Final Report: Supporting services to prevent, identify and respond to Adverse Childhood Experiences among the population of Cheshire & Merseyside

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About the Champs Intelligence & Evidence Service

This work was conducted under the remit of the Champs Intelligence & Evidence Service. Commissioned by the Cheshire and Merseyside Directors of Public Health, the service aims to provide high quality research in response to collaborative priorities across the nine local authority public health teams in Cheshire and Merseyside.

Matthew Ashton, Director of Public Health and Head of Health & Wellbeing, Sefton Council, leads the Public Health Intelligence Network with support from Sharon McAteer (Halton), Adam Major, and the wider network. Their role in the Intelligence & Evidence Service involves setting the work programme, providing strategic direction and facilitating collaborative links between the Champs Public Health Collaborative, the Public Health Institute, LJMU and the wider public health community. They also contribute to editing and final approval of reports.

About this report

This report aims to support services to prevent, identify and respond to adverse childhood experiences among the population of Cheshire and Merseyside.

A steering group, which included a wide range of public health colleagues from Cheshire and Merseyside Public Health teams, and was led by Julia Rosser, Consultant in Public Health, Halton Borough Council, was established to inform the report and to develop the report recommendations. The steering group was supported by the Cheshire and Merseyside Children and Young People's mental health group, which is chaired by Sandra Davies, Liverpool City Council.

The report examines how prevalent ACEs are, what their impact is, and what can be done in order to prevent, identify and respond to them. The report presents a number of case studies which detail initiatives to address ACEs, and provides recommendations for commissioners, practitioners and schools.

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Foreword

Welcome to this important report that informs our understanding of Adverse Childhood Experiences (ACEs) and addressing these for the population of Cheshire & Merseyside.

Adversity in childhood is now well recognised as an important influence on both levels of chronic poor health in adulthood and demands upon health and care services and the life chances for children (as the future adult population) with both short and longer term impacts for their physical health and emotional wellbeing. Indeed, since the original ACE studies over twenty years ago, the evidence base has become well established in this regard; that the safeguarding of children and young people plays a key part in preventing health and wellbeing impacts in the short term and the onset of chronic, physical and mental ill-health in adulthood and later life.

ACEs are highly prevalent in the population, with some experiencing more than others. We know for example that for those adults with ACE scores of four or more, there is a significantly higher risk of developing conditions such as high blood pressure, heart disease and diabetes than those with ACE scores of zero. Reducing the prevalence of ACEs in the population by addressing their root causes in the wider determinants of health, therefore, has to be an important goal for stakeholders.

This report brings together current understandings on ACEs. What they are, how they are prevented and identified, and how responding to them in a trauma-informed way is key to minimising their impact and enhancing child and adult resilience. Nine real life examples in the form of case studies are also described that tell us how local areas have been able to respond to this important topic. Indeed, these case studies are helpful ways to recognise that these experiences are rooted in the wider determinants of health and that working together through strong partnerships and collaborative working provides the greatest opportunities for preventing, identifying and responding to ACEs.

I'd like to pay thanks to the authors, the Public Health Institute, Liverpool John Moores University, the Champs Intelligence & Evidence Service and all of those who have contributed to the Report in a way that continues to build our understanding of this important area of work and that plays such a key part in health outcomes and life chances throughout the life course.

Dr Sandra Davies BSc, PhD, MPH, FFPH

Director of Public Health for Liverpool and Mental Health Lead for Children and Young People on behalf of Cheshire and Merseyside Directors of Public Health

Executive Summary

What are ACEs?

In recent years, interest has grown in the concept of Adverse Childhood Experiences (commonly shortened to ACEs). The 'ACE concept' incorporates a wide range of highly stressful and potentially traumatic events that children may be exposed to whilst growing up. The original ACE Study*, conducted with American adults, focused on ten types of childhood trauma that affected children either directly or indirectly through the environment in which they lived:

	Physical abuse		Mother exposed to domestic abuse
	Verbal abuse		Substance abuse in the household
	Sexual abuse		Incarcerated household member
	Physical neglect		Mental illness in the household
	Emotional neglect		Parental separation or divorce

*Felitti et al., 1998.

How common are ACEs?

In England (based on retrospective reports+), it has been estimated that around half of all adults have been exposed to at least one of the ten types of ACEs; 9% have suffered four or more ACEs.

48%

of all adults in England have experienced at least one of the ten types of ACEs identified in the English study

9%

of adults in England have suffered four or more ACEs

+ Based on a nationally representative survey of 3,885 adults aged 18 to 69 years (Bellis et al., 2014a). Figures have been adjusted to English population by age, sex, ethnicity and deprivation quintile of residence.

What are the long-term impact of ACEs?

- The ACE concept offers a new approach to how we view childhood adversity and health, and importantly that ACEs may cluster or accumulate. The more ACEs an individual suffers, the greater their risk of poor health outcomes.

- Chronic stress in childhood is thought to have an impact on children's developing brains and physiological systems.

- Studies show that having been exposed to four or more ACEs is strongly associated with sexual risk taking, mental ill health, problematic substance use, violence and imprisonment in adulthood.

- ACEs are linked to increased use of health care resources, including primary care and emergency care use.

- Children growing up in deprived areas, or in poverty, are more likely to be exposed to ACEs than their more well off peers.

Preventing, identifying and responding to ACEs

- It is vital to prevent exposure to trauma and chronic stress in early life.

- Addressing social inequalities and reducing poverty in families with children are an essential component of any response to ACEs.

- Strengthening early years services (including universal health visiting and midwifery services) is crucial.

- Building resilience among children and families, and in their communities is key.

- A growing interest in trauma-informed approaches needs to be balanced with the provision of effective workforce training and development for services to be organisationally ready

Recommendations

The following recommendations have been produced based upon the national and local evidence of best practice on what is effective in preventing, identifying and responding to ACEs. Steering group members advised on additional recommendations following a discussion about the report at a meeting on Wednesday 16th May 2018.

Structural level recommendations

There is already a strong rationale for increasing investment in the early years; an ACE-informed agenda can build on these foundations to ensure that every child has the best start in life. The interest and momentum around ACEs can be directed at supporting efforts to tackle social and economic inequalities and highlighting the clear links between social determinants and ACEs.

Who should act? Commissioners.

What action should they take?

- Protect universal support for early child development, with a central role for health visitors and Children's Centres.
- Ensure resources are in place to enable health visitors to carry out their role in supporting vulnerable families and families with complex needs, and in supporting maternal and parental mental health.
- Promote joint working across the interface of NHS, community, Local Authorities with involvement of young people.
- Develop multi-agency guidelines to address mental health in young people.

Organisational level recommendations

System-wide adoption of the principles of trauma-informed practice, through workforce training and development, is required to ensure services are organisationally ready to identify and respond to ACEs.

Who should act? Early years practitioners

- Improve training for professionals working with children and young people to build ACE awareness among the workforce.
- Assess organisational readiness and build capacity to support the implementation of trauma-informed practice, and provide training in trauma-informed approaches.
- Cautiously, explore the potential role for routine enquiry about ACEs within day-to-day practice, where appropriate.

Who should act? Schools and colleges

- Assess organisational readiness and build capacity to support the implementation of trauma-informed practice and provide training in trauma-informed approaches.

Community, family & individual level recommendations

The most important implication of the research on ACEs is the need to prevent exposure to trauma and chronic stress in early life. Investment in giving every child the best possible start in life is therefore crucial. At an individual-, family- and community-level, embedding trauma-informed practice across the services and organisations that children and young people may encounter throughout their life and strategies to build resilience appear promising.

Who should act? Early years practitioners

- Deliver evidence-based parenting programmes to help prevent the generational transmission of ACEs.

Who should act? Schools and colleges

- Take a whole school (or college) approach to emotional and mental health and wellbeing, including resilience skills, social norms, services in schools and colleges, single-point of access. Plan and prepare for implementation carefully.
- Ensure that all secondary schools and colleges have regular access to on-site support from a CAMHS professional. Joined up working is essential.
- Ensure that children are able to identify trusted adults within their school that they can go to for advice and help. Support from a trusted adult is an important factor in building resilience and in mitigating the impacts of ACEs.

Recommendations for further research

A public health approach to ACE prevention is likely to reduce the future burden on the NHS, and to be cost effective. However, more research is needed about how to effectively identify and respond to ACEs. Trauma-informed practice is currently in its infancy in the UK.

Based on the current evidence it may be beneficial to:

- Commission further research to establish which types of training are effective in developing workforce skills to identify and address ACEs.

- Consider whether collecting ACE prevalence data would create evidence for the need for action, particularly in areas of high socioeconomic disadvantage, where prevalence of ACEs is likely to be higher.

Background

About this report

Preventing childhood adversity and moderating its impacts is fundamental to improving population health and reducing inequalities. The Cheshire and Merseyside Directors of Public Health have commissioned this report to raise awareness and knowledge of the ACEs concept in the region.

Building multi-agency awareness and knowledge on ACEs is critical to enabling the development of effective service delivery that addresses the effects of childhood adversity throughout the life course. This includes early years support to prevent adversity and develop parenting skills; building resiliency in young people to protect against the harmful impacts of childhood adversity; and trauma-focused practices for those suffering the health and social impacts of childhood adversity in young adulthood and later life.

What are adverse childhood experiences?

Childhood experiences are fundamental in determining our future health and social prospects. In recent years, interest has grown in the concept of Adverse Childhood Experiences (commonly shortened to ACEs).

The 'ACE concept' incorporates a wide range of highly stressful and potentially traumatic events that children can be exposed to whilst growing up (Bellis et al., 2014b). The original ACE Study (Felitti et al., 1998) focused on ten types of childhood trauma that affected children either directly, or indirectly through the environment in which they lived.

Events having direct effects were:

- Physical abuse,
- Verbal abuse,
- Sexual abuse,
- Physical neglect,
- Emotional neglect.

Events having indirect effects were:

- Exposure to domestic abuse,
- Parental substance abuse,
- Incarceration,
- Mental illness,
- The disappearance of a parent through divorce, death or abandonment.

However, there are additional domains that developmental researchers think are just as important in predicting long-term health and well-being outcomes (Finkelhor et al., 2013). In particular, the concept of ACEs as conceived in the original ACE Study did not take into account events that take place outside of the family or the household; Finkelhor et al. (2013) suggest that a wider range of adversities, such as exposure to community violence and socioeconomic status, should be considered within the concept of ACEs.

The International World Health Organization and ACE Research Network has produced the ACE-IQ[1], which is designed to enable the measurement of childhood adversities in all countries. The ACE-IQ focuses on a broader range of domains than the original ACE study by asking about experiences of peer and community violence, and exposure to collective violence. It is important to consider at the forefront of any response to ACEs that they take place within complex social contexts.

How common are adverse childhood experiences?

In England (based on retrospective reports) it has been estimated that around half of all adults have been exposed to at least one of the ten types of ACEs [as described by Felitti et al. (1998)]; and that around 9% have suffered four or more ACEs (Bellis et al., 2014a).

An NSPCC survey of parents and children, young people and young adults in the UK, estimated that 6% of under 11 year olds and 19% of 11–17 year olds in the UK have experienced some form of severe maltreatment (Radford et al., 2011). Evidence about current levels of child maltreatment in the UK suggest that 3% of under 11 year olds and 6% of 11–17 year olds had one or more experiences of physical, sexual or emotional abuse or neglect by a parent or guardian in the past year.

Early childhood experiences have long term impacts

> *"The thing about ACEs is that it is a powerful epidemiological tool for explaining how impacts in childhood affect people across the life course. It does not mean that it affects everybody that way… and we do need to be careful about how we frame it."*
>
> Professor Mark Bellis, Bangor University and Public Health Wales, presenting oral evidence to the Parliamentary Evidence-based early-years intervention inquiry[2].

Research suggests that childhood adversities can have a lasting influence on children's development and mean that they may be more likely to have poorer health and social outcomes later in life (Bellis et al., 2014a).

Many studies linking childhood adversities with poor health outcomes have been conducted within the last decade, but there has previously been little recognition that adversities may co-occur. The examination of multiple ACEs has therefore offered a new approach to how we look at the relationship between childhood adversity and health (Hughes et al., 2017).

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[1] www.who.int/violence_injury_prevention/violence/activities/adverse_childhood_experiences/en/
[2] www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/inquiries/parliament-2017/evidence-based-early-years-intervention-17-19/publications/

ACEs may cluster or accumulate across a child's life and an increasing number of studies have been undertaken to identify how exposure to multiple ACEs affects health-harming behaviours and development of health conditions.

Importantly, these studies have shown that the more ACEs an individual suffers, the greater their risks of poor health outcomes in later life (Anda et al., 2006, Bellis et al., 2015). A limitation of the ACE concept at this current time, however, is that we are at an early stage of understanding whether different childhood adversities are equally 'toxic' and how timing and severity impact on development (Nurius et al., 2012, Humphreys & Zeanah, 2015).

Impact of adverse childhood experiences on health across the life course

Introduction

By examining multiple childhood adversities, the ACE concept has offered a new approach to how we view the relationship between childhood adversity and health (Hughes et al., 2017). Importantly, the approach has identified that ACEs may cluster or accumulate across a child's life. An increasing number of studies identify how exposure to multiple ACEs may affect health-harming behaviours and the development of health conditions (Anda et al., 2006, Bellis et al., 2015).

Figure 1 shows the 'ACE pyramid' – the proposed pathway linking ACEs to outcomes across the life course (Felitti et al., 1998).
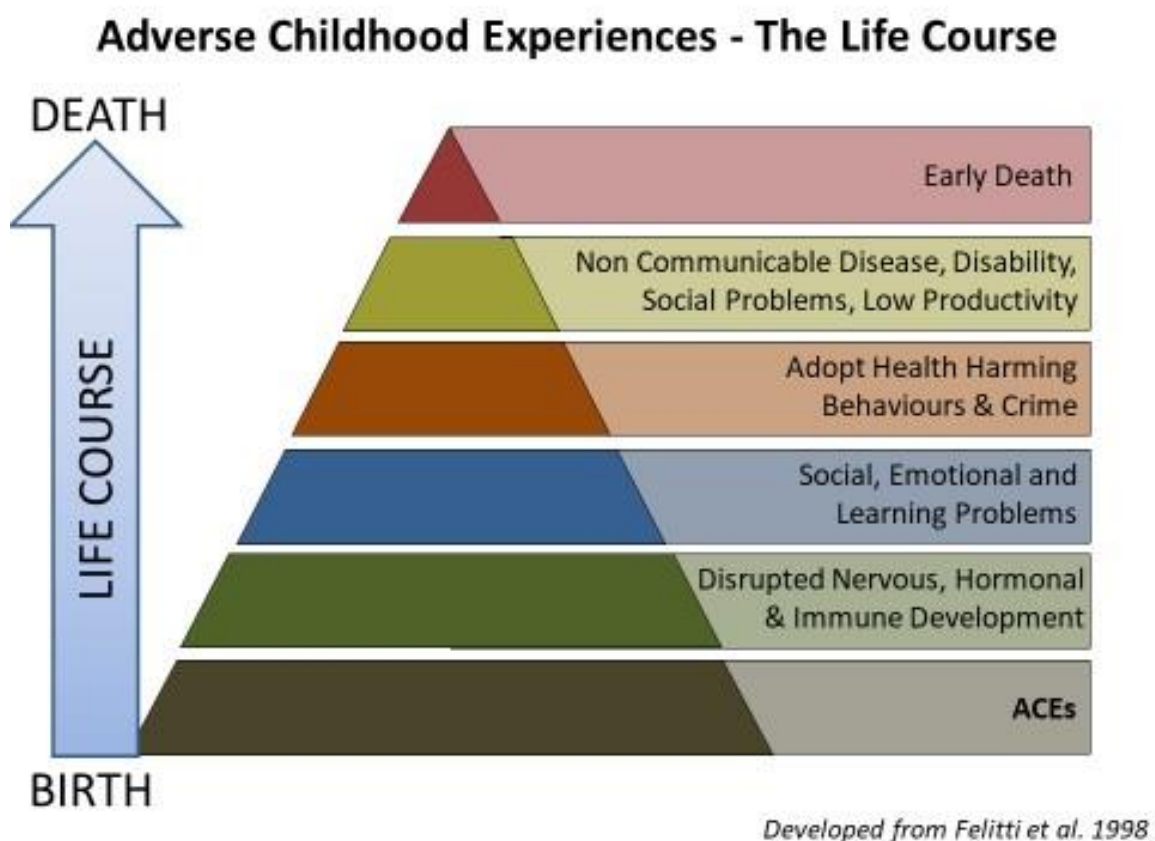
Adverse Childhood Experiences - The Life Course

Developed from Felitti et al. 1998

Figure 1. The ACE Pyramid showing impact of ACEs across the life course

Impact of exposure to ACEs on development

Advances in developmental science have provided an underlying theory to link ACEs with poor outcomes in later life. As shown in Figure 1, it is thought that trauma and chronic stress in childhood have negative impacts on children's developing brains and physiological systems that persist across the life course (Felitti et al., 1998).

These impacts have been characterised as being 'adaptive responses' to a harsh environment (McCrory et al., 2010). That is, children that experience abuse, neglect or exposure to other 'toxic stress' are thought to respond to these challenges through a process of adaptation,

which may show itself through heightened stress responses (termed 'hypervigilance'), attachment difficulties and dulled emotions (termed 'underarousal').

These characteristics may then lead to communication problems, difficulties forming healthy relationships and vulnerability to harmful behaviours such as substance use, risky sexual activity and overeating. Importantly, the heightened physiological stress responses that develop through chronic childhood stress is also thought to increase allostatic load – the wear and tear that stress causes to the body – which further increases vulnerability to poor health outcomes (Danese & McEwen, 2012).

Adoption of health harming behaviours in adolescence

Because of the process of adaption that some children who are exposed to ACEs are thought to go through, a vulnerability to the adoption of health harming behaviours such as poor diet, alcohol and drug use, as well as involvement in delinquency and crime is suspected (Hughes et al., 2016). Such behaviours may serve as coping mechanisms or as a form of self-medication.

A large-scale study of around 3,000 15-year-olds had results consistent with the proposition that the effects of childhood adversity may manifest in adolescence as high-risk behaviours (Layne et al., 2014). The study indicated that each additional type of trauma significantly increased the likelihood of a range of high-risk behaviours, including suicidality, criminal activity, self-harm, sexual exploitation, and substance abuse.

As established predictors of future disease and injury (Murray et al., 2012), the adoption of health harming behaviours in adolescence is thought to explain the increased risk of poor health outcomes and early death observed among those who experience ACEs. Adoption of health harming behaviours may also have a compounding effect on health, through their impact on the social determinants of health, including educational attainment, employment and household income (Marmot, 2005) (also see Section 2.5 on the *chains of risk* perspective).

Health outcomes in adulthood

Poor health outcomes are strongly associated with an accumulation of ACEs. A recent systematic review and meta-analysis (Hughes et al., 2017) comprehensively explored the association between multiple ACEs and risk of a range of health outcomes in adulthood, including substance use, sexual health, mental health, weight and physical exercise, violence, and physical health status and conditions. Drawing on evidence from 37 studies, individuals with at least four ACEs were found to be at increased risk of all of the health outcomes examined. However, the strongest associations with multiple ACEs were found for sexual risk taking, mental ill health and problematic alcohol use, problematic drug use, interpersonal and self-directed violence, and incarceration (Bellis et al, 2013).

ACEs have also been linked to increased use of health care resources. For example, a recent study (Bellis et al., 2017a), based on household surveys with adults resident in Wales and England, found that exposure to multiple ACEs was associated with increased use of primary, emergency and in-patient care. Further a US-based prospective study of 802 young people found that those who had a high-level of exposure to ACEs accessed more medical care at age 18 (Thompson et al., 2015).

Co-occurring socioeconomic disadvantage

Like exposure to stressful and traumatic events, socioeconomic status in childhood is also a strong predictor of health in adulthood (Galobardes et al., 2008, Galobardes et al., 2004). However, studies have tended to focus on the effects of either childhood adversity or childhood socioeconomic disadvantage leading to separate strands of research (Turner et al., 2016).

As our understanding of ACEs evolves, it points to the need to consider socioeconomic status as an additional and related form of childhood adversity (Finkelhor et al., 2013, Nurius et al., 2012). Although people across all strata of society may experience ACEs, as Allen & Donkin (2015) state "*children growing up in disadvantaged areas, in poverty, or of a lower socioeconomic status are more likely to be exposed to ACEs than their more advantaged peers*". A greater clustering of ACEs is seen in more deprived areas (Bellis et al., 2015), and this drives inequalities in the risk of poor health outcomes as a risk of ACE exposure in these areas (Allen & Donkin, 2015).

Nurius et al. (2012) have argued for the continued examination of ACEs integrated within a social disadvantage framework. In practice, this means being aware that an unequal distribution of ACEs has commonly been associated with multiple indicators of socioeconomic disadvantage, suggesting that ACEs are socially patterned (Nurius et al., 2016).

The *chains of risk* perspective (Nurius et al., 2017, Turner et al., 2016) views early adversity as a major risk factor for experiencing future adversity, with greater accumulation leading to poorer health outcomes (Kuh & Shlomo, 2004). Experiencing adversities in early life may also be associated with "curtailed opportunities and success", such as having lower achievements in education and in work, less effective social supports, and a worse outlook in terms of stress-related health behaviours (Umberson et al., 2008, Zielinski, 2009).

Preventing, identifying and responses to adverse childhood experiences

Introduction

ACEs are a major crosscutting issue, and a wide range of agencies have a role to play in preventing and addressing childhood adversity as part of an inclusive, system-wide response. This not only includes agencies working directly with children and parents, but also those that work to address the behavioural, health and social consequences of exposure to childhood adversities.

The most important implication of the research on ACEs is the need to prevent exposure to trauma and chronic stress in early life. Any public health response to ACEs should draw on an ecological, life course perspective and build on actions to tackle health inequalities and therefore, social inequalities (Allen & Donkin, 2015). Addressing structural inequalities in society, and reducing poverty among families with children is an essential component of any response to ACEs[3].

As a second priority, effective intervention is required to identify and respond to the impact of ACEs in young adulthood and later life. Developing a shared understanding between agencies of how ACEs affect individuals, how preventing and addressing ACEs can benefit all organisations, and how recognising and responding to the impacts of ACEs can support the delivery of more effective services, is key to improving population health and reducing inequalities.

At the heart of any response to ACEs is the shared understanding that early adversity and traumatic experience can have an effect on the way children behave, and the difficulties that they present with, both as children and into adulthood, within a range of settings.

Preventing, identifying and responses to ACEs

It is vital to prevent exposure to trauma and chronic stress in early life.

Addressing social inequalities and reducing poverty in families with children are an essential component of any response to ACEs.

Strengthening early years services (including universal health visiting and midwifery services) is crucial.

A growing interest in trauma-informed approaches needs to be balanced with the provision of effective workforce training and development for services to be organisationally ready to identify and respond to ACEs.

Building resilience among children and families, and in their communities is key.

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[3]Written evidence from the MRC/CSO Social and Public Health Unit

Given the complexity of the impact of ACEs, trauma-informed practice means working across different levels of action, targeting the individual, families, communities, and policy/legislation.

A public health response to ACEs should therefore employ a range of strategies across a three-tiered approach to prevention, comprising:

(i)   Universal prevention targeted towards whole populations or vulnerable subgroups to prevent the occurrence of ACEs;

(ii)   Selective prevention strategies for those who display specific risk factors to moderate the effect of ACEs; and

(iii)   Indicated prevention strategies to treat those affected by ACEs.

Preventing the occurrence of ACEs

A focus on universal prevention, in which ACEs are targeted at the population level, will yield the greatest individual and societal impact (Oral et al., 2015).

Tackling social inequalities to prevent ACEs

Recent reports that have called for action to improve outcomes for children, young people and their families to ensure that all children have the best start in life, make a good foundation for the primary prevention of ACEs (Whitehead et al., 2014, Marmot et al., 2010). Strategies to tackle ACEs should build on their recommendations as the basis for upstream action.

Actions need to be taken at scale; the Due North report (Whitehead et al., 2014) cautions that "*just targeting the most disadvantaged groups is not enough*".

> *"… you can hold [ACEs] or [social deprivation] more responsible. You can say, "There are more ACEs because people in complicated, socially deprived circumstances really struggle to parent – they do not have support networks and so on – so we will deal with the community-based resources that communities and families have," or you can say, 'It's not the social deprivation. People are socially deprived because they had ACEs. An intergenerational cycle of ACEs is causing it'… Do you deal with the ACEs, and/or do you deal with people's material circumstances?"*
>
> Professor Sue White, University of Sheffield, presenting oral evidence to the Parliamentary Evidence-based early-years intervention inquiry

The public health community, along with other key stakeholders, should capitalise on the current interest and momentum around ACEs to advocate for greater investment in the early years. Advocacy should build on traditional arguments of the need to tackle ACEs and their consequences on the basis of fairness and social justice, but also advance the economic argument that we would expect a high return on investment associated with the prevention of ACEs (Larkin & Records, 2007).

Recommendations in the Fair Society, Healthy Lives and Due North reports intersect; tailored recommendations for agencies in the North are that they should work together to:

- Monitor and incrementally increase the proportion of overall expenditure allocated to giving every child the best possible start in life, and ensure that the level of expenditure on early years development reflects levels of need.

- Ensure access to good quality universal early years education and childcare with greater emphasis on those with the greatest needs to ensure that all children achieve an acceptable level of school readiness.

- Maintain and protect universal integrated neighbourhood support for early child development, with a central role for health visitors and Children's Centres that clearly articulates the proportionate universalism approach.

(Whitehead et al., 2014)

As well as a focus on early years, ensuring that all children have the best start in life requires an "all-of-society approach" to change the contexts that stand in the way of all children and their families having access to safe, stable and nurturing relationships and environments.

The public health community can join other health professionals in advocating for policy action on the social determinants that support parents' capacity and ability to care for their children. For example, advocating for and supporting the provision of affordable housing, sufficient income support for adequate quality of life for all families with children, tackling in-work poverty, as well as working with families to help them develop positive coping skills.

As Wickham et al. (2016) have noted in relation to tackling and mitigating the impact of child poverty, a whole family approach to the care of children is vital, with appropriate involvement of the full range of social services support available to families living in disadvantaged circumstances.

Strengthening early years services

Universal health visiting and midwifery services are ideally placed to identify children in families with additional needs and problems, including ACEs, and to support families and carers (see also Section 3.3.3). Many prenatal and antenatal services already incorporate routine enquiry about substance use, domestic violence and mental wellbeing, and so there is the potential for such approaches to be strengthened as a key part of ACE prevention approaches.

> *"[The ACE concept] has helped to galvanise a societal conversation about the need to think about investing in early care and in support and resources for vulnerable children."*

> Professor Eamon McCrory, University College London, presenting oral evidence to the Parliamentary Evidence-based early-years intervention inquiry

For children aged under 5, social and emotional wellbeing of vulnerable children should be supported through home visiting, childcare and early education (NICE, 2012). It is recognised that secure attachment and mental health and well-being for parents and their children can be universally promoted through investment in and positive support for responsive feeding and parent-infant relationship building (UNICEF UK, 2013).

While there is variability in effectiveness across targeted home visiting programmes (MacMillan et al., 2009), one promising early intervention programme targeted at vulnerable populations is the Family Nurse Partnership (FNP) programme. The programme provides one-to-one support to teenage mothers expecting their first child to develop parenting skills, build strong relationships with their children and make positive lifestyle choices that will give their children the best possible start in life (Robling et al., 2016). While the US version (Nurse-Family

Partnership) of the programme has been shown to be effective in preventing maltreatment (MacMillan et al., 2009), longer-term outcomes of the UK implemented programme are awaited.

Universal & targeted programmes

Universal provision of parenting programmes is another important measure within an ACE-informed approach. Like other early intervention approaches, programmes may be universal or targeted towards vulnerable groups.

A recent Cochrane review (Barlow et al., 2016) examined whether universal and targeted group-based parent training programmes are effective in improving emotional and behavioural adjustment in young children. Their assessment of the evidence provided tentative support for the use of group-based parenting programmes to improve the overall emotional and behavioural adjustment of children up to around three years of age.

Children's Centres offer a wide range of services to families of young children including parenting programmes, drop in support sessions, childcare, child and parental education and health services. Research done on the Sure Start programme suggests that positive benefits of providing Children's Centres include better social development in children and increased provision of stimulating home learning environments (Melhuish et al., 2008). In this respect, Children's Centres may be an important setting for delivering actions to prevent ACEs, such as universal and targeted parenting programmes.

Building resiliency

Studies show that childhood adversity does not set people on an inevitable path towards harmful behaviours and ill health; the relationship is *probabilistic* not *deterministic*. Many individuals who experience ACEs do not encounter these consequences.

The term 'resiliency' is used to describe this ability to avoid harmful behavioural and psychological changes in the face of exposure to adversity.

Building resilience in children and families

An ACE-informed approach should build on recommended actions by NICE to achieve social and emotional wellbeing in schools (NICE, 2013). Universal approaches to improving social and emotional wellbeing in primary and secondary education, in addition to targeted approaches for those showing signs of anxiety or emotional distress, are detailed in specific NICE guidance (NICE, 2009) and pathways[4].

Case study 4.2.4 provides an example of an early intervention approach for children and their families in Manchester.

Progression to secondary school represents new opportunities for many children and young people. It is essential that children are supported with positive environments and opportunities to grow in to confident and healthy young people.

Universal, whole school approaches have been shown to be effective across various studies (Weare & Markham, 2005). For example, a systematic review on the effectiveness of a type of

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[4] http://pathways.nice.org.uk/pathways/social-and-emotional-wellbeing-for-children-and-young-people/social-and-emotional-wellbeing-in-secondary-education#content=view-node%3Anodes-principles-of-care

whole-school approach, health-promoting schools, found that the approach can build resilience and promotes partnerships between schools, the local community and other service providers (Stewart & Wang, 2012).

The Government's NHS long-term plan (Department of Health, 2019) reconfirmed the commitments from the 2017 Children and Young People's Green Paper to improve mental health in schools and colleges. Under the plan, schools and colleges will be incentivised to train a designated mental health lead (training will be funded by the Department for Education) in order to enable leads and staff to develop whole-school approaches to promoting better mental health. New Mental Health Support Teams will be funded to provide specific extra capacity for early intervention and ongoing help within school and college settings. The first 25 trailblazer sites were identified in 2018, of which Liverpool was one.

Further, case study 4.2.7 describes the EmBRACE programme approach, which is designed to change cultures within schools.

Having a strong relationship with and support from a trusted adult throughout childhood may be an important factor in building resilience, and may mitigate or reduce the long-term negative impacts of childhood adversity (Bellis et al., 2017b). Effective parenting and good parent–child relationships also play a role in building resilience (Allen, 2014). Characteristics of the family environment are important and resilience has been associated with a stable and supportive family environment; characterised in one study by parents showing an active interest and involvement in their child's education, parents reading to their children, and parents taking children out for joint activities (Schoon & Bartley, 2008) (see also Section 3.2.2).

Building resilience in communities

Moving outside the family context, experiences within the community and wider neighbourhood also affect resilience. Creating resilient communities and supportive environments is one of the four priority areas for policy action in the World Health Organization 2020 policy (WHO, 2013).

> *"Children are embedded in families, not just parents. There are wider networks: extended families; friendship networks; the wider neighbourhood; local service provision; and national policies. There are social attitudes such as racism and homophobia and so on. These are all things that we might want to look at as well as ACEs."*
>
> Professor Rosalind Edwards, University of Southampton, presenting oral evidence to the Parliamentary Evidence-based early-years intervention inquiry

Further information on the evidence supporting approaches to developing community resilience can be found in a recent Champs report (Ubido et al., 2018). Briefly, it is important that local health and care system support communities and utilise the community assets to maximise opportunities for local communities to improve their health and wellbeing (SDU, 2014, Marmot et al., 2010). Community resilience is undermined by inequality; although it is possible to be resilient in the face of poverty and deprivation, meeting basic material needs is necessary for ongoing resilience (GCPH, 2014).

Developing community resilience, using approaches such as social network development and involving members of the public in public health, should be regarded as a way of reducing

barriers to resources that support good health and be seen as part of a strategy to increase equity in health (South et al., 2012).

Trauma-informed practice

Trauma-informed practice (or care) originated as an approach in the USA developed by Harris & Fallot (2001) to improve mental health practice and service delivery. Trauma-informed practice recognises the complex interplay between individual, interpersonal, community, societal and environmental factors and seeks to reflect an awareness of context and the role that providers play in hindering or fostering recovery for trauma survivors (Guarino & Decandia, 2015).

According to the Substance Abuse and Mental Health Services Administration (SAMHSA), trauma-informed practice can be implemented in any type of service setting or organisation. The approach is applicable to health, education and schools, forensic, housing and social care. Trauma-informed practice is distinct from trauma-specific interventions or treatments that are designed specifically to address and treat the consequences of trauma.

The USA has seen a dramatic increase in the number of legislative proposals designed to promote trauma-informed practice in recent years (Purtle & Lewis, 2017). Such approaches are in their infancy in the UK, but different approaches are beginning to be implemented.

Sweeney et al. (2016), for example, reflect on the introduction of approaches in England with a focus on mental health services. Christie (2018) published a report that examined a trauma-informed support service for young people who had experienced sexual exploitation and sexual abuse, and found that young people valued the opportunity to develop a trusting relationship with their key workers.

System responses to ACEs

States and cities in the USA have made commitments to promoting trauma-informed practice in their public systems. For example, in 2011, Washington was the first state within the US to establish public policy specifically aimed at reducing ACEs (Kagi & Regala, 2012). The legislation supported the creation of a public-private partnership to prevent ACEs, reduce their prevalence, and mitigate their effects.

State-specific collection of data on ACEs has been used to inform prevention efforts, for example by using the data to better understand the potential cost savings and to strengthen the case for legislation. Data collection also prompted changes in service delivery to strengthen the support available for families receiving Temporary Assistance for Needy Families (TANF) among whom mental health and substance abuse problems were identified as prevalent[5].

In the city of Philadelphia, a trauma-informed publicly funded behavioural health system for children and adolescents has been created, which was designed to support the implementation of trauma-focused cognitive-behavioral therapy (TF-CBT) for traumatized young people in the city (Beidas et al., 2016). A case study about the efforts to build the system identified the following important lessons:

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[5]www.cdc.gov/violenceprevention/acestudy/pdf/ACE_Case_Study_Washington.pdf

(i) Agencies often need initial support in establishing trauma-based screening mechanisms;

(ii) Engaging with leaders in agencies implementing TF-CBT is important;

(iii) Staff turnover is a critical issue that must be planned for;

(iv) Training and consultation in evidence-based trauma treatments may be necessary but not sufficient to improve therapist knowledge and openness to them;

(v) Young people who present in community mental health settings with trauma are heterogeneous, which has implications for how to assess and treat trauma;

(vi) A community-academic partnership approach is critical for implementing evidence-based practice (EBP) in the community; and

(vii) More work is needed to guide decisions on how to handle the agencies that struggle most with EBP implementation and sustainment.

In the UK, Case study 4.2.3 describes how Better Start Blackpool has adopted a 'full system' approach to reducing and responding to trauma. This investment in early childhood intervention through Better Start Blackpool is funded through a Big Lottery Fund project operating across a number of sites across England that have a high level of need in terms of deprivation and child health. The University of Warwick is conducting a 10-year study designed to evaluate the impact of this investment (Barlow et al., 2017).

Furthermore, Case study 4.2.5 describes how Manchester City Council are funding an initiative to train, coach and develop frontline services (including commissioned services) to offer a trauma-informed approach.

Identifying and responding to adverse childhood experiences

By effectively identifying and responding to ACEs, there is the potential to accrue multiple benefits. That is, effective responses may improve "*the health of young people now, their health in later life, and health outcomes for their children*"– the so-called 'triple dividend' (Kinner & Borschmann, 2017).

Selective prevention strategies target those who display specific risk factors with the aim of moderating the effect of ACEs, and indicated prevention strategies specifically target those who are already affected by ACEs. Finkelhor (2017) has argued that more research is needed into which interventions are most effective in moderating the impacts of ACEs.

There is a growing interest in the provision of universal screening for childhood adversities, commonly termed *routine enquiry*. Routine enquiry can potentially be applied across settings to identify current exposure to ACEs among children and young people, and in adults who have been exposed to ACEs in their childhood. However, researchers have sounded a note of caution as "*ACEs screening raises concerns about overly diagnosing patients without sufficient understanding about what to do*" (Dube, 2018). Any steps towards introducing universal screening or routine enquiry for ACEs should proceed cautiously and ethically.

The case for routine enquiry in health and social care (see discussion of the REACh model below) is based on the findings of studies of victims of childhood abuse. Firstly, drawing on studies that suggest that victims of childhood abuse may wait a number of years before disclosing abuse (a widely cited study is Frenken & Van Stolk, 1990); and secondly, that most

people who use mental health services are never asked about child abuse or neglect (Read et al., 2018).

Routine enquiry with children & families

There are few examples in the literature of approaches to routine enquiry with children and families. In written evidence to the Parliamentary Enquiry on Early Intervention[6], the NSPCC raised concerns about "*the roll out of the ACEs checklist as a screening tool in primary care*" and particularly its use with children. They note that because the ACEs tool is still in its infancy, that without proper oversight and evaluation, translation of the research into practice at this stage may lead to unintended harm.

As discussed in Section 3.2.2., there is potentially scope for routine enquiry to be extended within prenatal and antenatal services as a key part of ACE prevention approaches (see also Section 3.3.3 on preventing intergenerational transmission).

The Safe Environment for Every Kid (SEEK) model is a US-based approach used to identify risk factors for child maltreatment among parents attending paediatric primary care services (Dubowitz et al., 2009, Dubowitz et al., 2012). The tool enquires about maternal depression, substance use, domestic violence and parental stress and enables child health professionals to identify potential problems and offer support via an onsite social worker, who can provide counselling and specialist referral where appropriate. Results suggest that the model can be effective in reducing maltreatment (MacMillan et al., 2009).

Routine enquiry with adults

In Blackburn with Darwen, the REACh (Routine Enquiry into Adversity in Childhood) model has been utilised to train professionals across a range of services to use the short ACE questionnaire as a tool for routine enquiry.

The REACh training programme (developed by Lancashire Care NHS Foundation Trust) is designed to increase service providers' knowledge about the impact of ACEs on health and social outcomes and encourage services to routinely undertake enquiries about childhood experiences as part of assessments (McGee et al., 2015). As discussed above, that the simple act of enquiring about ACEs may reduce the future burden of patients accessing health services is the underlying premise of the model.

By routinely asking adults about childhood experiences, it is thought that health professionals and practitioners will be better able to understand patient needs, which then enables them to offer appropriate interventions to support recovery and reduce the impact of childhood adversities on current and future health and well-being. As well as training to increase knowledge about the impact of ACEs, studies suggest that training on patient-centred communication can improve discussion about ACEs (Green et al., 2016, Helitzer et al., 2011).

Department of Health Pathfinder Project

In 2016, the Department of Health commissioned Lancashire Care NHS Foundation Trust (LCFT) to implement a pathfinder project to explore the implementation of routine enquire

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[6] http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/science-and-technology-committee/evidencebased-early-years-intervention/written/75234.html

about childhood adversity across mental health, sexual health and substance misuse services (HM Government, 2015).

As part of the pathfinder project, three services in the North West of England volunteered to pilot a standalone Implementation Pack to facilitate routine enquiry, including a Child and Adolescent Mental Health Service (CAMHS), a drug and alcohol service, and a sexual violence support service.

The findings from an evaluation of the Implementation Pack were published in 2018 (Quigg et al., 2018). Practitioners and clients in the services where routine enquiry was implemented generally reported that it was acceptable; however, this approach to developing and implementing routine enquiry (using a modification of the ACE-IQ, the ACE-CSE questionnaire) was ultimately found not to be feasible.

Practitioners in the pilot sites specifically raised concerns about the appropriateness and value of the ACE-CSE questionnaire, highlighting that there is currently insufficient information on how to use the information gathered from routine enquiry to inform service provision and the support offered to clients, particularly within the types of services included in the pathfinder project.

Importantly, the evaluation highlights that further consideration needs to be given to the complexity of implementing routine enquiry and that some services may need additional support to assess whether they are ready to implement routine enquiry (Quigg et al., 2018).

NHS England Pathfinder Project
NHS England commissioned a separate pathfinder study of routine enquiry to examine the feasibility and early impact of implementation of the REACh approach in a general practice setting. LFCT partnered with Beacon Primary Care, a large training practice based across four sites in West Lancashire, to explore the feasibility of asking ACE questions in general practice.

A preliminary impact evaluation was published in 2008 (Hardcastle & Bellis, 2018) and identified that further research and evaluation is required before wider implementation of routine ACE enquiry is considered within general practice. The practitioners involved (GPs, nurse practitioners and a healthcare assistant) felt routine enquiry had a positive impact on the patient-practitioner relationship; however implementation was limited by time pressures, a lack of wider staff engagement and difficulties in coordinating implementation across the multi-site practice.

Preventing intergenerational transmission of ACEs
The ongoing identification of, and response to, ACEs throughout the life course is necessary to reduce intergenerational transmission. A broad focus is required to disrupt the intergenerational transmission of ACEs.

As noted in Section 4.2.1., the contexts in which children grow up need to change to ensure that all children and their families have access to safe, stable, nurturing relationships and environments

An ACE-informed approach should build on NICE guidance (NICE, 2010) supporting the care of women (and their partners, where appropriate) with complex social factors who become pregnant; including those aged under 20, misusing substances, recent migrants and women experiencing domestic abuse. The guidance calls for local antenatal services to work with local

agencies, including social care and third-sector agencies, to coordinate this care; for example by jointly developing care plans across agencies, signposting to other agencies, or by co-locating services.

Early intervention provides opportunities to break the cycle of poor outcomes among vulnerable families and families with complex needs (see Section 3.3.3). Health visitors can be instrumental in safeguarding children from harm within the home; for example, through the additional support provided within a targeted programme (see section 3.2.2 on the Nurse Family Partnership), allowing early identification and intervention for those at risk (NICE, 2014); including in theory, those at risk in relation to ACEs. Health visitors can also play a vital part in supporting vulnerable families and families with complex needs, and in supporting maternal and parental mental health.

The ACE recovery toolkit discussed in Case studies 4.1.1 and 4.1.2 provide examples of local interventions designed to reduce intergenerational transmission of ACEs.

Pilot programme of ACE enquiry within health visiting
In 2017/18, Cyngor Sir Ynys Môn Isle of Anglesey County Council and Betsi Cadwaladr University Health Board (BCUHB) introduced a pilot programme of ACE enquiry within health visiting in Anglesey, North Wales.

A consultant facilitator provided training, materials and support to the health visiting service and co-produced the model of ACE enquiry. Implementation of the pilot was explored across two groups, with a structured questionnaire to gather information on ACEs delivered at either the six weeks (the ACE group) or six month (the Comparison group) routine home-visit appointment.

There was an overall uptake rate of 90% of eligible mothers (321 ACE enquiries were completed during the pilot). Public Health Wales evaluated the pilot (Hardcastle & Bellis, 2019) and found considerable support for the feasibility and acceptability of ACE enquiry in health visiting.

Overall, health visitors felt happy and confident to deliver ACE enquiry, and did not find the process time consuming. Practitioners acknowledged that they were exceptionally well placed as a service to identify and support mothers with ACEs, and to potentially prevent ACE exposure in future generations. A high proportion of service users considered ACE enquiry in health visiting to be both acceptable and important.

Early intervention

There is an emerging evidence base from the US for early interventions to manage ACEs and their impact on family relationships; including as reported by Oral et al. (2015), Child-Parent Psychotherapy, Attachment and Biobehavioural Catch up, Circle of Security, and Child First. However, according to the Early Intervention Foundation Guidebook[7] these programmes have yet to be evaluated or implemented in the UK.

Trauma-focused cognitive behavioral therapy (CBT) is a common approach to reducing psychological symptoms from exposure to trauma among families (Oral et al., 2015). Trauma-

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[7] guidebook.eif.org.uk

focused CBT was developed in the US and has been shown to be effective in a range of service settings including Germany and Norway (Goldbeck et al., 2016).

Case study 4.2.6 provides an example of a pilot attachment-based educational and therapeutic support project funded by Norfolk County Council that works with children who have experienced complex trauma.

Discussion

What are the benefits of addressing ACEs?

ACEs are unfair and preventable, and addressing ACEs will benefit everyone in society.

There is already a strong rationale from a public health perspective for increasing investment in the early years; an ACE-informed agenda can build on these foundations to ensure that every child has the best start in life. Furthermore, there are opportunities to intervene across the life course. For children that do experience adversity during childhood, action can be taken to moderate the impact of this adversity.

At an individual-, family- and community-level, embedding trauma-informed practice across the services and organisations that children and young people may encounter throughout their life and strategies to build resilience appear promising.

At a societal level, the interest and momentum around ACEs can be directed at supporting efforts to tackle social and economic inequalities and highlighting the clear links between social determinants and ACEs.

A public health approach to ACE prevention is likely to reduce the future burden on the NHS, and to be cost effective.

How should services identify, address and respond to ACEs?

The most important implication of the research on ACEs is the need to prevent exposure to trauma and chronic stress in early life. Investment in giving every child the best possible start in life is therefore crucial.

Addressing structural inequalities in society, and reducing exposure to poverty in childhood is an essential component of any response to ACEs.

As a second priority, effective intervention is required to identify and respond to the impact of ACEs in young adulthood and later life. System-wide adoption of the principles of trauma-informed practice, through workforce training and development, is required to ensure services are organisationally ready to identify and respond to ACEs.

Trauma-informed practice is currently in its infancy in the UK and while the evidence base is beginning to grow, as Sweeney et al. (2016) note there are barriers: "*introducing new conceptualisations of care can be challenging... UK austerity means that resources are scarcer and morale lower. This context makes it harder to engage with new initiatives*".

Informing workforce training and development needs on ACEs

As noted, trauma-informed practice is currently in its infancy in the UK, however the concept of ACEs and trauma-informed practice is beginning to take hold.

The case studies collected in this report provide a range of examples of how workforce training has been utilised to support trauma-informed practice (see Case Studies 4.2.2, 4.2.3 and 4.2.6).

Case studies

Cheshire & Merseyside

Two case studies suitable for inclusion in the report were received for the Cheshire and Merseyside areas. In addition, five case studies are presented to show initiatives taking place elsewhere in the UK. Evaluation data has been included where available, however evaluation data were not available for the majority of the Cheshire and Merseyside initiatives.

Appendix 1 provides further information about the case studies. This includes how they were identified, which geographical area they cover, and which population groups are targeted.

Sefton, Liverpool & Knowsley Public Health Departments

In what area is the organisation based?
North Merseyside

What was the ACEs initiative?
ACE Recovery Toolkit. A trauma-informed intervention for adults. The intervention and subsequent evaluation is jointly commissioned by Sefton, Liverpool and Knowsley public health departments.

Which areas did the initiative cover?
Sefton, Liverpool and Knowsley. Each authority will deliver the intervention within their geographical boundary and in a setting suited to their local service delivery model, e.g. children and family centre, through locality base.

Was the initiative evaluated? If yes, please include any relevant evaluation data.
Liverpool John Moores University (LJMU) has been commissioned to evaluate how training impacts on staff awareness and understanding of the influence of ACEs on health and wellbeing. The delivery of the training will also be evaluated. This will include understanding the client's experience of participating in the course and insight into how the course might be developed. Evaluation is intended to aid commissioner's review of the effectiveness and sustainability of the intervention.

Please add any further information about the initiative.
The ACE Recovery Toolkit is a 10 week trauma-informed intervention for adults who have experienced ACEs. The toolkit has been written and developed by Rockpool to educate and inform parents about the impact of ACEs on themselves and their children. It also provides step-by-step guidance on the protective factors that lessen the impact of ACEs and practical methods that help parents develop resilience for themselves and their children.

Twelve staff from across Sefton, Knowsley and Liverpool undertook a two-day training course in November 2017. From this, it is expected that they will have a clear understanding of ACE research and evidence, screening for ACEs, attachment theory, resilience factors, protective factors and trauma-informed working.

Liverpool Training department has taken a coordinating role in bringing partners together for training and post training follow-up. Service managers, practitioners, training and public health leads from the three authorities, together with the LJMU researcher met in December 2017 to reflect on the initial training and the planned delivery of the intervention. Practitioners provided positive feedback, commenting on the relevance and suitability of the intervention for the families they worked with. It was agreed that each area will develop a delivery model that reflects current service provision. In Knowsley for example, two staff from the Family Learning Service, one from Children's Centres and one from Family First will deliver the intervention. Sefton will deliver interventions via the targeted youth offer.

Initial discussions between participants suggest the ACEs Recovery Toolkit course would appear to have the potential to significantly enhance the current parenting offer, specifically by providing specialist support for families who have experienced ACEs such as Domestic Abuse. All areas are confident that they will be able to identify course participants and aim to complete two courses with approximately 10 participants each in the next 6 months.

The group agreed to meet at regular intervals during the roll-out and evaluation of the programme and to continue to work collaboratively to support the evaluation, to share good practice and to explore potential for future commissioning and service development.

This is an example of collaborative work within and across Councils. It also demonstrates excellent engagement between statutory, independent and academic partners. Working together has helped share the cost and risk of testing out new ideas. It has also helped raise the profile of ACEs, which in turn can inform practice across the wider workforce.

An evaluation of the ACEs Recovery Toolkit is currently being undertaken by the Public Health Institute at Liverpool John Moores University, the outcomes of which are due to report in September 2019.

Contact details

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Knowsley: Julie Tierney, Public Health Julie.Tierney@knowsley.gov.uk

Venus Charity

In what area is the organisation based?

Halton

What was the ACEs initiative?

Since the Champs conference in December 2017, the charity have used the ACEs video and information from Helen Lowey's presentation to train staff and volunteers in using a trauma-informed/ACEs approach in delivering parent-to-parent volunteer support in Halton. They are also implementing targeted support to address inter-parental conflict and its effects on child development

Which areas did the initiative cover?

Halton

Was the initiative evaluated? If yes, please include any relevant evaluation data.

No

Please add any further information about the initiative.

[Further information was not provided]

Are you happy for your details to be included in the report, in case anybody would like further information? If so, please state the name and email address of the best person to contact.

[This information was not provided]

Elsewhere in the UK

Blackburn with Darwen

A study conducted in Blackburn with Darwen found that almost half (47%) of adults across the Borough have suffered at least one ACE, with 12% of adults in Blackburn with Darwen having suffered four or more (accessed online via https://www.blackburn.gov.uk/Pages/aces.aspx: last accessed 11th May 2018).

The study showed that the more ACEs an individual experiences in childhood, the greater their risk of a wide range of health issues as an adult[8]. Several initiatives were implemented including working with Lancashire Care Foundation Trust to train staff to routinely ask about ACEs, through the Routine Enquiry in Adverse Childhood Experiences (REACh)[9] initiative, and by working with a local secondary school to be ACE-Aware and ACE-informed, through the Emotional and Brain Resilience in Adverse Childhood Experiences (EmBRACE) initiative (see Case study 4.2.7). An animation has also been developed in collaboration with Public Health Wales – please see the link below to the animation:

http://www.lscb.org.uk/adverse-childhood-experiences-ACEs-animation/

Trauma and Mental Health-Informed Schools Initiative[10]

This whole-system approach, which was implemented in Cornwall, is designed to give all local children access to an 'emotionally available adult' in order to boost their resilience. It aims to give school staff additional skills and confidence in an area where, at present, they often feel anxious; in 2015, two out of three teachers were worried that if they talk to children who self-harm it will make things worse.[11] The approach aims to address developmental deficits to support learning and emotional health, at the same time as upskilling adults across the community to provide support, and enabling school staff to support children with specific mental health problems as a result of ACEs.

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[8] http://www.blackburn.gov.uk/Pages/ACEs.aspx
[9] https://www.lancashirecare.nhs.uk/reach-and-ace-links
[10] Evidence presented to the Parliamentary Evidence-based early-years intervention inquiry:
 https://www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/inquiries/parliament-2017/evidence-based-early-years-intervention-17-19/publications/
[11] Talking Self Harm report 2015

Blackpool Trauma-Informed Care Strategy[12]

Better Start Blackpool has adopted a 'full system' approach to reducing and responding to trauma.[13] It is part of a broader trauma-informed care strategy that aims to transform the workforce. Alongside the trauma-informed and trauma focused interventions being implemented by the partnership, the trauma-informed strategy will bring out sustainable change which includes the community and partner organisations. The partnership is also piloting the use of adapted ACEs questionnaires through health visitors, and embedding trauma focused learning across the health visitor infrastructure. Training will be provided to Blackpool First Response, Neighbourhood and Early Action policing teams to help them to become more trauma aware, and a new trauma-informed diet and nutrition service for pregnant women is also being developed.

CAPS Early Intervention Service - Manchester: A model of best practice[14]

The Children and Parents Service (CAPS) is a citywide, multi-agency, early intervention service in Manchester. It is highlighted as a model of best practice by NICE for Early Years Social and Emotional Wellbeing. It has been established for 18 years and delivers evidence based parent interventions to preschool children and their families. It aims to provide thorough psychological assessment and intervention in community settings, identify early social and emotional problems in pre-school children, deliver accessible training to parents of pre-school children with emotional and behaviour problems, and to provide a pathway into other relevant services.

Reasons for implementing

Manchester is one of the most deprived cities in the UK, and is ranked number one for child poverty. There are around 32,000 children of pre-school age in the area. Manchester also has one of the highest rates of looked after children in the UK. In their submission to the ACEs parliamentary inquiry, they demonstrate that there is strong cost-benefit argument for the service, as they estimate that the cost of one adult on benefits over a lifetime is half a million pounds, whilst the average cost of the intervention is around £1500 per family, and about a third of the parents who complete courses go back to college, get a job or volunteer within three months of completing the course.

How did you implement?

A CAMHS-led (Child and Adolescent Mental Health Service), multi-agency steering group was established. The service was delivered initially in an area of high need in Manchester, but due to its success it became part of all Children Centre provision.

Data was collected using standardised measures pre-intervention, post- and at follow up to ensure the courses were successful. A report was then published and widely distributed to inform wider systems. The service also became a training hub for the programme, in order to

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[12] Evidence presented to the Parliamentary Evidence-based early-years intervention inquiry: https://www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/inquiries/parliament-2017/evidence-based-early-years-intervention-17-19/publications/

[13] Seng J. & Taylor J. (2015) Trauma informed care in the perinatal period. Dunedin Academic Press http://www.ACEstudy.org/uploads/3/4/9/6/34961588/10-qacecalc.pdf

[14] https://www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/inquiries/parliament-2017/evidence-based-early-years-intervention-17-19/publications/

enable more rapid expansion of the programmes at a reduced cost in terms of training. The service lead has also acted as a champion for the service.

Key findings

The results showed improvements in child behaviour, and decreased parental depression and stress at post intervention and at follow up. Following the course, between 76% and 82% of families who were previously in the clinical range for parental depression, parent stress and child behaviour problems, were in the normal range. The authors argue that this represents significant cost savings to multiple agencies. Demand for courses has increased as the service has become more established and whilst courses used to be actively advertised and recruited to, this is no longer required as demand exceeds resources.

Key learning points

Use a collaborative approach from the start with a multi-agency approach, involving key partners, strategic leads and commissioners and always make decisions with their input and support. Start small and initially work with enthusiastic people. Do it well and evaluate what you do. Use evidence based models and keep to model fidelity, no matter how much pressure you are put under to dilute, cut, adapt or modify. Never lose sight of quality. Work to model fidelity, demand accredited supervision and ensure practitioners achieve accreditation.

Trauma-Informed Practice, Manchester City Council[15]

The initiative is funded by Manchester City Council. All frontline services, including commissioned services, in one ward will be trained, coached and developed to offer a trauma-informed approach to engaging with current and future service users/people with lived experience. Organisations taking part include Integrated Neighbourhood Teams, police, GPs, youth services, VCS, Health & Social, Early Help, fire and rescue, mental health services, domestic violence and abuse services, early years services, health visiting, schools and substance misuse services. The ward has a fairly static population compared to other areas of the City.

The project is looking to test whether having a trauma-informed workforce at place level makes a difference to the workforce capacity to engage with service users/people with lived experience. It aims to explore whether understanding of the root causes of behaviour rather than simply "treating" presenting behaviour, improves the effectiveness of interventions.

The project will contribute to include a strong sense of citizenship for the City. Trauma informed work has strong evidence that it can help to improve the health and wellbeing of children and adults, in order to facilitate a true partnership at place level on the wider determinants of health. This will include an increase in the number of apprenticeships for the people in the ward with pathways to graduate level study in health and social care. The project works on the assumption that if people feel respected and listened to they will be more open to the idea of different strategies. This allows frontline staff to have far more of a

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[15] Evidence presented to the Parliamentary Evidence-based early-years intervention inquiry:
 https://www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/inquiries/parliament-2017/evidence-based-early-years-intervention-17-19/publications/

blank mind approach leading to better de-escalation practice with service users/people with lived experience. Frontline practice will be able to practically demonstrate that they work together and trust each other by co-designing the implementation plan for training, respecting one another's ideas and innovations, training together, being supervised together and share learning and development in a place. They are our key experts to bring about change. We recognised the frontline are the business; not the back office functions. They have the right experience, insight and skills to help us design to implement. The implementation system is being driven by the frontline and not the other way around which gives the ideas better traction to landing in every day practice. They are the experts on place; they understand what helps and what stops them from doing their best and what support they need in place to make a design idea on paper actually happen in practice.

The aim is that frontline staff will own the project by co-designing the whole implementation plan and training package before any training starts. Robust evaluation will be put in place to identify key learning and what is scalable to help inform future workforce transformation.

Wensum Trust[16]

Attachment Outreach Support (AOS), a pilot project, was set up in September 2016 (AOS), with funding from Norfolk County Council. The project will work with a population of children who have experienced complex trauma. Complex trauma occurs when a child suffers repeated long-term abuse and neglect, often at the hands of someone they depend on for protection and survival. The impact of this is to change the way that a child's body and brain function, so that the ability to co-ordinate different physical, emotional and cognitive functions is significantly compromised. The child could be said to have a fear-driven brain, unlike their more fortunate peers, whose brains have developed to seek out others to soothe their distresses and to be curious and playful as they explore the world around them. The fear-driven brain can become quickly disorganised when the child is distressed, unable to know how to be soothed. These children struggle to make sense of incoming information; can be very rigid in their beliefs about how the world and relationships work and resistant to new experiences. Their early abuses are experienced by the child as if they are continually happening in the present even when they are now in a safe environment.

Understanding the fear-driven brain helps us to understand why these children are not able to remain calm in a busy classroom, make friends or be curious and playful enough to learn. It also informs us as to why some approaches within therapy and education do not work, as they unwittingly increase the child's fear and disorganisation. This is particularly the case for behavioural approaches.

The model combines the latest research on neuroscience, sensory integration, attachment theory and trauma. In order to truly learn we must feel safe, and this approach is based on enabling the child to experience safety through their attachment relationships and with specialised input from occupational therapy and psychotherapy. Central to our model is the

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[16] Evidence presented to the Parliamentary Evidence-based early-years intervention inquiry: https://www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/inquiries/parliament-2017/evidence-based-early-years-intervention-17-19/publications/

role of the key adult. The team will include a head teacher, attachment lead and psychotherapist

The project is in its second year and is a multi-disciplinary, attachment-based educational and therapeutic support project, supporting adopted children, their families and their school, across the three school phases; infant, primary and secondary. Although school led, this approach provides therapeutic support from a number of therapists including sensory integration, speech and language and a psychotherapist. The project works on the assumption that, if schools are supported to understand the needs of children who have suffered attachment difficulties, relationship trauma and loss and are offered practical support with the management of needs (that is also replicated in the child's home), the outcomes for these children will be more positive. It also aims to provide professional development that will lead to a change in a school's ethos so that these children have the provision that reflects their needs, provide access to a wide range of therapeutic therapies to support a child's development.

Outcomes

100% of children made good progress/attainment from their starting points. 83% of children (with the highest level of need) have been saved from exclusion, as a direct result of AOS support. Norfolk schools welcome the support offered by AOS because providing for these children creates stress and anxiety for school staff and the leadership team. A lack of training and CPD means that there is little understanding of the needs or type of provision required, for a child who has suffered attachment trauma and loss. Training provided by AOS is sought and very positively received by schools, with feedback indicating it is pitched at the right level and is school focused. Norfolk Adoption Support Team social workers also welcome the initiative.

The findings do suggest, however, that schools often cannot meet the complex needs of the most vulnerable children (those who have suffered complex trauma). They are unable to support the complex high level needs of the child, which results in exclusion, or moving them to costly inappropriate provision.

Children who are not excluded still need therapeutic support aligned with an approach that main stream schools cannot provide. In line with recent research on trauma, these children require a phased approach, starting with a period of stabilization. The service are currently proposing an alternative short stay, multidisciplinary free school for these children.

Emotionally and Brain Resilient to Adverse Childhood (EmBRACE)
A vehicle to change culture through an ACE-informed approach

The authors argue that a paradigm shift is needed in our education system to overcome the effects of Adverse Childhood Experiences (ACEs), which requires local and national priority. EmBRACE (Emotionally and Brain Resilient to Adverse Childhood Experiences) is an innovative cultural change programme, taking the emerging evidence of childhood adversity together with the neuroscience and implemented within educational settings. The project involves changing culture within, breaking down barriers, increasing expectation and challenging traditional ways of thinking. This approach improves outcomes for students and institutions, by having more engaged pupils, pupils who understand their behaviour and can

change their actions, but also supports staff and parents/caregivers; providing a common language and approach for multi-agency working.

Background

On the basis of the first population prevalence study in Blackburn with Darwen, a pilot study (funded by Lancashire Constabulary) was undertaken to understand the impact of repeated exposure to ACEs on a young person's emotional well-being and learning within an educational setting. This has since been rolled out to other educational settings. EmBRACE is a consultant-led change management programme; planned and developed by Sue Irwin Ltd. The principles and vision for implementation was modelled on the Lincoln High School in America, where graduation increased and exclusions reduced due to culture changing within the school by integrating trauma-informed strategies and resilience building practices.

EmBRACE was piloted at Witton Park Academy (WPA). The model uses a collaborative approach between multi-agencies to drive the ACE agenda, encourages, develops and supports a common language for partnership working, and focuses on changing culture and capacity building. Senior leadership teams implement and embed the thinking, understanding, responses and considers how the 'organisation' becomes both ACE Aware and Informed. Various change management tools are implemented to ensure that EmBRACE's values, vision and framework are implemented.

Outcomes (and efficacy)

This consultant-led change management programme has been successfully implemented and continues to be driven forward in other educational settings/organisations. The change management process provides an organisation with a framework to become ACE aware and then plan for being ACE informed. The authors argue that cultural change takes time. The process is manageable and takes into account the thinking needed in order to have a paradigm shift.

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Recommendations

The following recommendations have been produced based upon the national and local evidence of best practice on what is effective in preventing, identifying and responding to ACEs. Steering group members advised on additional recommendations following a discussion about the report at a meeting on Wednesday 16th May 2018.

Structural level recommendations

Who should act? Commissioners.

What action should they take?

- Protect universal support for early child development, with a central role for health visitors and Children's Centres.
- Ensure resources are in place to enable health visitors to carry out their role in supporting vulnerable families and families with complex needs, and in supporting maternal and parental mental health.
- Promote joint working across the interface of NHS, community, Local Authorities with involvement of young people.
- Develop multi-agency guidelines to address mental health in young people.

Organisational level recommendations

Who should act? Early years practitioners

- Improve training for professionals working with children and young people to build ACE awareness among the workforce.
- Assess organisational readiness and build capacity to support the implementation of trauma-informed practice, and provide training in trauma-informed approaches.
- Cautiously, explore the potential role for routine enquiry about ACEs within day-to-day practice, where appropriate.

Who should act? Schools and colleges

- Assess organisational readiness and build capacity to support the implementation of trauma-informed practice and provide training in trauma-informed approaches.

Community, family & individual level recommendations

Who should act? Early years practitioners

- Deliver evidence-based parenting programmes to help prevent the generational transmission of ACEs.

Who should act? Schools and colleges

- Take a whole school (or college) approach to emotional and mental health and wellbeing, including resilience skills, social norms, services in schools and colleges, single-point of access. Plan and prepare for implementation carefully.
- Ensure that all secondary schools and colleges have regular access to on-site support from a CAMHS professional. Joined up working is essential.

- Ensure that children are able to identify trusted adults within their school that they can go to for advice and help. Support from a trusted adult is an important factor in building resilience and in mitigating the impacts of ACEs.

Recommendations for further research

Based on the current evidence it may be beneficial to:

- Commission further research to establish which types of training are effective in developing workforce skills to identify and address ACEs.
- Consider whether collecting ACE prevalence data would create evidence for the need for action, particularly in areas of high socioeconomic disadvantage, where prevalence of ACEs is likely to be higher.

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Appendix 1. Table of case studies and how they were identified

Name of initiative	Geographical area covered	How was the case study identified?	Which groups does this initiative target?	Area targeted
Cheshire and Merseyside initiatives				
ACE Recovery Toolkit	Knowsley, Liverpool & Sefton	LJMU are conducting the evaluation of this initiative.	Adults	Treatment & prevention
Unknown (delivered via Venus Charity)	Halton	Via an email that was sent to leads in each local authority area	Parents	Treatment
Initiatives from outside the Cheshire and Merseyside area				
Blackburn with Darwen	Blackburn with Darwen	The initiative was presented at a Champs conference. Information was identified via internet search	Adults	Identification & screening, early intervention
Trauma and Mental Health Informed Schools initiative	Cornwall	From examples provided to the Parliamentary Evidence-based early-years intervention inquiry	Secondary school children	Early intervention, treatment
Blackpool trauma-informed care strategy	Blackpool	As above	Multi-agency approach	Early intervention
CAPS Early Intervention Service - Manchester	Manchester	As above	Multi-agency approach, children & parents	Early intervention
Manchester City Council	Manchester	As above	Multi-agency approach, workplace setting	Prevention, early intervention
Wensome Trust	Norfolk	As above	Children who have experienced trauma	Treatment
EmBRACE	N/A	Via a conference	Young people in education	Cultural change

Appendix 2. Search strategy for the literature review

An electronic literature search was undertaken in MEDLINE (via the Ovid platform) using the following key word terms:

> adverse childhood experience*, adverse childhood event*, adverse experience* adj2 childhood, childhood adversity, childhood adversities, adult survivors of child adverse events [MeSH term], trauma-informed, trauma focused, trauma responsive, trauma and staff training, intervention*, program evaluation [MeSH term]

This search identified 259 articles, which were screened for relevance by a single researcher [CL]. Additional articles were identified by hand searching the reference lists of relevant articles and by looking for forward citations for key authors.

Google scholar was searched for grey literature and we also utilised evidence submitted to the UK Parliamentary Evidence-based early-years intervention Inquiry.