviews, which were conducted by Matilda Allen in February and March of 2022 as part of a Harkness Fellowship.[i]

The context for Integrated Care Systems (ICSs) taking action in the UK as part of the CHEC is different in important ways from the context for these case studies. For example, US health systems have both more capital to invest, and more autonomy over how they operate – they are, in many ways, individual organisations. These organisations vary significantly – systems can be public or private, for-profit or not-for-profit, a single hospital serving a small geography or a multi-state system of multiple sites.

However, these case studies show that action on the SDH is possible, and while investment is important, action can be achieved with non-financial assets, using the trusted 'voice' of a children's hospital to advocate for policy change on SDH issues, or providing expertise to local partners for instance.

The purpose of these case studies is to provide inspiration and practical ideas for change within the healthcare system in the UK, as well as reflecting on facilitators and barriers for this type of work. The case studies describe impacts on health and the SDH where possible.

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CINCINNATI CHILDREN'S HOSPITAL MEDICAL CENTRE[1]

KEY POINTS

- Cincinnati Children's Hospital Medical Centre (referred to as 'Cincinnati Children's' in this case study) is a large paediatric hospital that has taken a leading role in 'All Children Thrive' a city-wide learning collaborative focussed on tackling SDH for children and families. The collaborative co-ordinates activities, and shares learning, data and expertise between partners.
- Motivated by an increasing strategic focus on the community, Cincinnati Children's has provided a co-ordinating role and invested in supporting partners across education, child welfare, housing and other institutions.
- The collaborative has supported networks to deliver place-based interventions focussed across SDH areas, including food poverty, work, education, early years development, housing, and economic mobility.
- The hospital is a key partner in many of these projects – including by referring patients and families, supporting co-ordinated data collection and sharing, and building and supporting partnerships and networks. A key activity has been providing technical assistance with quality improvement methodologies, delivered by quality improvement consultants employed by the hospital.
- Internal work has also taken place to identify and tackle equity gaps in patient access, experience and outcomes, supported by quality improvement methods.
- Data has been a key enabler of the work, and Cincinnati Children's have worked with others to build shared datasets to identify need and track progress towards ambitious shared population-based goals.
- Co-production with children, families and communities is at the heart of the work.
- Measured impacts include reductions in infant mortality in a target intervention area, reductions in hospitalisations for children where families were referred to a medical-legal partnership, and an improvement in public school results.

CONTEXT

Cincinnati Children's is a large academic paediatric children's hospital in Cincinnati, Ohio. The hospital is the major secondary care facility for all children in Cincinnati, which has a population of just over 300,000 people.[2]

49% of people in Cincinnati are White alone (not Hispanic or Latino), 40% are Black or African American, and 11% are Hispanic or Latino, Asian, two or more races, or American Indian and Alaska Native. 21% of the population are aged under 18 years old, 7% are under 5 years old. 25% of the population live below the poverty line.[3]

BACKGROUND

Cincinnati Children's is part of a collaborative called 'All Children Thrive', a learning network of partners working together to take action on SDH for children in Cincinnati, with the long-term goals of eliminating infant mortality, ensuring all five-year-olds have a healthy mind and body, eliminating neighbourhood disparities in inpatient bed days, and ensuring all children can read

proficiently by third grade.[4] The collaborative co-ordinates activities and enables shared learning between partners.

Cincinnati Children's involvement in this work grew out of a strategic shift for the hospital in 2015, away from a focus on 'conditions' (such as asthma, injury rates, and childhood obesity) and towards a focus on 'community', or a shift from 'healthcare' to 'health':

*"We really **shifted from our focus on healthcare to health**. And when we did that, we understood that the hospital could do some stuff to improve health, but really the vast majority of the work of health was not in the hospital, it was in the community. And that shift then really caused us to get out, to build the partners that we needed in the community."*

The development of their new strategic role and aim at this time was summarised by one interviewee as follows:

*"Cincinnati Children's would help Cincinnati's children be the healthiest in the nation through strong community partnership. And so, within that realm, this concept of **our role for the population of Cincinnati and not just those who walked through our doors**, was kind of written in stone."*

Out of this strategic shift, three thematic areas for the work developed:

- safe and supported families
- a pathway to full potential
- excellent and equitable health outcomes.

APPROACH TO EQUITY

The work was initially motivated in part by areas of high deprivation and poor outcomes within the immediate geographical area of the hospital:

*"There are huge gaps, disparities, problems in our own backyard, including in the neighbourhood that basically encircles the hospital. And it was hard to ignore that, and we shouldn't ignore it, when **you have a world-class institution and you know, down the street are disparities and equity gaps that are entirely immoral and require intervention**."*

In more recent years, there has been a growing focus on racial inequities, motivated in part by a "*very clear call out from our family and community partners that we needed to address **racism and structural racism**, and that it was incumbent upon us to do that."*

RESOURCES AND ROLE

The 'All Children Thrive' collaborative includes organizations working on housing, public benefits and child welfare, education, and others, who come together to share projects and learning within their own organisations. A significant contribution of Cincinnati Children's within the collaborative is to provide technical assistance and support to other organizations – including training in key methodologies (particularly quality improvement). They call this 'building improvement capability and capacity'.

"(Our role is) to partner with organizations generously, and help them be the best at what they do, in terms of their vision and mission. So if that is stabilising housing, if that is stabilising public benefits support, child welfare, education… (we) ***bring our methods around data and improvement to them****. And in the process create a trusted network that puts families at the centre."*

To support partners on data and improvement methods, Cincinnati Children's provide time and expertise from hospital staff, including quality improvement consultants who have been employed by the hospital to support other institutions with activities such as gathering, understanding and sharing data; setting up projects, monitoring progress and capturing impact; and applying cycles of improvement to adjust and improve delivery over time.

Interviewees reflected on the importance of long-term relationships and dedication to build trust within the collaborative. The investment of expertise and staff time was also seen as vital:

"We're not asking people to do it without any resources, which is another risk that a lot of places have, you know, let me train you and you go ahead and take care of it. We have ***quality improvement consultants****, like in our Cincinnati public schools, who are building that relationship and that capacity and that confidence."*

Another key role of Cincinnati Children's within the collaborative is to identify and refer patients and families into wider support – for example, referring to a medical-legal partnership for advice (see below for further detail on this project).

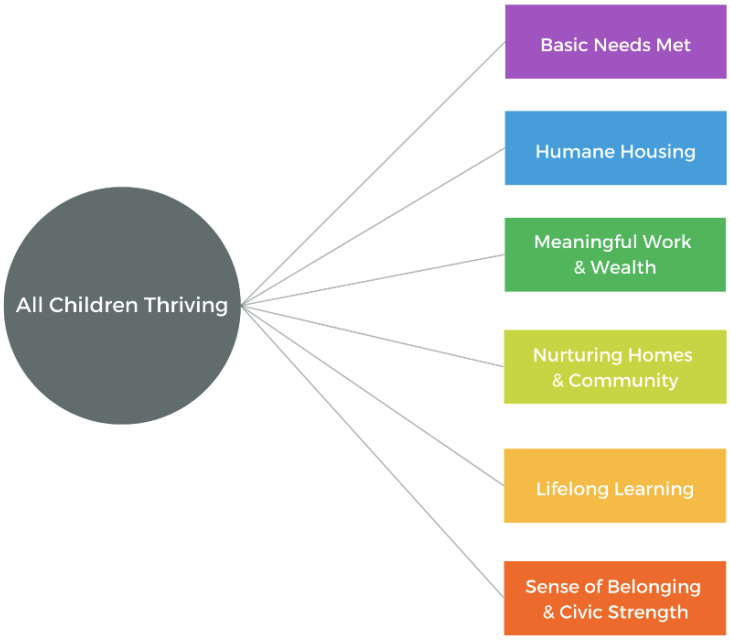
Finally, Cincinnati Children's have a direct role in internal equity work, including the hospital 'health equity network' (described further below), and have invested in training internal staff, including senior leaders:

*"****We need all the leaders trained in improvement****… so if you're the chair of surgery, I want you to come to a six month course, which is 12 days in those six months. And the chair says to me, you know, you've taken my most precious person. And I said to him, well, your most precious person is going to quit, because he has very high ambitions for kids, and you're just mucking around."*

EXAMPLE INTERVENTIONS

Safe and supported families

The 'All Children Thrive' collaborative recognises and seeks to act on key SDH for children and families within their 'safe and supported families' theme:



Within each of these areas, there are key projects within particular geographies, for example:

Drivers	Key Initiative	Current Project
Basic Needs, Emotional Wellbeing, Nurturing Homes	All Families Thrive	Develop a prototype to decrease child abuse & neglect for children living in Avondale
Nurturing Community, Sense of Belonging & Strong Civic Muscle	Community Healing & Trauma	Learn about community trauma & support community healing through community-owned projects
Emotional Wellbeing, Nurturing Community, Sense of Belonging, Learning System	Mayerson Wellbeing Initiative	Co-develop model for production of child thriving; test & implement wellbeing measures across clinics and community-based settings to drive improvement in child thriving
Basic Needs, Meaningful Work & Emotional Wellbeing	Social Determinants of Child Thriving	Improve economic mobility & emotional wellbeing for families in Avondale
Basic Needs, Learning System	System to Achieve Food Equity (SAFE)	Improve food security across three pilot neighborhoods (Avondale, East Price Hill, and Lower Price Hill) by 10%

Source:[5]

A sub-network of All Children Thrive focussed on food equity (the '**System to Achieve Food Equity** – SAFE'[6]) aims to ensure all children have the food that they need to grow, develop, learn and thrive. Partners include emergency food organisations, healthcare, education, government institutions, data scientists and families. During COVID-19, staff from the hospital and partners mapped food distribution sites against neighbourhood poverty rates, and identified an inequitable distribution of emergency food resources. Local organisations responded by increasing distribution in areas of unmet need, ensuring food resources were available at least three days per week within one mile of every child in Cincinnati.

Following the pandemic, the SAFE partnership grew, and has engaged in a range of activities. For example, they have leveraged external funding for nine community interventions in three target neighbourhoods. These have included delivering neighbourhood garden produce and teaching children how to choose and prepare healthy meals. The network is based on

principles of equity, addressing racism, and listening to lived experience, and includes co-production and 'families and neighbours as experts and decision-makers'[7]. Experts from Cincinnati Children's supported the interventions with community engagement, data, and quality improvement activities. Further information is available in the SAFE one-year report.[8]

A pathway to full potential

The 'All Children Thrive' collaborative focuses on child developmental and educational milestones through working with parents, children and communities in the following areas:

Source:[9]

The 2033 'North Star' metrics for this area of work are that 100% of children are ready to success in kindergarten, there is 100% proficiency on academic outcomes, and 100% of 18-year-olds are engaged, enrolled, enlisted or employed. The impact section (below) shows some encouraging improvements in school results.

Excellent and equitable health outcomes

Cincinnati Children's have also developed internal programmes of work that focus within the hospital, including a **'health equity network'** – which focusses on healthcare inequalities by narrowing identified equity gaps within clinical areas. This work seeks to focus on *"shared drivers, common factors, common strategies, common methods"* across different clinical areas, and therefore tends to include consideration of wider common drivers of inequity such as the SDH. The network shares common overarching aims of decreasing total hospitalisations, and decreasing the gap in hospitalisations between black and non-black patients by 10%, from the current rate of 484 to an aim of 435 per 100,000.[10]

REFLECTIONS

Partnership

Partnership has been essential for the work – both with other institutions in the city such as schools, and with local youth and families. One interviewee described the importance of child, youth and family voice as follows:

"Co-design and co-production has also been a massive focus for us, for the last many years. And now where we have as a goal, ***a north star goal for 2033 is that 100% of our community outcomes initiatives are co-produced*** *with family and community partners."*

The work has also focussed on shared, or networked action:

"How do we create these things such that we're just one node in an entire network? With children and family at the centre, as opposed to us being the centre and the be all and the gravitational pull of things… we say we can show up with these assets, these pieces of the puzzle, these methods. But ***this isn't about us****."*

Data and measurement

There has also been a significant focus on developing shared datasets around common outcomes that matter to all partners – for example, visualising data on the child welfare system jointly with the department of jobs and family services, or schools data with the Cincinnati public school system. One interviewee reflected that the use of shared data has been vital:

"We're now working on building up ***democratised data dashboards for action*** *in which these kinds of data assets that we all have a vested interested in can be created, and then we can* ***all be accountable and responsible*** *to them."*

One example is their work around food equity described above (the 'SAFE' network). This joint work been based on identifying a shared outcome between different partners:

"We have a strong interest in having children not experience hunger. Well, so does every other stakeholder that surrounds children, and we've been able to come together and ***create a learning network by asking people who have that vested interest to share an outcome****, that's data-based."*

Within this shared approach to data, Cincinnati Children's have been clear that it is essential to focus on population-level outcomes rather than a narrow group of patients. They refer to this population-based view as thinking about 'the denominator':

"We continually focus on the denominator. What's the denominator, what's the denominator. And that's also a game changer in a conversation. Instead of talking about data in terms of a particular set of patients… we really, really try to think about a population level denominator and having the data speak to that ***… we're talking about a denominator of a population of kids who live in Cincinnati.****"*

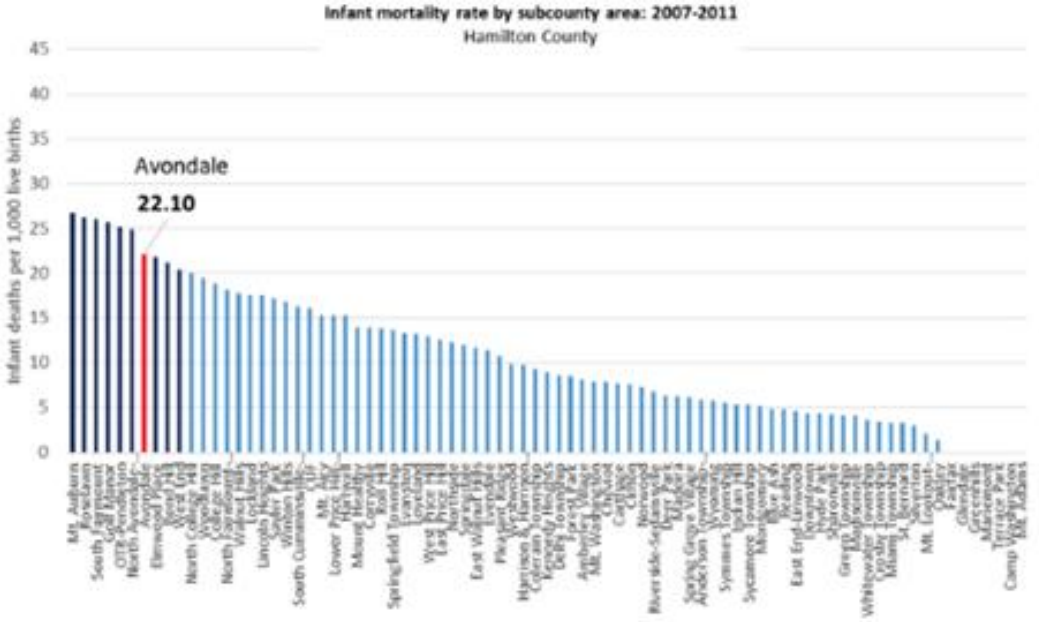
IMPACT

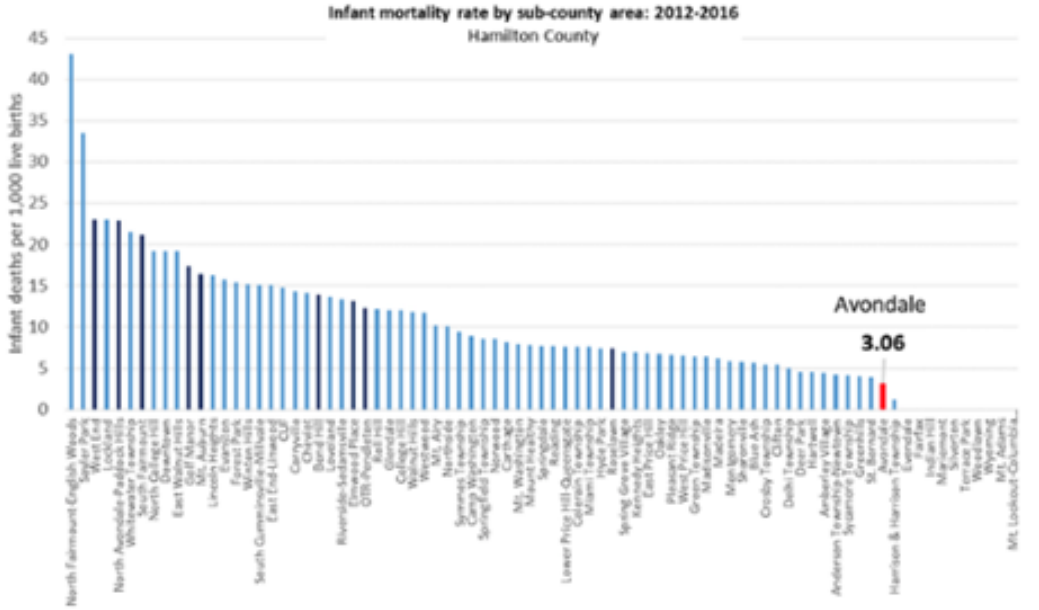
Many of the projects and programmes within 'All Children Thrive' monitor progress internally, and Cincinnati Children's supports a focus on data and measurement throughout the work. For example, in the first year, the 'SAFE' network has served almost 90,000 meals.[11]

There has also been some published impact measurement - for example, a programme that referred urban, low-income families in need of legal support to a medical-legal partnership resulted in a 38% drop in hospitalizations among children in the year after the referral, compared to a control group of children also seen by the hospital but not referred.[12] The authors of the study proposed that the reduced hospitalisation rate was due to support addressing 'the root causes of ill health' including 'unhealthy housing conditions' and 'public benefit denial.'[13]

Attributing observed changes in population-level outcomes to specific interventions is difficult. However, targeted work in a particular geographical area close to Cincinnati Children's ('Avondale' - labelled in the graph below), which focussed on identifying and supporting pregnant women, including by connecting them to services, coincided with a significant absolute and relative (to other areas) reduction in infant mortality rates in this area.

Infant mortality rate by subcounty area: 2007-11 (left) and 2012-2016 (right), Hamilton County

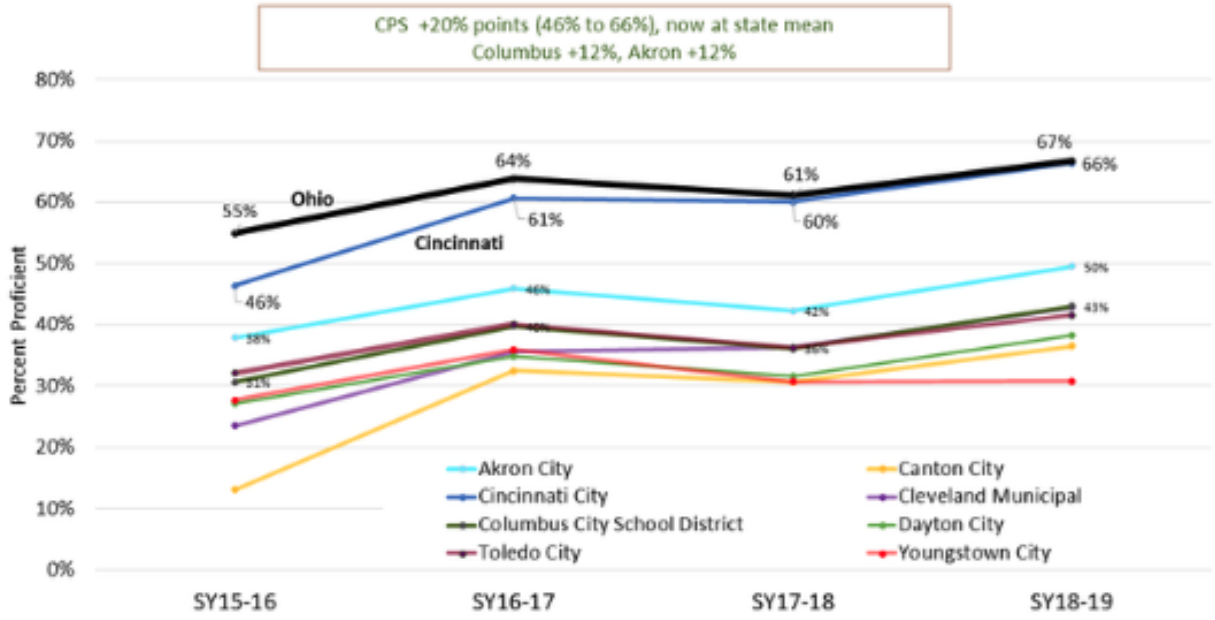




Source: [14]

A comprehensive programme of work with Cincinnati Public Schools also appears to have been associated with proficiency in English Language and Arts at Grade 3 increasing from 46% to 66%, a steeper improvement than seen for urban districts across the state as a whole. Cincinnati results (shown in dark blue in the graph below) are now at the state average.

Ohio Urban Districts Grade 3 English Language Arts Proficiency, 2015/16 – 2018/19



Source:[15]

NEMOURS CHILDREN'S HEALTH SYSTEM[16]

KEY POINTS

- Nemours Children's Health (referred to as 'Nemours' in this case study) is a large integrated paediatric health system, consisting of 95 locations in 4 states (Delaware, New Jersey, Pennsylvania and Florida), caring for nearly half a million children each year.
- Nemours undertakes a range of activities aiming to tackle SDH for CYP, most of which sit within their 'Office of Policy and Prevention', which has a national remit.
- A key activity has been gathering, summarising, and sharing evidence to support the health sector and partners in acting to improve population health – for example, supporting and studying the role of 'population health integrators' and 'integrative activities' in multi-sector networks.
- Nemours also develops (and in some cases delivers) programs to improve child health and tackle health inequities, in part through acting on the SDH. This includes supporting early child education settings to increase healthy behaviours, developing an early literacy programme, and working with partners to share data on child health needs and outcomes.
- Finally, Nemours takes a particularly active advocacy role, with the explicit aim of impacting on state and federal policy that can improve conditions for child health.
- Reflections on the work include the importance of identifying clinical champions; focussing advocacy efforts on the health impacts of wider social and economic policies; and identifying where it is best for the health sector to lead, and where it is better placed to support others.

CONTEXT

Nemours operates two hospitals, and outpatient services for children in four states (Delaware, New Jersey, Pennsylvania and Florida). The system provides paediatric primary, urgent, specialty and hospital care.

In addition, Nemours operates an 'Office of Policy and Prevention', which is focussed on 'supporting innovative prevention and population health strategies', including through advocacy and research.[17] These activities (described further below) extend to 32 states, including those where Nemours does not have a healthcare presence.

BACKGROUND

In 2011, Nemours established their Office of Policy and Prevention. One interviewee noted that this was established with a broad remit:

*"With the idea that it was not only the children who walked through our doors who we could impact, but **all kids across the country**."*

Alongside this broad view of population impact, the remit of the team is to focus upstream, on the SDH, rather than just on healthcare:

*"I think what makes Nemours Children's really unique is the idea that we want to redefine what it means to focus on children's health and understand that that will mean **going well beyond medicine**, and really thinking about how we partner across the community, with a focus on, not only what I would call traditional prevention, but also thinking about **community, population health and wellness, advocacy, (and) education for parents.**"*

Based on this wide scope, Nemours have three broad activities related to SDH for children and young people.

1. **Gathering and sharing learning and resources** related to population health and SDH – for example, through the 'population health integrator' initiative.
2. **Developing specific programs for early years and health settings** that aim to improve child health – for example, on healthy eating and physical activity, or early literacy.
3. **Advocating for state and federal policy change** that has relevance to child health – including on early years childcare and education and food policy.

Nemours have announced they are also engaging in 'anchor institution' activities – seeking to ensure their employment, investment and procurement activities positively contribute to population health and reducing health inequalities – and have recently joined the Healthcare Anchor Network.[18]

APPROACH TO EQUITY

The work by Nemours to impact on child health explicitly recognises inequities. For example, their recommendations for federal leadership for children and youth developed as part of their advocacy function open with the recognition that 'all children and youth should have equitable opportunities to thrive and achieve their full potential. They do not. A significant number face social, racial and other structural barriers that dramatically reduce their opportunity to learn and achieve optimal health, well-being and economic security.'[19]

RESOURCES AND ROLE

Nemours have invested in this work by establishing their Office of Policy and Prevention. External funding has also supported elements of the work – for example, both the 'moving healthcare upstream' programme and the 'population health integrator' initiative (described below) were initially funded by the Kresge Foundation[20] and the Centers for Disease Control and Prevention (CDC) has funded the 'healthy kids healthy future' technical assistance program (also described below).

The role of Nemours depends on the area of work. Within the 'moving healthcare upstream' and 'population health integrator' initiatives, the key role of Nemours was to study, understand, and share learning about key actions that can be taken by the health system to tackle SDH.

However, they have also taken a more direct delivery role, setting up programs such as 'healthy kids healthy future', and those described in the 'well beyond medicine' section below, and engaging in state and federal policy advocacy.

EXAMPLE INTERVENTIONS

GATHERING AND SHARING LEARNING AND RESOURCES

Moving Healthcare Upstream

'Moving healthcare upstream' was a programme led by Nemours that aimed 'to create community-level impact and improve community conditions by addressing social determinants of health through policy, laws, and regulation.'[21]

As part of 'Moving Healthcare Upstream', Nemours has a collection of resources for health organisations seeking to act on population health – including videos, tools for action, and examples of interventions delivered by the multi-sector networks they have been supporting and others.[22][23]

Population Health Integrator Initiative

In 2018, Nemours started a two-year initiative to increase understanding of the role of 'population health integrators.'[24] Integrators are key organisations within multi-sector networks that are together trying to impact on the SDH:[25]

"***(Integrators are) the organizations that set the table to allow those kinds of cross sector networks to happen for shared population health goals****. And then we also think about them as the organizations that, you know, do the day to day, what it takes to keep the network moving."*

Integrators take on activities that are hard to fund or allocate otherwise – such as cross-sector data sharing. Nemours refers to these as 'integrative activities':

"Integrative activities are all of those day-to-day things… we think of the integrative activities as these buckets of, ***what does it take to keep the work moving, that isn't the work****, right? So if you're focused on early literacy, you know, cross sector data sharing has to happen for you to improve literacy, but it isn't necessarily the work and it's hard to get funding for, you know, and it's also hard to know who's in charge of this."*

The initiative led by Nemours included gathering evidence, interviewing experts, setting up a learning collaborative to strengthen the use of population health integrators within networks, and publishing reflections, advice, and resources.[26]

For example, Nemours provided support to several multi-sector networks as part of their 2020 'Integrator Learning Lab', including 'Bridgeport Prospers', a collection of organisations

(including local health systems) together working to support local babies and mothers in Bridgeport through pregnancy, birth and childhood to ensure they are 'safe, supported, thriving and resilient.' The network has an aim of all children being healthy and achieving developmental targets at age 3. The 'integrative activities' taking place in this network have included creating a memorandum of understanding (MOU) to formalise the partnership between organisations, creating data sharing agreements, and engaging with the community to inform the network's plans.[27]

DEVELOPING SPECIFIC PROGRAMMES FOR EARLY YEARS AND HEALTH SETTINGS

Healthy kids, healthy future

The 'Healthy kids healthy future' programme[28] aims to build capacity in 14 states to 'empower early care and education providers to make positive health changes in their childcare programs.'[29] Much of this work is focussed on 'healthy habits', including improving healthy eating, physical activity, and emotional and behavioural health. Nemours provides resources for early care and education professionals, including training, online courses, and information on the evidence base; and brings together organisations to share learning.

Well beyond medicine

The 'well beyond medicine' work at Nemours supports programs that address nonmedical challenges. Examples include:

- A partnership between Nemours, a School District and Health information network to produce a data-sharing programme 'Data Access for Student Health' (DASH) which alerts a student's primary care provider if they miss school, so that they can proactively offer support and reduce school absenteeism.[30]
- A literacy programme that develops products, resources and services for early years settings, teachers and parents to support children with literacy, with an aim of closing the reading readiness achievement gap.[31]
- Place-based programs, delivered in partnership, to provide patients with help addressing legal challenges including housing and job discrimination. The learning from this work has also been used for advocacy work – for example, in Delaware, Nemours have supported calls for landlords to be required to test for and eliminate lead exposure in housing.[32]

Social needs screening

Nemours also 'screens' their patients to identify their wider needs, and then refers them on to further support where possible. Since 2018, over 35,000 families have provided information on SDH issues such as food insecurity, housing, and transport.[33]

ADVOCATING FOR STATE AND FEDERAL POLICY CHANGE

Nemours has a Federal Affairs Team that 'provides thought leadership and advocacy to support children's health, well-being and development. The team works with the U.S. Congress, the federal executive branch and national partners on federal policy changes that help create positive conditions for children to grow up healthy and thrive.'[34]

Nemours' advocacy activities have included producing policy recommendations, policy briefs and case studies on a wide range of topics including child mental, emotional and behavioural health and wellbeing, and school-based behavioural health services.[35]

For example, Nemours have worked in partnership to produce recommendations for federal leadership for children and youth, which call for new leadership structures such as a White House Office on Children and Youth and a Federal Children's Cabinet.[36]

Nemours have also recently produced a briefing for policymakers on the impact of housing on child health, which sets out the evidence that safe and stable housing is essential for improving health and reducing health inequities.[37]

REFLECTIONS

Importance of clinical champions

Interviewees from Nemours reflected on the value of identifying and working with clinical members of staff who could inform, champion and share the work on SDH within their teams:

*"I think where we have found really great opportunity is by **connecting with providers who can really become champions for the work**. So who are our docs who are going to talk about it? Who are our nurses who are going to talk about it? And how do we bring them in to sort of build up energy?"*

Find a clear focus and role in advocacy work

Within the advocacy work, whether at a state or federal level, it has been vital for Nemours to focus on the health impact of the policies that they are advocating for. This gives them a clear role and mandate to advocate for change:

*"I think we're very clear on our strategy… (which is) speaking on topics that clearly relate to health outcomes. I think as we develop our policy around what we want to do on housing, what we want to do on poverty, et cetera… I think **no matter what, as a health organization, it's going to tie back to health.**"*

They have also found opportunities by reiterating the focus on children, which they have found is a non-partisan issue that can garner support from both major political parties:

"One of the great things about Nemours is we're very much a non-partisan organization. Kids are a very purple [both Democrat and Republican] *issue and* ***it allows us to take advantage of opportunities, regardless of who's in the White House and who's in Congress****. Obviously those opportunities might be different, but kids do tend to be at the table, and I think what we have really set ourselves up to do is say, kids are not just small adults, they have their own needs."*

Recognise where to support and where to lead

Another key learning from the work at Nemours to date is that while health systems have opportunities to lead or directly deliver on the SDH (for example, in some of the activities above, Nemours have taken a leading role), in other cases, they are not best placed to take on this role:

"Healthcare is healthcare. We're not community organizers. We're not social justice… And so ultimately, we're interested in population health, community-wide health, thriving, wellbeing, but… we can't go dramatically out of our lane in making that happen… So ***finding that… place where we support that work, whatever the work is, in the most meaningful way, or the most impactful way****, in our role. And then support, cheerlead, whatever, all of the other stuff to make that happen.*

That's a big challenge, figuring out how far we go. When does it make sense for healthcare to lead? And when does it make sense for healthcare to support? And that doesn't mean stepping out and being like, oh, that's the food bank's problem or the that's the school's problem, but really this idea of, we're really good at providing top-notch healthcare… and we would be really upset if schools all of a sudden decided they could do appendectomies, right? And at the same time, we're not great at education. So how can we partner with schools knowing that education is a huge component of what's going to drive someone's health… And so, ***I think the biggest opportunity that we have and what keeps me up at night is this idea of how do we sort of design the systems that allow us each to do what we're really, really good at?***

..If we can start to sort of align the systems to really get to the fact that we all care for that same population, we can all do our part, we can figure out a way to make this work where it's not, you know, from a game theory perspective that when one wins another loses."

IMPACT

Individual programmes and projects within the wider Nemours strategy have measured clear impacts – for example, the 'healthy kids, healthy future' work has gathered a large number of 'success stories' from local programmes[38] and the Nemours early literacy program has reached over 260,000 children in 38 states, and has resulted in 'early literacy gains of more than 110% for at-risk kindergarteners (and) two-thirds of at-risk kindergarteners closing the literacy gap with their peers',[39] therefore demonstrating a key SDH equity impact.

ALAMEDA HEALTH SYSTEM[40]

KEY POINTS

- Alameda Health System (referred to as 'Alameda' in this case study) is a 'safety-net' health system in California, which delivers a workforce development initiative, healthPATH, which aims to improve routes into healthcare training and careers, particularly for local youth of colour, and those from low-income, refugee and immigrant communities.
- HealthPATH's main aims are to tackle local health inequities by improving two important social determinants - education and employment, and to ensure the health system has a workforce that represents the local population.
- There are 10 programmes within healthPATH, each of which provide different opportunities. Common features include information on healthcare careers, hospital rotations, and a range of supportive training and mentoring opportunities such as leadership training.
- The work was initially funded by a $10 million grant from The Atlantic Philanthropies, and future financial viability is a concern, along with accurately tracking employment outcomes and creating systemic and operational shifts within the health system.
- Impact evaluation has found a positive impact on interns in terms of their knowledge and understanding of potential routes into healthcare careers, and their commitment to education.[41]

CONTEXT

Alameda is a public healthcare provider based in Alameda County, California. Often referred to as a 'safety-net' hospital, Alameda provides healthcare to ethnically diverse communities, including low-income populations and those who are uninsured.

Alameda is a county in the San Francisco Bay Area of California, with a population of over 1.6 million. The largest city is Oakland. 47% of the population of Alameda county are White, 35% are Asian, 22% are Hispanic or Latino, and 11% are Black or African American. 33% of the population were born abroad, and 10% of the population live in poverty.[42]

BACKGROUND

Since 2015, Alameda have run a workforce development initiative to increase education, training and employment among local young people, called 'HealthPATH'.[43] The focus is on underrepresented youth and young adults – particularly youth of colour and focus on *"individuals with barriers to employment"* such as those from low-income, immigrant or refugee communities.

The programme has two main goals:

*"One is really a **health equity goal**, which is recognizing that if young people have access to education pathways and careers, it's going to lead to long-term economic stability, which will*

lead to improved health outcomes. And then the other piece of that for Alameda health system is… we're really interested in ***having a workforce that reflects the communities we serve*** *and comes from the communities we serve. And so our hope is that some of these young people will go through our programs… and will one day come back and be the future workforce of Alameda health system."*

APPROACH TO EQUITY

HealthPATH is designed based on a recognition that employment is a key SDH, and major contributor to health inequities. Therefore Alameda have adapted the work or set up new programmes when an inequity has been identified, for example, a 'young men of colour' programme:

"In every cohort we would have probably 90% girls and 10% boys… partly that's because of, I think some stigma around, you know, boys think healthcare, they think a nurse or, it was just kind of not for them. But what was also going on is that, for instance, we would offer an internship in the summer that coincided with the summer school. And I don't have it at the tip of my fingers, but some huge percentage of boys of colour in Oakland unified school district are what's called credit deficient. They're behind in their high school credits and they have to take summer school to catch up. And so ***we were just precluding this large population that we wanted to serve from participating in our program. So we had to create these special cohorts*** *that were outside of the summer school session."*

RESOURCES AND ROLE

HealthPATH was initially funded by a $10m grant from The Atlantic Philanthropies in 2015, and now has a range of external funders.[44] The challenge of continuous funding when this grant runs out was recognised by one interviewee:

"That will be a true test, I think, in another year or two, ***when we're going to probably need to see some money coming out of our general operating support****, going into support this program, whether this remains the priority that it's easy to be now because we're fully funded with soft money. So that's a big question in my mind."*

Alameda takes a leading delivery role in HealthPATH, setting up and running the programmes.

EXAMPLE INTERVENTIONS

HealthPATH works with approximately 500 students every year, providing internships and information on careers in healthcare. Key elements across the work include:

- Working with local schools and community-based organisations to identify and refer young people to the programme.
- Information on the range of healthcare careers, as well as medical or nursing roles.
- Providing shadowing of staff in the hospital:

"It is that experience of actually getting out there into different hospital departments, and I think one of the real beauties about our program is we really allow students to get out there."

Within the overall initiative, there are 10 programs which focus on different population groups or interventions. Specific programs include:

- 'Health Excellence and Academic Leadership' (HEAL) – internships for middle and high school student of colour, which include hospital department rotations, information on different health careers and education and training requirements, and professional and life skills classes and workshops.[45]
- FACES for the future – a two-year program for 11th and 12th graders in local school districts, where hospital-based learning is supplemented with individualised tutoring, leadership training, and ongoing support to alumni with job and internship placements, career and education guidance and life coaching.[46]
- College internships: A paid 8-week summer college internship programme.

Alameda are also developing new programs for 'opportunity youth' – who are not in education or employment.

Throughout the programmes, education on SDH and equity is embedded:

"We're very committed to health equity, and really embed that into our programs as part of our curriculum… (we are) ***educating students around social determinants of health****, for instance."*

REFLECTIONS

Creating systematic and operational changes

The success of the programme has relied on supportive frontline staff who are willing to take interns, but an interviewee reflected that there is still more work to do to ensure that hiring managers are willing to change HR practices, recognising the challenges involved in:

*"****Educating our hiring managers about the value of these sorts of hires*** *and understanding how they're related to our mission as a safety net health system."*

Another challenge for the work has been moving beyond stand-alone programs and into longer term systemic or operational changes:

"Our leadership, our C-suite, is very, very supportive of healthPATH programs, real champions. But it has not necessarily kind of cascaded down into, um, kind of those real kind of ***systemic operational shifts****."*

This includes looking at procedures and internal employment practices:

"We have to do so much more to really embed health equity into our sort of DNA and who we are. And that might include some ***deeper changes in organizational policies and practices****. (So) it's not uncommon that those out of school, out of work youth who we're trying to serve*

have a criminal background, they may have had some interaction with the juvenile justice system. So, what happens when they get screened for a job? Are they automatically kind of put in the no pile, or can we be more discretionary in hiring decisions for people with criminal backgrounds?"

EVALUATION

HealthPATH has had an internally available evaluation, and a stand-alone evaluation of the 'HEAL' programme (see below). This has been a real asset for the work:

"We really used our evaluation as both a outcomes evaluation, but also a kind of formative process evaluation and, you know, anytime our evaluators produced a report or shared data with us, we really took time as a team to look at it closely and reflect on what it meant in terms of how we can improve our programs. And so I think that was an ***extraordinarily worthwhile investment for us****."*

However, because a large part of HealthPATH's work is with young people while they are still in school, it takes a long time to track impact on employment outcomes:

"Those students, you know, they were just in high school, hadn't finished high school, hadn't gone to college, hadn't graduated from college, hadn't entered the workforce. And so we're just at that point where we're starting to see those first cohorts get through college and maybe to a point of employment. And so we're very interested to know, did they pursue a career in healthcare or did they get hired into a healthcare job?
Now unfortunately, we don't have great ways of tracking those outcomes and it's really done through alumni surveys. So ***it's really hard to get complete information****."*

IMPACT

An impact evaluation of HEAL[47] found that:

- Interns reflected the diverse patient population of Alameda Health System
- 81% of interns planned to work with low-income communities, and 93% planned to pursue a career in healthcare, after taking part in the internship
- 85% had a clearer education path, 84% had a clearer career path, and 92% were more motivated to pursue education seriously, after taking part in the internship
- 89% of male interns were more interested in school after their HEAL internships

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