West Midlands Combined Authority

WEST MIDLANDS TRAUMA INFORMED COALITION

Reducing Systemic Trauma

Developing Systemic Resilience

The Social and Economic Case for Transformational Change

A Report for the West Midlands Trauma Informed Coalition

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careKNOWLEDGE

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Foreword

As Head of Systems Change and Inclusion at the West Midlands Combined Authority, I am proud to introduce this landmark report, "Trauma to Resilience." This work is the culmination of a region-wide commitment to understanding and addressing the profound impact of adversity and trauma on individuals, families, and communities across the West Midlands.

Our journey began with a simple but powerful question: What will it cost us if we don't become trauma-informed? The answer, as this report makes clear, is measured not only in financial terms (though the costs are staggering) but in the wellbeing, potential, and futures of our people.

Innovation in the Public Sector: A Systemic Approach
Innovation in the public sector is often spoken of in terms of technology or efficiency. But true innovation, as we have learned, is about fundamentally rethinking the systems that shape people's lives. It is about moving beyond siloed responses to adversity and instead building a culture of collaboration, learning, and shared purpose.

This report embodies that spirit. It challenges us to see trauma not as an individual failing, but as a systemic phenomenon—one that is shaped by historic, structural, and intergenerational forces.

It calls for a shift from fragmented, reactive services to a holistic, preventative approach that builds resilience at every level: individual, family, community, and system.

Central to our approach is a clear recognition that trauma and adversity do not affect all communities equally. The evidence is unequivocal: poverty, discrimination, and racialisation are powerful drivers of trauma, and the West Midlands, one of the most diverse regions in the UK, faces disproportionate challenges as a result. Many of our communities, particularly those who are racialised or experience persistent inequality, carry the weight of historic and structural disadvantage. Addressing trauma in our region therefore demands an explicit commitment to equity, anti-racism, and the dismantling of systemic barriers. Our framework is underpinned by the principle that "do no harm" is not passive; it requires us to actively challenge discrimination, listen to lived experience, and ensure that every intervention is inclusive, equitable, and just.

From Evidence to Action

The evidence presented here is both sobering and galvanising. We see clearly the high social and economic costs of adversity and trauma, and the limitations of current trauma-informed practice when it is not embedded within a broader, systemic framework. Yet we also see the transformative potential of investing in resilient communities, supporting families, and designing services that "do no harm" and actively promote healing and inclusion.

Our approach in the West Midlands has been to ground innovation in partnership with communities, with those who have lived experience, and with colleagues across sectors. We have sought to create the conditions for learning, experimentation, and honest reflection. This report is itself a product of that collaborative ethos, drawing on the insights of practitioners, strategic leaders and academics from both statutory and third sector organisations both locally and nationally.

A Call to Collective Leadership

The path from trauma to resilience is not linear, nor is it easy. It demands courage, humility, and a willingness to confront uncomfortable truths about inequality, discrimination and the legacy of historic harms. But, it also offers hope: that by working together, we can disrupt cycles of adversity, build stronger and more inclusive communities, and create a public sector that is truly fit for the future.

I invite all who read this report to join us in this work. Let us commit to transformational change, not just in policy, but in practice and, more importantly, in culture. Let us ensure that every decision we make, every service we design, and every partnership we forge is guided by the principles of equity, compassion, and systemic resilience.

All of our wonderful, diverse and culturally rich communities can move from trauma to resilience—and in doing so, unlock the full potential of the West Midlands and its people.

Claire Dhami

Head of Systems Change and Inclusion - West Midlands Combined Authority

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Reader's Guide

> *A word is a bridge thrown between myself and another. If one end of the bridge depends on me, then the other depends on my addressee. A word is a territory shared by both addresser and addressee …*
>
> **Volosinov (1973)**[1]

The above reflects an understanding of linguistics that what is said or written comes from the perspectives and experience of the speaker or author. Whilst how speech or text is understood, depends also on the perspectives and experience of the listener or reader. Consequently the meanings and understandings reached from this report can be seen as a social construction between author and reader.

Report Overview

Executive Summary, provides a two page overview of key policy findings and summarises proposals for Transformational Change.

Readers Guide (this section).

Part One - Introductory Chapters, provides an overview of key thinking that has informed and been developed within the report. This includes details of the proposals and policy findings. Part One, has the following sections:

- Introduction;
- Background;
- Systemic Perspectives on Research and Practice;
- A Regional Framework;
- Summary of Policy Findings and Proposals;
- Transformational Change.

The systemic thinking applied in developing the report is outlined in the section *Systemic Perspectives to Practice and Research*.

The *Regional Framework* underpins key aspects of the report. This views trauma as a systemic phenomenon and that addressing trauma requires both reducing systemic trauma and increasing systemic resilience.

Part Two - Literature Review provides the academic thinking informing the report. This has three sections:

- Introduction to the Literature Review;
- A Review of National Policy and Evidence;
- A Wider Literature Review.

The **Introduction to the Literature Review** outlines some of the challenges caused by limited evidence of the benefits of trauma-informed approaches, including the impact this has had on modelling. Trauma as a social construct is considered and our reasoning for the move to viewing trauma as a systemic phenomenon.

The **National Policy and Evidence** section considers the policy position of the four nations of the United Kingdom towards ACEs (Adverse Childhood Experiences) and trauma-informed practice. Academic evidence, including critiques of these policies are provided.

The **Wider Literature Review** considers the available evidence, both nationally and internationally, to assist the West Midlands in the journey to becoming trauma -informed. The three main areas considered are:

- **Limitations of the Evidence Base** outlines national and international research on the limited evidence of effectiveness of trauma-informed approaches across key public sectors;

- **Building Resilient Families and Communities** outlines evidence of effective broader approaches to build resilience, including proposals to apply these in the West Midlands;
- **Regional and Strategic Barriers** to trauma-informed approaches reviews a range of national and international literature.

Part Three - Modelling the Impact of Adversity and Trauma, has three sections:

- **Introduction to the Modelling** considers the approach and key findings from the modelling;
- **Regional Systems Models** illustrates and develops the concept of addressing systemic trauma through building systemic resilience;
- **Cost Modelling** explores the potential future cost of adversity and trauma.

Part Four - Project Approach and Development has five sections:

- Project Requirements;
- Project Team;
- Development of the Project and the Report;
- Literature Review Approach;
- Addressing Limitations of the Literature Review.

Appendix A - Biographies Outlines the Project Team.

Terminology

Trauma can be described and defined in multiple ways. Within the literature review we identify that this is in itself problematic. However, a commonly used definition was developed by the American government Substance Abuse and Mental Health Services Administration (SAMHSA):

> *Trauma is defined as an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social or emotional wellbeing*[2].

Acknowledging the SAMHSA definition, the Office for Health Improvement & Disparities in the Department of Health and Social Care (2022)[3] provides guidance for health and care professionals on a *Working definition of trauma-informed practice*, that is:

> *Trauma-informed practice is an approach to health and care interventions which is grounded in the understanding that trauma exposure can impact an individual's neurological, biological, psychological and social development.*

The terms trauma and trauma-informed practice used by the authors of this report broadly reflect the above definitions. However, we also recognise that such definitions individualise trauma and argue within this report of the need to also view trauma much more broadly as a systemic phenomena.

The terminology **West Midlands** or in some contexts the **West Midlands Metropolitan Area**, applies to the West Midlands Combined Authority (WMCA) area. The (WMCA) area lies within the broader West Midlands Government region and this will be referred to as the **West Midlands Government** region.

Spelling

Where we have used American quotes we have retained the original spelling.

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Executive Summary

There is strong evidence regarding the high social and financial harm caused by early adversity and possible trauma. Illustrating the levels of trauma, areas in the West Midlands have the highest rates of child mortality anywhere in England. We estimated that the regional annual cost of loss of GDP, from poor health, linked with adverse childhood experiences (ACEs) is £2,597 million (£2.6b). In addition there are very significant social and financial costs to individuals, communities and the range of public services.

Where the evidence is less well established is the interaction of social and biological factors underlying poor outcomes. There is strong evidence of social and financial cost effectiveness of building resilience from strengthening communities. There is also very good evidence both internationally and in the UK of the effectiveness of parenting interventions. Evidence of effectiveness of trauma-informed practice as a response to adversity is very limited. This evidence gap applies to the majority of areas of public services.

Given the strong evidence of very high harm and high social and financial cost of adversity and trauma, doing nothing, is indefensible, socially, financially and morally. Consequently, there is a need to respond to adversity and trauma guided by the best available evidence. Whilst continuing to consider and create the developing evidence base of effective service responses that provide social and economic benefits at both strategic and individual levels.

Increasing evidence shows that harm from early adversity should be considered much more broadly than adverse childhood experiences (ACEs). We suggest the need to consider childhood adversity and traumas (CATs), a model which considers a wider range of factors. ACE based models are inherently based within childhood additionally adult adversity and traumas (AATs) also needs to be considered and effectively addressed.

The audience for this report is wide, whilst evidence of effective trauma-informed practice to reduce and address adversity and trauma is limited. Consequently we are not advocating any particular model to address trauma. This would be likely to reduce innovation and could cause partners to commit to models that may not be effective.

However, the Trauma Informed Coalition agreed an overarching strategic framework to be applied at a regional and local level. The framework, is based on moving from Systemic Trauma to Systemic Resilience™. The framework can be applied strategically and at a casework level by public and private organisations. This resonates with the policy position developing in other countries in the UK and more widely.

Further Key Findings:

- Evidence suggests that high levels of poverty and racialised communities strongly indicate that the region will have greater levels of trauma than in the overall UK population;
- Adversity and trauma can occur throughout life, but are more evident in vulnerable groups e.g. those affected by deprivation and racialisation;
- High levels of childhood adversity correlate for many people with ill health in later life;
- How individuals are affected by and respond to childhood adversity varies and many individuals recover and lead fulfilling lives;
- In order to ensure legitimacy of approach service development requires consultation with communities and service users and to be applied in a framework of informed consent.

Becoming trauma-informed is an essential beginning. However, to be effective requires an ongoing focus on preventing trauma, strengthening communities and identifying those who have been traumatised, ensuring they receive appropriate help and support.

Transformational Change

For transformational change to occur a multi-layered strategic approach to prevent and reduce trauma is needed. The highest levels of the approach are to:

- Address the systemic and structural factors that correlate with traumagenic environments;
- Reduce the likelihood of adversity and trauma in families and communities to increase resilience;
- Maintain and develop services to support those affected by adversity and trauma;
- Ensure that services do no harm, responding effectively to promote the wellbeing of those individuals who have been affected by adversity in order to prevent or heal trauma.

To facilitate this:

At both a political and strategic level across all West Midlands public bodies, it should be explicitly recognised that trauma is a systemic phenomena that is structural and historic as well as inter-generational and occurs across the life course. That responding to trauma and reducing the harmful social and economic impact requires that the historic and structural factors which underlie trauma are identified and removed or reduced, that inter-generational transmission of trauma is disrupted and the systemic resilience of families and communities is increased.

A concordat should be developed across all of the main political parties acknowledging that trauma is a systemic phenomena that is causing immense social and economic harm. The concordat should agree that from the outset, all strategic, financial and economic decision-making, including devolution of powers from central government, should always consider whether proposed actions will alleviate or increase systemic trauma and build community resilience.

All public agencies should commit to developing and publishing a strategic ten-year plan to reduce the levels and impact of trauma and promote the wellbeing and systemic resilience of service users, employees and communities. An annual report on progressing the plan should be published.

A strategic multi-disciplinary Trauma to Resilience Unit (TRU) should be created. The overarching objectives of the TRU should be to reduce the levels and impact of trauma and increase the wellbeing and resilience of communities. This should be undertaken in line with the evidence in this report and the continually developing practice and academic evidence.

The work of the unit should include:

- *Raising awareness of the very harmful impact of adversity and trauma and the social and economic gains from addressing these issues;*
- *Developing a ten-year regional Trauma to Resilience Plan (TRP) following this report;*
- *To selectively scrutinise strategic, financial and economic decision-making by public bodies and provide advice on whether proposed actions will alleviate or increase systemic trauma and increase resilience;*
- *To provide strategic advice to all public bodies on effective strategies that can reduce adversity and trauma and increase resilience.*

Part One

Introductory Chapters

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Introduction

In the autumn of 2021 a Trauma Informed Coalition (TIC) was established across the West Midlands Combined Authority (WMCA) area. The aim was to establish a trauma-informed region. This report was commissioned by the WMCA on behalf of the TIC.

The audiences for this report include leaders, policy makers and senior staff across the West Midlands public agencies. This report may also be of interest to policy makers locally and nationally.

When commissioned we were asked to undertake a *focussed literature review* of the *best available evidence* on the social and financial benefits of the region becoming trauma-informed. The review was to include an analysis of the evidence of the *structural* and possible *organisational barriers*. The other purpose of the literature review was to contribute to a financial analysis and benefits modelling.

At an early point in the project it became apparent that whilst the harm caused by significant childhood adversity is very well evidenced, evidence of the social and financial benefits of developing trauma-informed approaches was scarce. It also became apparent that the strongest evidence of the costs of adversity and trauma are within studies of the economic impact of adverse childhood experiences (ACEs) on economic productivity.

Alongside the above were emergent findings of the extremely high economic cost of trauma to the West Midlands region. Consequently, it was agreed that the focus of our systems modelling should be to evidence the economic costs of adversity and trauma. The underlying question to be addressed being *What will it cost us if we don't become trauma-informed*?

At the inception of the project we had also agreed an overall framework to address adversity and trauma. The Regional Framework, Systemic Trauma to Systemic Resilience™ is detailed in a later section of the report. It influenced the thinking across this report.

As the literature review was progressed the very limited evidence of effective outcomes of trauma-informed approaches as a response to adversity and trauma became highly evident. Where we have found strong evidence of social and financial cost effectiveness is building resilience from strengthening communities as well as effectiveness of parenting interventions in strengthening families.

The findings from the literature review and the system modelling, led us to conclude that while the social and economic impact of adversity and trauma require urgently addressing, trauma-informed approaches are in themselves insufficient. Our reasoning includes:

- Compelling evidence of high social and financial cost accruing through adversity and trauma;
- Limited evidence of effectiveness of trauma-informed approaches;
- trauma-informed approaches are frequently focussed on individuals and respond to trauma that has already occurred;
- Strong evidence of social and financial effectiveness of building resilient communities and of parenting interventions;
- The agreed framework and the need to address factors that correlate with trauma, including systemic structural issues that disproportionately affect many local communities.

Given the findings of this report, we were recently requested to provide proposals on Transformational Approaches to reduce adversity and trauma within the region. These follow in a further section below.

Background

This report was commissioned on behalf of the West Midlands Trauma Informed Coalition (TIC). Members of the coalition had become increasingly aware of the impact of adversity and trauma and were looking to establish the region as being trauma-informed.

Punishing Abuse (Chard 2021)[1] studied eighty children in the West Midlands justice system. In their Joint Foreword to the report Andy Street, Mayor of the West Midlands and David Jamieson who was the Police and Crime Commissioner stated that:

> *We initiated this research because we believed that both the extent and impact of trauma for some children was having a profound effect on these young people's vulnerability. This extremely detailed and sophisticated study of children in our region has shown this to be the case, and the picture presented by the evidence is distressing. Vitally, these findings substantiate the case for robust investment in supporting vulnerable children and families in early years, health, schools and in their homes, before problems become more serious.*

Punishing Abuse proposed significant reform of both the local youth justice system and wider services. The findings were a significant driver for establishing the Trauma Informed Coalition. Punishing Abuse outlined the concept of *Systemic Resilience* which has now become a cornerstone of the Regional Framework to address trauma.

There is an increasing understanding nationally and internationally of the long term harm that is caused to individuals from childhood adversity. What can be clearly evidenced is that early childhood adversity, such as abuse or loss of loved ones can often traumatise children. When such trauma is not recognised and healed this may negatively impact on their health and wellbeing (and of others), not just in their childhood but across their life-course.

One of the foundational early studies in this area was an American study on the impact on longer term health of childhood adversity. The study by Felitti, Anda[2] and others was published in 1998 and considered ten adverse childhood experiences (ACEs). Those with four or more ACEs were found to have:

- Twice the likelihood of cardiac disease, a stroke, or cancer;
- Four times the likelihood of lung disease;
- A twelve-fold increase in attempted suicide;
- A sevenfold increase in becoming alcoholic; and,
- A ten-fold increase in injecting illicit drugs.

More recent ACE based studies in the UK, also provide strong evidence that the ongoing consequences of unresolved childhood trauma have significant impact on some individuals including on health, mental wellbeing and longevity (Anders et al. 2006)[3]. Studies also show the broader impact of adversity on educational attainment, career success and earning potential (Bhushan et al. 2020)[4].

Nevertheless, it is important to recognise that adversity and trauma are not deterministic of poor life outcomes. Many people affected by early adversity subsequently lead healthy, fulfilling lives. However, what is not well understood from the available research are the underlying social and biological mechanisms that are likely to combine to cause very poor outcomes for many individuals[5].

Disproportional Impact of Adversity

There is also good evidence that trauma can impact and transmit across generations (Dashorst 2019)[6] and this may adversely affect some communities (Kinouni 2021)[7]. This includes the often longstanding trauma of discrimination from povertisation and racialisation.

The Indices of Deprivation show that many areas in the West Midlands have some of the highest levels of deprivation in the country. Many areas in the region also have highly diverse communities with Black and other racialised groups forming the majority of the population. Evidence of higher levels of trauma and adversity within deprived and racialised communities would strongly indicate that the West Midlands is likely to have higher levels of adversity and trauma in the population than many other areas in the UK[8].

The links between structural factors such as poverty, deprivation and discrimination and higher likelihood of traumatisation leads to considering trauma through the lens of intersectionality (Crenshaw 1989)[9]. Intersecting social categories (e.g., gender, race, class) and interlocking systems of oppression (e.g racism, sexism, able-ism) (Shramnko et al. 2019)[10] may increase the likelihood of adversity and trauma. Reducing the capacity of an individual or community to respond resiliently, resulting in systemic trauma and traumagenic environments.

Societal Impact of Adversity

Recognising and addressing the impact of ACEs is now being pursued at a national policy level by governments across the globe. In a UK context the Welsh government has been at the forefront of such developments. Whilst it is important to acknowledge differences in terms of demographic and other factors, the population size and the extent of poverty in Wales provides a useful data comparator with the West Midlands. The population of Wales is 3.17 Million, the population of the WMCA region is 2.9 million.

Based on ACE survey data, a calculation of the proportion of key health risk behaviours and health conditions attributable to ACEs in Wales, calculated the annual cost of ACE's at £2.2 billion. A 10% reduction in ACE prevalence was calculated by Public Health Wales[11] to reduce the combined annual lost costs to GDP by 7% a sum of £161 million per year. The above begins to illustrate that the social and financial burden from the long-term impact of childhood abuse and adversity are very significant.

However, what is also increasingly evident is that the social and financial cost of childhood adversity begins in childhood and then potentially accrues across the life course. The likely social and financial costs identifiable, impact in many areas, including:

- Harm to individuals and avoidable costs of social care and health services;
- Educational costs of meeting behavioural and special educational needs caused or exacerbated by adversity and trauma;
- The impact on individuals and communities of anti-social behaviour, violence and other crime;
- Costs to the justice system of the involvement of children and adults in crime;
- Loss of educational opportunity and lower attainment levels;
- Lost cost from providing services not aligned on reducing adversity or ameliorating harm;
- Lost productivity through lower skills, unemployment, ill health and early death;
- Lost taxes through reduced economic activity; and,
- Increased costs of state benefits from ill health and reduced economic activity.

Given the evidence we have reviewed, alongside the modelling we have undertaken, we are of the view that the West Midlands needs to respond to adversity and trauma systemically. This includes both addressing the impact for adults and the underlying structural issues that underly adversity and trauma. Nevertheless the understandings and evidence that have driven trauma-informed approaches, stem from the accumulating evidence of the very significant individual and societal harms caused by ACEs.

The recent publication, Tackling Adverse Childhood Experiences State of the Art and Options for Action is a collaborative report from the World Health Organisation Centres at Public Health Wales and Liverpool John Moores University. This significant report provides a detailed review of evidence of the impact of ACE's and possible responses[12].

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Systemic Perspectives on Research and Practice

> *Systemically based practice continually helps me to help others as we join up the dots hopefully creating more cohesive, effective and fulfilling human organisations.*
>
> **Orientations: Systemic Approaches to Research Practices (Chard 2014)[1]**

The title of this report *Reducing Systemic Trauma Developing Systemic Resilience* reflects the Regional Framework agreed with the Trauma Informed Coalition. The Framework and this report have both been developed from applying systemic thinking and practices. Whilst this has been a regional research project we have also seen it as a form of pan-organisational consultancy and have applied systemic thinking in both areas. Consequently we believe it's important to ensure that the systemic influences that underpin this report are made apparent at the outset.

The Oxford Dictionary defines the word *systemic* as *… relating to a system as opposed to a particular part.* In contrast Gregory Bateson a foundational systemic thinker is often quoted for asserting that *everything is connected* and the need to see the *patterns that connect* (Bateson 1979)[2]. The term systemic applied in this report and in the Conceptual Framework is much more akin to the thinking of Bateson. This reflects the significant complexity we have been exploring and reporting. Including at the strategic level, how trauma is located in society and may be caused by human systems and then how human systems respond and enable or undermine resilience. In these complex processes influencing whether harm is caused, healed or exacerbated. Systemic thinking and practices have helped us to begin to reveal the *patterns that connect* adversity and trauma in the West Midlands.

The systemic thinking and practices that have influenced and informed this report embody thinking that has evolved and developed over a long timespan. The following provides a brief very overview of key schools of thought that underlie systemic thinking and how these have been reflected in this project.

What follows draws primarily on a chapter written by Alex Chard in Systemic Inquiry (Simon and Chard 2014)[3] an academic text focusing on collaborative research. Mary Gergen introducing the book, written by a range of authors, comments that:

> *Always in the background is the notion of reflexivity, a continuous consciousness of the valuational or ideological consequences of their actions. This heightened awareness is a major factor in keeping ethical concerns at the forefront of the researchers interests.*

This report is in essence about the immense impact of harm and trauma to the broader community including those who live and work in the West Midlands. Recognising and respecting this has remained at the forefront of our minds when undertaking this project. Also reflexively acknowledging that this is an emotive area and we are not untouched by the subject matter. A key part of our response to that is presenting our findings faithfully including being clear about what research tells us about what is known and not known about trauma-informed practice. Ethically this also includes recognising the disproportionate impact of adversity and trauma on povertised and racialised groups. Having entered this space we also accept the responsibility to help co-create a way forward that enables the West Midlands to reduce and ameliorate the impact of harm and trauma.

In considering reflexivity Gergen touches upon a key concept that underpins systemic thinking that originates from second order cybernetics. When we observe systems we become part of those systems and those systems act on us and affect us and in a reflexive manner we act on them (von Foerster 1992)[4]. Consequently researching and co-creating this report for and with key individuals in the West Midlands and beyond has both deepened and extended our thinking, but also changed us. We also hope our action research has begun and will continue to reflexively inform a process of change in how agencies and individuals in the West Midlands respond to adversity and trauma.

Another key aspect of thinking systemically is the understanding that that our joint realities are a social construction that is created through language and within our dialogical interactions with others (Burr 1995)[5]. Mary and Ken Gergen observe that:

> *The foundational idea of social construction seems simple enough, but it is also profound. Everything we consider to be real is socially constructed. Or more dramatically, Nothing is real unless we agree that it is. (Gergen and Gergen 2004, p.10)*[6].

At its simplest this report re-presents a social construction of reality that we have understood from research on the relevance of trauma-informed practice in the West Midlands. However, as is clear in the quote above, we view the relationship as profoundly complex. Peter Berger's and Thomas Luckman's (1966)[7] *The Social Construction of Reality: a Treatise in the Sociology of Knowledge* is acknowledged by many to be the origin of the term social construction.

> [A human being] *is biologically predestined to construct and to inhabit a world with others. This world becomes for* [them] *the dominant and definite reality. Its limits are set by nature, but, once constructed, this world acts back upon nature. In the dialectic between nature and the socially constructed world the human organism itself is transformed. In this same dialectic* [a human being] *produces reality and thereby produces* [themself].

Again we see how Berger's and Luckman's understandings reflect second order cybernetics and reflexivity. Linking this with systemic thinking, Robert Flood (2006)[8] distinguishes between systems thinking and systemic thinking, arguing that systems thinking advocates thinking about social systems as if they exist in the world. Whilst systemic thinking assumes that the social construction of the world is systemic.

Fundamently this report was commissioned and is intended to engender learning and systemic change in the West Midlands. We view this project as a form of systemic action research with the intention of informing pan-organisational learning and change. Flood (2006) creates an important fusion between systemic thinking, which he also sees as being underpinned by a socially constructed world, whilst using systemic thinking and action research to navigate that world. Suggesting that:

> *It is through systemic thinking that we know of the unknowable. It is with action research that we learn and may act meaningfully within the unknowable. Where these two arcs of reasoning converge, we witness the incredible genesis of a conceptual universe that opens up otherwise unimaginable ways in which people may live their lives in a more meaningful and fulfilling manner.*

The proposal and development of a community of practice (CoP) as part of the proposal was informed by the systemic thinking outlined above. Also by the perspective that in this context CoPs can be seen as a key aspect of a learning processes that enables development of policy and practice. We are delighted to see the CoP now has just under 200 members.

A systemic, reflexive, social constructionist orientation as outlined above creates possibilities for change. Working from the view point that reality is constructed by people in relation, we hope this report engenders change by influencing the way individuals view adversity and trauma and how they act in the world. This in turn will influence the way human systems work and begin the proces of systemic change.

We know from our ongoing conversations with members of the Trauma Informed Coalition that the findings within earlier drafts of this report have already begun to inform thinking in the West Midlands. The intent of the Trauma Informed Coalition commissioning this report was to instigate change. We are hopeful that having helped to reveal the *patterns that connect*, will assist the West Midlands to respond effectively and appropriately both strategically and in practice to heal the harm created by adversity and trauma.

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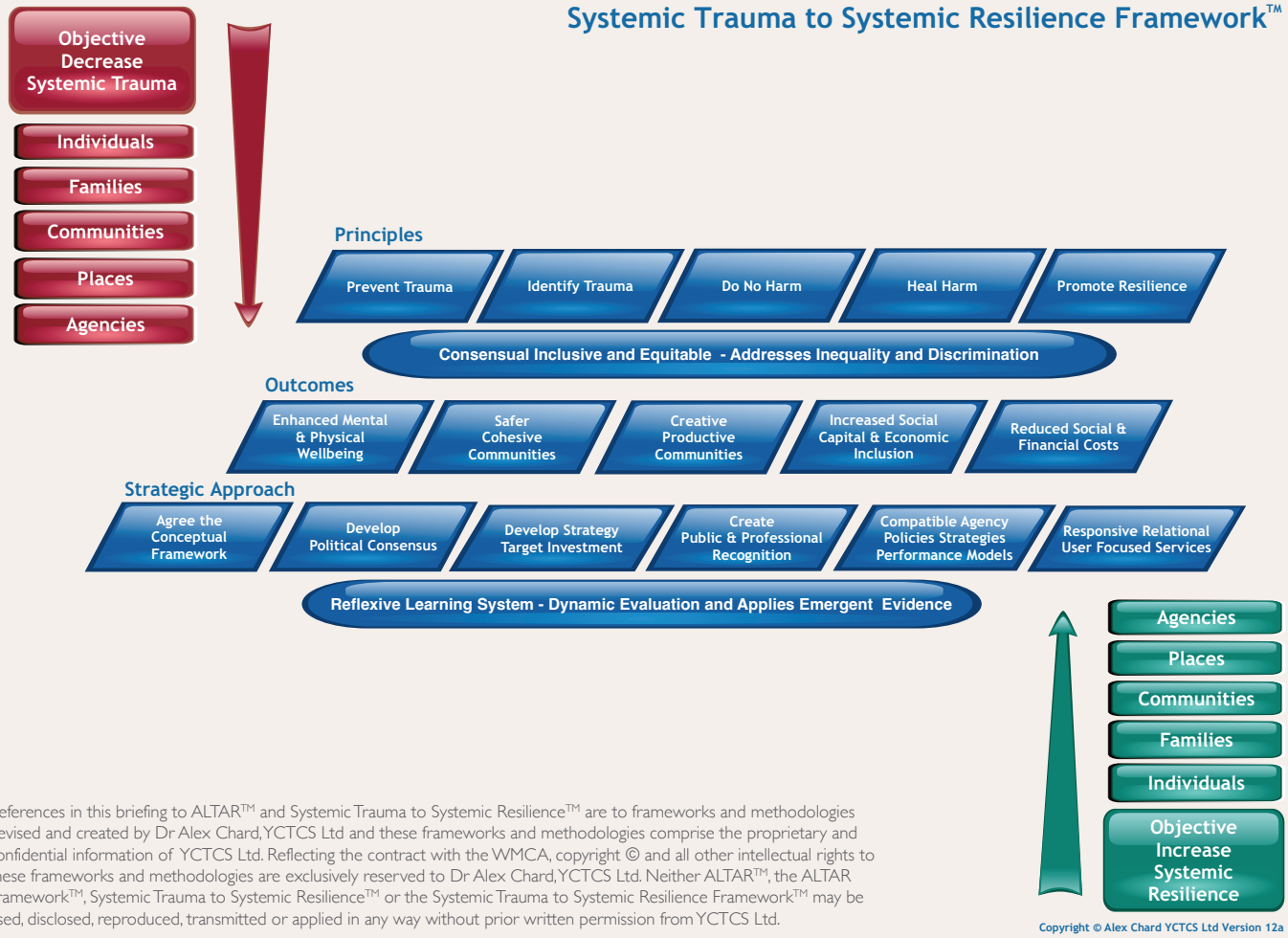
The Regional Framework

> *We can only meaningfully understand ourselves by understanding the whole of which we are an integral part. Systemic thinking is the discipline which makes visible that our actions are inter-related to other people's actions in patterns of behaviour and are not merely isolated events.*
>
> **Rethinking the Fifth Discipline, Learning Within the Unknowable (Flood 1999)[1]**

To assist the West Midlands to become a trauma-informed region, initial work was undertaken to agree an overall conceptual framework through which to progress the project. The Systemic Trauma to Systemic Resilience Framework™ (see below), was developed and then presented and agreed with the Trauma Informed Coalition and key partners at the inception of the project. The Framework can be applied at a regional, local and individual level and at all levels views both trauma and resilience as systemic phenomena. Consequently, reducing the impact of trauma requires not only reducing levels of systemic trauma, it also requires increasing systemic resilience.

The Framework informed the systems modelling and has been reflected in the policy findings and proposals. Importantly, the thinking that informed the Framework has since been further validated by the findings from the Literature Review and the Systems Modelling. The Framework as shown below has been refined by the lead author of the report. Nevertheless this fully reflects the originally agreed Framework.

Systemic Trauma to Systemic Resilience Framework™



References in this briefing to ALTAR™ and Systemic Trauma to Systemic Resilience™ are to frameworks and methodologies devised and created by Dr Alex Chard, YCTCS Ltd and these frameworks and methodologies comprise the proprietary and confidential information of YCTCS Ltd. Reflecting the contract with the WMCA, copyright © and all other intellectual rights to these frameworks and methodologies are exclusively reserved to Dr Alex Chard, YCTCS Ltd. Neither ALTAR™, the ALTAR Framework™, Systemic Trauma to Systemic Resilience™ or the Systemic Trauma to Systemic Resilience Framework™ may be used, disclosed, reproduced, transmitted or applied in any way without prior written permission from YCTCS Ltd.

In terms of the Objectives, Principles, Outcomes and Strategy in the Framework, much of the thinking is hopefully self evident. Importantly the Principles are underpinned by Equity and addressing all forms of Discrimination.

However, it needs to be recognised that the Principle of **Do No Harm** is not a passive statement. It requires agencies to actively consider whether the way services are structured, managed and delivered may cause harm either to people being served, staff or more broadly. Examples of this would be:

- When assessments are not carried forward and a service user is required to tell their story more than once, which may traumatise or re-traumatise them.
- Where failure to collect information or take account of relevant information leads to care or education placements which are inappropriate leading to service breakdown and possible trauma and cost.
- Vicarious trauma caused to staff by working with service users suffering from adversity and trauma without appropriate resources, supervision and support.
- Where agency failure to provide services appropriately, taking account of the potential to traumatise an individual, causes reputational harm and loss of public trust in that service.

Background to the Framework

The Systemic Trauma to Systemic Resilience Framework™ draws on the findings of a range of systemic action research studies undertaken over the past decade by the lead author of this report. These studies considered both qualitative and quantitative data regarding the lives of 130 older troubled children. The earliest of these studies led to the development of the ALTAR™ Framework as a research or case review methodology to study and understand the lives of troubled children.

As these studies progressed, there was accumulating evidence of the significant impact of abuse and loss and other adversity in the lives of the children studied and increasing evidence of the likely impact on their development and behaviours.

The ALTAR Framework™ is grounded in a wide range of academic evidence of how abuse, loss and other significant adversity impacts on children's behaviours as well as the factors that support children's resilience. In summary **A**buse and **L**oss in childhood frequently **T**raumatises children and this also affects their patterns of **A**ttachment to parents and others. Abuse, loss and other adversity impacts on the child's physical and neurological development affecting their behaviours and frequently their life course outcomes. Development of **R**esilience provides a framework to mitigate the impact of abuse and loss across the life course and also provides a framework for strategic intervention and prevention.

The ongoing development of the ALTAR Framework™ included a study of eighty children known to the justice system and other agencies undertaken for the WMCA and West Midlands PCC (Chard 2021).[2] This research culminated in the report Punishing Abuse. That report considered resilience as being systemically located, recognising *children and their behaviours as the product of their families and environment which are in turn affected by national and local policy and wider contexts*.

The concept of systemic resilience was then further developed in a paper for HMI Probation in their Academic Insights series (Chard 2022)[3]. In that paper the juxtaposition of both trauma and resilience as systemic phenomena was explored:

It was against the overwhelming evidence of abuse, loss, adversity and probable trauma that Punishing Abuse argued for the need for applying Systemic Resilience both to develop work with individual children and to address the underlying systemic and societal issues that escalate vulnerable children into the youth justice system.

Understanding trauma systemically enables us to see how we need to respond to the systemic factors of trauma including in our own practice and institutions. Seeing resilience as a systemic response also enables a clear link to be created between practice with individual children and both strategic responses and frameworks to prevent crime and offending and to address structural factors such as poverty and social exclusion that create adversity and vulnerability to involvement in crime.

In summary, the Systemic Trauma to Systemic Resilience™ Framework was developed from the findings of research undertaken by applying the ALTAR Framework™. The Systemic Trauma to Systemic Resilience™ Framework conceptualises the duality of trauma and resilience as linked systemic phenomena. The Framework has the potential be applied very broadly as a theory of change at a regional and local level. The Framework including the principles and outcomes are applicable to both strategic approaches and operational delivery, including responding to the individual needs of both children and adults.

Supporting Evidence

Findings from the Welsh Adverse Childhood Experience (ACE) and Resilience Study (Hughes et al. 2018)[4], shows that there is a moderating relationship between levels of adversity and availability of resources that promote resilience. Findings included:

- Among individuals with four or more ACEs, for example, modelled levels of current mental illness fell from 29% in those with low childhood resilience to less than half this level (14%) in those with high childhood resilience.
- Adjusted prevalence of lifetime mental illness fell from 60% in those with four or more ACEs and low childhood resilience to 14% in those with no ACEs and high childhood resilience.
- This indicates the substantial mental health gains that could be made by preventing ACEs and building resilience in future generations.
- However, the more ACEs individuals had, the less likely they were to report all forms of childhood resilience, suggesting that children who suffer ACEs are less well placed to access or develop resilience resources.

The impact of adversity and possible trauma are often seen as the response of an individual to a traumatic event. However, what is apparent is that frequently how an individual (a child or an adult) is impacted by potentially traumatic events is to a significant extent influenced by their lived context including their relationships and personal support (Judith Jordan, 1992)[5]. We would suggest that this almost certainly includes relationships with professionals and in broader terms the agencies for whom they work.

At a local level communities can become traumatised from disasters or from events such as loss of industries and livelihoods. It is also evident that trauma can deeply affect societies. This is apparent from the impact of the horrific events taking place in the wars in several parts of the world. The ongoing traumatic impact of the Covid pandemic remains highly evident, including the poor mental health of many children. Social, emotional and financial impact and deep harm from wars and Covid have affected communities in the UK and across the world.

Reflecting the systemic nature of trauma, Goldsmith et al. (2014)[6] make the following comments:

> *Substantial theoretical, empirical, and clinical work examines trauma as it relates to individual victims and perpetrators. As trauma professionals, it is necessary to acknowledge facets of institutions, cultures, and communities that contribute to trauma and subsequent outcomes.*
>
> *A systemic trauma perspective offers the possibility of expanding trauma prevention and treatment efforts. It is in line with multidisciplinary, ecological approaches to public health rather than narrow scholarly lenses ... A systemic trauma framework involves noticing how our own institutions and practices contribute to trauma and its outcomes.*

The above indicates that at a systems level we need to view trauma as a systemic, relational phenomenon that impacts individuals, communities and societies nationally and globally.

In a similar way resilience can be conceptualised as an individual characteristic in which a resourceful and emotionally strong individual heroically resumes or rebuilds their life following a traumatic event[7]. However, as is outlined above the evidence suggests that individual resilience is highly dependant on context and supportive relationships. Jordan (1992) suggests resilience is relational and contends that in building resilience, we *'can no longer look only at factors within the individual that facilitate adjustment; we must examine the relational dynamics which encourage the capacity for connection'*. In a similar vein when considering how to diagnose resilience in children Michael Ungar (2015)[8] asserts that:

> *Given the multidimensionality of the processes associated with resilience, the likelihood of individual children withstanding the impact of cumulative stressors is not a measure of their personal invulnerability. Instead, resilience is predicted by both the capacity of individuals, and the capacity of their social and physical ecologies to facilitate their coping in culturally meaningful ways.*

Consequently, the concept of Systemic Resilience (Chard 2022) recognises that improving outcomes for those who have been harmed, is not principally about developing the resilience of individuals. Creating and sustaining resilience is intrinsically linked to promoting broader resilience in an individuals relationships including their family and community. Individual resilience is also affected by fragility or resilience in broader local and national systems.

Considering resilience systemically is also supported by Urie Bronfonbrenners Ecological Systems Model of human development. Bronfonbrenner (1979)[9], conceptualising human development as a nested and recursive relationship between the child, family, neighbourhood and wider society and culture. Subsequently Hoffman and Kruczek (2011)[10] developed a conceptual framework applying an ecosystemic model based on Bronfonbrenner's work to mass trauma. Within that context commenting that:

> *… a comprehensive systems approach that allows conceptualization and response at the individual, family, community, and societal levels seems optimal. Therefore, we believe that an ecosystemic model more accurately provides a conceptual framework that can account for the complexity of trauma.*

Considering trauma as a systemic phenomenon also reflects the evidence that trauma and its impact are not limited to one life course, with trauma being transmitted across generations. Examples of this

include inter-generational child abuse, emotional harm and mental ill health (Langvin et al. 2022)[11]. Evidence also shows that the descendants of holocaust survivors have increased levels of mental health issues (Dashorst et al. 2019)[12].

Many communities or groups continue to be impacted by longstanding trauma from structural discrimination and racialisation that has impacted across many generations (Blushan et al. 2020)[13]. Psychologist Guilaine Kinouni (2021)[14] considers how racism and trauma affects those who are Black:

> *Those who have experienced more adversities in life tend to be more distressed when faced with racism and social injustice. ... Racial trauma, which as a framework aims to make visible the harm of racism, must be considered beyond the individual. The intergenerational transmission of trauma that may take place via various mechanisms is likely to contribute to the excess of psychological distress in Black groups.*

Adopting a systemic lens on adversity and trauma recognises the structural factors that may create or amplify trauma. Whilst living in poverty and in deprivation are in themselves traumatic; poverty and deprivation also impact the ability of individuals families and communities to respond to trauma. The stress created for those living in poverty is also known to increase the likelihood of further trauma through factors such as child abuse, substance misuse, familial violence, criminality, and levels of violence in communities (Bywaters 2022[15], Lewer et al. 2020)[16]. Such contexts leave children and families vulnerable to further traumatisation for example through criminal and sexual exploitation.

Viewing resilience as relational aligns it with the concept of social capital. Systemic Trauma to Systemic Resilience™ is synergistic with a series of economic and social policy papers published by DEMOS. In an essay published in 2023[17], The Preventative State, DEMOS argued of the need to build social capital, rebuilding our social and civic foundations including that:

> *… to truly reduce demand for public services in the long run, we need to not only prevent problems from arising, but create the conditions for flourishing and resilience within communities. Achieving this means investing in those foundational goods which create the social capital that enables us to lead better lives, without state intervention. Only then can a truly preventative state emerge.*
>
> *In this vision, the state leans in to enable stronger neighbourhoods, by creating the conditions for connections, building social infrastructure, mobilising people and long term community development - rather than turning a blind eye until the consequences become too impossible to ignore.*

In conclusion, viewing trauma systemically and recognising how trauma can become woven through lives and societies, moves us collectively from individualising trauma and expecting individuals to be strong enough to cope, towards a systemic relational position that recognises that hope for a better future lies in addressing trauma, though collective compassion and concerted joint action to reduce the impact of trauma and build greater resilience for individuals and communities.

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Summary of Policy Findings and Proposals

> *Truth is not born nor is it to be found inside the head of an individual person, it is born between people collectively searching for truth, in the process of their dialogic interaction.*
>
> **Mikhail Bakhtin 1984 cited by Shotter (1994)**

This section of the report provides a summary of the key policy findings and proposals from across the report. It then considers the implications of the policy finding for the region. This has been a learning journey, the findings represent our *searching for truth* for the region around becoming trauma-informed. However, the meaning of these findings will be for individuals and agencies locally to determine in *their dialogic interaction*.

In exploring the findings and proposals we consider dilemmas faced in making key proposals and for the region to consider when deciding whether to implement them.

Key Policy Findings

The following bullet points provide a distillation of the policy findings:

- Strong evidence to show the impact of childhood adversity at a population level is significant with compelling evidence of high social and financial cost accruing through adversity and trauma;
- Modelling suggests that failing to prevent and address trauma will cause the cumulative social and financial costs of trauma to escalate;
- Modelling also suggests that whether services ameliorate or increase adversity and trauma, affects how individuals move through systems, significantly affecting costs, particularly through escalation into more specialist services;
- Poor and racialised communities are more likely to be affected by and impacted by adversity and harmed in ways that can be traumatising;
- Levels of poverty and of racialised communities strongly indicate that the region will have some of the highest rates of trauma in the UK;
- High levels of childhood adversity correlate for many people with ill health, but the processes underlying this are not entirely understood;
- How individuals are affected by and respond to childhood adversity varies and many individuals recover and lead fulfilling lives;
- Adversity needs to be considered much more broadly than adverse child experiences (ACEs);
- A range of authoritative studies find limited evidence of trauma-informed practice improving outcomes for those using the majority of public services;
- Limited evidence means it is not possible to state that social and economic benefits will accrue as a result of the region becoming trauma-informed;
- The likely cumulative harm and cost of adversity and trauma informs the view that the underlying structural factors that may cause or sustain adversity and trauma need to be addressed;
- Public sector plans, initiatives and contracts and the extent to which they may increase or decrease adversity, trauma and resilience, should be tested in a similar way to equalities duties or carbon emission reduction;
- There is strong evidence from America and England of social and economic effectiveness of building resilient communities;
- Strong evidence internationally and in the UK shows the effectiveness of parenting interventions in reducing harm to children and potentially creating resilience in families and communities.

Two Findings in Tension

Two of the most significant findings of this study are the compelling evidence of the very high and potentially increasing social and economic costs of adversity and trauma, juxtaposed with the limited evidence of trauma-informed practice improving outcomes. Reconciling these findings is probably the biggest challenge to the region in successfully reducing and addressing adversity and trauma.

With regard firstly to the social and economic costs, the evidence suggest that lost productivity (GDP) in the region from ill health and premature death caused by childhood adversity has an estimated annual cost of £2.6 billion. Evidencing not just high financial cost but also very significant human suffering. Given that this is just one aspect of the cost of adversity and trauma and does not for example, include costs to public services as a result of trauma, overall costs will be much higher. The modelling undertaken suggest that failing to prevent and address trauma in the short term will cause the cumulative social and financial costs of trauma to escalate, becoming an even bigger burden on future generations.

The evidence also suggests that poor and racialised communities are more likely to be impacted by adversity and harmed in ways that may be traumatising. Levels of poverty and of racialised communities strongly indicate that the region will have some of the highest rates of trauma in the UK. The intersection between structural factors such as poverty, deprivation and discrimination may affect the capacity of an individual or community to respond resiliently, resulting in systemic trauma and traumagenic environments.

What is also apparent is the very limited evidence of trauma-informed practice in improving outcomes.

This evidence gap creates a range of dilemmas. These include whether public services should continue to invest in trauma-informed practice and related approaches. However, it is important to note that implicit in the formation of the Trauma Informed Coalition (TIC) and the commissioning of this report was that a decision had already been made to become trauma-informed by the TIC and a wide range of public bodies. We were not tasked with considering if the region should become trauma-informed. That decision had already been taken.

Nevertheless, the strength of evidence of very high harm and high social and financial cost of adversity and trauma, suggest to us that doing nothing to address these issues is indefensible, socially, financially and morally. If this view is accepted, (as it already appears to have been), then the question becomes. How can adversity and trauma be effectively addressed at a strategic and practice level?

In brief we think that the answer to this question lies in some of our broader findings. These include:

- The need to view trauma and resilience as systemic, trauma being exacerbated through structural factors including povertisation and racialisation;
- The systems modelling, including whether services ameliorate or increase adversity and trauma and the affects this has on how individuals move through systems;
- Recognising that trauma-informed approaches frequently respond to individual adversity and trauma whilst underlying systemic structural and cultural barriers remain unaddressed;
- Good evidence of the effectiveness of parenting interventions promoting resilience in families and for programmes building community resilience.

Consequently, there is a need to extend the conceptualisation of what it means to be trauma-informed. Recognising that to adequately address adversity and trauma requires Transformational Change. This includes addressing adversity and trauma systemically not just at an agency and individual level. In response we have proposed a multi-layered strategic approach to prevent and reduce trauma, the highest levels of which are to:

- Address the systemic and structural factors that cause and sustain traumagenic environments;
- Reduce the likelihood of adversity and trauma within families and communities and increase resilience;
- Ensure that services do no harm, responding effectively to promote the wellbeing of those individuals who have been affected by adversity in order to prevent or heal trauma

At the outset of the project, work was undertaken to consider an overall conceptual framework to address adversity and trauma. This was framework, developed by Dr Alex Chard (lead author of this report) was then agreed with the Trauma Informed Coalition and key partners. The Regional Framework views trauma as a systemic phenomena and that addressing and reducing trauma requires both reducing levels of trauma and increasing systemic resilience.

This framework, Reducing Systemic Trauma Developing Systemic Resilience™ is presented in the previous section of the report, The Regional Framework. The proposed Transformational Changes that strengthen this approach follow.

Trauma-Informed Evidence Gap

> *There is an urgent need to better understand the cumulative impact of ACEs on health outcomes across the life course, integrating epidemiology with fields including epigenetics, immunology and neurology. Equally, there is a critical need for knowledge on how services can become more trauma-informed, what impact trauma-informed service delivery can have, and how services for children and families affected by child maltreatment, substance abuse, domestic violence or incarceration, for instance, can be better integrated to provide a cohesive offer.*
>
> **Health and financial burden of adverse childhood experiences in England and Wales (Hughes et al. 2020)**[1]

We were surprised by the very limited evidence of effectiveness of trauma-informed approaches. Particularly, given the investments in such approaches in nations within the UK (Wales, Scotland and Northern Ireland) but also internationally including in a number of American States. Nevertheless the limited evidence of effectiveness of trauma-informed approaches was confirmed repeatedly. The *Wider Literature Review* considers and presents this evidence across key areas of public services.

These findings also caused us to place a particular focus on presenting the literature review findings around national policy in the UK regarding trauma-informed approaches. What became clear was that these policy positions and the interpretation of the underlying academic evidence are highly contested. Significant policy conclusions we reached were that:

- Consideration must be given to limitations in the evidence base, particularly of the pathways between childhood adversity and poor life outcomes.
- As the evidence base stands it cannot be simplistically assumed that adversity leads to traumatisation, damage to the physiological and neurological systems and poor life outcomes.

- Neither can it be assumed that trauma-informed approaches will lead to improved life outcomes, or that such approaches are beneficial and do no harm.
- The lack of knowledge of the effectiveness of trauma-informed approaches needs careful consideration in policy and service delivery.

We found a shifting and developing policy focus in Northern Ireland, Scotland and Wales. Whilst the original policy driver for developing trauma-informed approaches was the detrimental impact of ACEs, the limitations of narrow ACE based approaches were becoming widely recognised. Causing a move towards broader approaches. Including recognising structural factors underlying trauma particularly poverty and of the need to think systemically regarding developing resilience.

It was also apparent at a national policy level England is less advanced than other UK nations in recognising and addressing adversity and trauma, Westminster government leaving policy to local areas. This places the West Midlands region in the beneficial position of learning from early adoption of such approaches in other UK countries and able to develop a locally agreed policy framework. It was also apparent that the framework agreed by the West Midlands Trauma Informed coalition, from Systemic Trauma to Systemic Resilience™, resonates with the emergent policy position in other countries within the UK.

Stemming from the National Policy and Evidence review and findings in the wider Literature Review were other fundamental policy considerations:

- There is no common definition nationally or internationally of what being trauma-informed means, creating a range of difficulties;
- That trauma is simply one way to construct or describe human suffering, trauma-informed approaches having been significantly defined by medical models.

The difficulties caused by a lack of understanding of what being trauma-informed means, include problems evaluating the effectiveness of approaches that describe themselves as *trauma-informed,* consistency in commissioning and delivery of services and consequently whether such approaches provide social or financial benefits.

Linked with the understanding that trauma is only way to socially construct human suffering, another fundamental question arises.

- To what extent do trauma-informed approaches differ from good care and good practice?

Seeking to distinguish between good practice and trauma-informed approaches also has significant difficulties, including in evaluating and attributing costs and potential benefits accruing from trauma-informed approaches as opposed to other practice.

The above difficulties contribute to the lack of evidence of effectiveness of trauma-informed approaches. If something is ill defined, it's hard to measure, to compare effectiveness of approaches, to specify what services are required, or to say if services deliver benefits. Lack of specificity as to the meaning of trauma-informed approaches and practices significantly impacts on defining regional and organisational strategy to respond to adversity and trauma. In response to these challenges our proposals include:

- To enable the region to overcome the definitional barrier of trauma-informed approaches, a broad statement defining adversity

and consequential trauma for the region should be agreed, alongside definitions and standards for *trauma-informed* approaches.
- This statement should include the agreed Framework, recognising the need to address Systemic Trauma and develop Systemic Resilience. The statement should recognise that trauma and adversity needs to be addressed strategically and organisationally as well in the delivery of services.

The following from NHS Scotland provides a useful starting point:

> *Being 'trauma-informed and responsive' means being able to recognise when someone may be affected by trauma, collaboratively adjusting how we work to take this into account and responding in a way that supports recovery, does no harm, and recognises and supports people's resilience.*
>
> **(NHS Education for Scotland, 2017)[2]**

We also propose that the statement should include that regional or local development or commissioning of services to prevent or address adversity and trauma always needs to have:

- Very clear service specifications including stated objectives and outcomes;
- Be informed by the best available evidence of effective practice; and,
- Integrate evaluation when specifying projects.

Linking with objectives and outcome, we also recognised the need to develop baseline measures that can be used regionally to evidence impact in the short, medium and long term.

Whilst we propose adopting a regional strategic position, it should be respected that individual agencies are entirely free to decide how they specifically define and address adversity, trauma and promote resilience. This reflects that this is a developing area of work, that evidence of effective practice is limited and that there should be no impediments that might inhibit service development.

The limited evidence of effectiveness of trauma-informed approaches also led us to make recommendations about the need for the region to carefully consider how trauma-informed approaches are implemented. As well as the need to strengthen the evidence base related to such approaches.

We think that this is a very challenging area. Given the tension between high cost and high harm from adversity and trauma against the limited evidence of effectiveness of trauma-informed approaches. Whilst recognising that agencies in the region are already well advanced in becoming trauma-informed. To try to balance these tensions, policy findings included:

- It is hard to justify committing public funds and delivering programmes of work without being able to evidence that such programmes are likely to deliver improved outcomes. Both for those in receipt of services and for the public more broadly.
- The limitations in the evidence base need to be fully acknowledged and caution exercised about the assumed legitimacy of trauma-informed approaches and to carefully consider this when developing trauma-informed approaches or services.
- As detailed above, development of trauma-informed services needs to clearly detail the needs that they are designed to address, the benefits they are intended provide and specify measurable outcomes.

In summary, whilst we would encourage the West Midlands to continue to provide and further develop trauma-informed services, we are strongly of the view that this should **only be undertaken** in ways that draw upon and develop a strong evidence base of improved outcomes for service users and resultant social and financial benefits. We proposed that:

- Services need to be developed within a theory of change that applies existing evidence and incorporates evaluation, building an evidence base and a culture of effective trauma-informed service design and delivery.
- To assist with ensuring legitimacy of approach development of services needs to be undertaken in consultation with communities and service users and applied via a consensual framework.

Evidence of Effective Responses

The lack of evidence around trauma-informed approaches also caused us to seek out and consider wider literature on effective ways to address adversity and trauma. Within the *Wider Literature Review, Building Resilient Families and Communities* we consider evidence from two well established approaches where there is good and in some areas very good evidence of positive outcomes.

The first of these areas are parenting interventions designed to support those who parent children, in order that they better able to help their children develop and thrive. The second area is supporting communities so that those communities can also thrive. Collectively being better able to respond to adversity and reduce trauma.

Policy in the region should explicitly recognise that to develop systemic resilience for children, we have to build resilience in families. Enhancing the quality of the child's parenting is critical in this regard. The evidence shows that childhood adversity and trauma are frequently intergenerationally linked.

The evidence suggests investment in a wide range of parenting interventions, (universal and targeted), could, perhaps in a generation, significantly fracture the links that cause families and communities to be impacted by adversity and trauma across many generations. Consequently we proposed that:

- Given the evidence of effectiveness of parenting interventions, such approaches should be a key component of regional and local strategies to significantly reduce adversity and trauma.
- Developing an agreed approach to developing both universal and targeted parenting interventions should form a key part of a regional strategy to reduce childhood adversity and build systemic resilience for children, families and communities.

We also very briefly considered evidence of effectiveness of broader parenting and child support programmes. Concluding that:

- Whilst needing to be informed by further review of the evidence, broader parenting and child support programmes should be considered as a key part of addressing childhood adversity and increasing community resilience.

The relationship between families and communities is symbiotic. To strengthen resilience in communities we need to strengthen resilience in families and to strengthen resilience in families we need to strengthen resilience in communities. Development of approaches that strengthen resilience in communities reducing adversity and trauma is the other area where significant evidence of effectiveness including social and financial benefits exists.

There have been a range of programmes in American States to improve the wellbeing of communities. We concluded that whilst upfront investment is clearly required, evaluation findings show that through building community resilience, very significant cost saving can accrue to services in the longer-term.

The links between adversity and poverty and how those living in deprived communities are more likely to be affected by trauma is evidenced. In the UK a recent report on the Futurebuilders England Fund, set up in 2004 under the Blair Government shows strong evidence that building economic resilience of communities is cost efficient and effective.

Consequently, key findings were that:

- American evidence shows that building more socially resilient communities saves public money. The Futurebuilders Fund evidences the ability to develop programmes that increase the economic and social resilience of communities through a viable economic model.
- A model could be developed that might significantly reduce the social and economic costs of adversity and trauma to West Midlands communities.
- The evidence also suggests that such a combined model could be implemented in a way that it would in time repay much of the upfront investment that would be needed.

Systems Modelling

Section Three, Systems Modelling, considers the modelling we have undertaken on systems and costs. The section starts with a detailed *Introduction to the Modelling* undertaken. Here we provide a brief overview with a focus on key policy findings.

Reflecting the overarching Regional Framework, *From Systemic Trauma to Systemic Resilience™* the approach that underpins all of the modelling is viewing trauma and resilience systemically. This recognises that trauma can become woven through individual lives and communities. Creating and sustaining resilience for an individual is intrinsically linked to reducing trauma and promoting resilience within that persons family and community.

The section, Regional Systems Models presents a series of conceptual frameworks on the impact of trauma. These enabled the development of two spreadsheet models. The first of these, models how children move through services and how this may affect children and cost. The second spreadsheet develops the thinking further and applies academic frameworks to consider regional costs of lost GDP due to adverse childhood experiences.

In terms of findings, the modelling demonstrates the potentially cumulative impact of adversity and trauma for individuals and communities. Where recovery opportunities are not available, levels of adversity and trauma accumulate within a population with possible amplification of adversity, risk and vulnerability. Alongside the evidence from the literature review this informs the view that being trauma-informed is only ever a beginning.

To be effective requires an ongoing focus on preventing trauma, actively identifying those who may have been traumatised and ensuring they receive appropriate help and support. Reducing the financial and social costs of trauma requires a sustained leadership focus on reducing the burden of trauma on individuals and communities by:

- Preventing adversity and trauma for individuals and communities, including by addressing the underlying structural issues;

- Providing services in ways that avoid traumatising or re-traumatising individuals and communities;
- Where trauma has occurred, ameliorating the impact for individuals and communities.

The conceptual thinking we developed to enable the modelling suggest that for services to ameliorate trauma requires *Service Sufficiency* and service accessibility to meet a person's relational needs. As well as *Trauma-Informed Practice Alignment* to address the specific needs of those who have been traumatised.

Through applying a systemic lens, we believe the modelling represents a very significant shift in the conceptualisation and understanding of the impact of trauma and adversity. Revealing the inter-relationship between services in *holding* and *helping* children. This includes how costs are likely to increase if skills, knowledge, awareness and resources are not aligned and optimised, in order to ensure children's needs are met and children are *helped* and *held* in mainstream and early help services. Consequently one of the key proposals was that:

- The main purpose of prevention and early help services could be re-defined as supporting and strengthening universal services in order to hold children and enable recovery from adversity and trauma.

The related purposes of aligned prevention and early help services would be to:

- Reduce risk of adversity and trauma;
- Identify and resolve adversity and trauma at the earliest opportunity;
- Build systemic resilience within families and communities; and,
- Enable ongoing systems learning to evidence where *sufficient* support for recovery improves individual and community outcomes.

Linked with the understanding of the very high cumulative social and financial impact of adversity and trauma, this lends significant weight to the need to ensure effective structures and governance of highly integrated prevention services.

Building on evidence in the literature review, we responded to the limitation of ACEs by considering how multiple adversities and traumas manifest in human lives. We have created a broad framework to address adversity, conceptualising Childhood Adversity and Traumas (CATs) and Adult Adversity and Traumas (AATs).

The use of CATs and AATs enables a much more comprehensive assessment of the wellbeing and physical health risks and impact of adversity and trauma on individuals across the life-course. We also emphasised the importance of the West Midlands building the trauma-informed practice evidence base. Including adapting information systems to enable insights to be generated from enriched datasets and the need to continually optimise, manage and measure trauma-informed service impact.

In terms of evidencing the financial cost of trauma we have drawn on the available academic evidence which indicates the very high financial cost of lost productivity due to the long term health impacts of childhood adversity.

We estimated that the regional annual cost of loss of GDP, from poor health, linked with adverse childhood experiences (ACEs) is £2,597 million (£2.6b). Whilst lost productivity is the area where the best academic evidence lies, these costs are simply

one aspect of the long term financial cost of childhood adversity and trauma.

The evidence we have presented through the cost models suggests that if those who suffer adversity and trauma are not effectively helped, then the ongoing costs of carrying the societal burden of trauma will be amplified significantly over time. Uncertainty lies in just how high those costs are and will become.

We are also of the view that the principles in the modelling including *holding* and *helping* children in order to prevent escalation into more acute services are applicable for a much broader group of children. If it is recognised that the model has wider applicability, then irrespective of evidence of effectiveness of trauma-informed practice, the model has the potential to refocus operational practice, the performance management of services and how services are delivered to children.

In considering the Cost Modelling it needs to be recognised that key concepts such as *Service Sufficiency* and *Trauma-Informed Practice Alignment* used within the models, in particular the way they are being applied in this context are novel and untested. As far as we are aware there is neither research, nor available data that addresses identifying and engaging with unresolved trauma and the effect that this demand has on flows through public service systems and increased or reduced costs or economic outputs.

References

[1] Hughes, K, Ford, K, Kadel, R, Sharp, C, Bellis, M (2020), Health and financial burden of adverse childhood experiences in England and Wales: a combined primary data study of five surveys, BMJ Open 2020;10.
[2] NHS Education for Scotland, 2017. Transforming Psychological Trauma: A knowledge and skills framework for the Scottish workforce.

Transformational Change

Following provision of an earlier draft of this report, we were asked by the WMCA, (on behalf of the Trauma Informed Coalition), to provide our thinking on how to strategically create transformational change. In order to reduce and address systemic trauma and help to increase resilience in the region.

This is a challenging request for a range of reasons. Not least because of the complex societal issues that underlie the probable very high levels of trauma in the region. This report has revealed very high social and economic cost of trauma to the region and the limited evidence nationally and internationally of the effectiveness of trauma-informed approaches. A further factor is the financial pressures on agencies within the region which evidence suggests are exacerbated by the levels of trauma and the costs this brings to public agencies. Nevertheless, we welcomed this opportunity and this section of the report draws upon the report findings to make transformational proposals for change.

The evidence reviewed, strongly points to longstanding social and structural issues, including intergenerational poverty and discrimination as highly correlated with adversity and trauma. Such factors are also known to reduce resilience to the harmful effects of adversity. The WMCA region has very high levels of deprivation and a high proportion of racialised communities. Consequently, the evidence suggests that the region is likely to have disproportionate levels of overall trauma within the population, with extremely high levels being experienced in many communities.

These concerns have been further evidenced by an expert submission to the Covid-19 Public Inquiry where Professor David Taylor-Robinson (2023)[1], notes that poverty in England has been rising and that the *rise in child poverty largely occurred in Northern regions and in the West Midlands (Department for Work and Pensions, 2023)*. The submission also details *major, longstanding ethnic inequalities in child poverty.*

Figures from the National Child Mortality Database[2], tragically show that areas in the region have some of the highest rates of child deaths (both infants and older children) of anywhere in England. Child death rates per 100,000 population in the year to March 2023 were as follows:

- In all regions of England rates ranged from 24.2 to 41.1, the West Midlands Government Region was the highest;
- The highest of any Integrated Care Board (ICB) in England was Birmingham and Solihull at 50.2;
- Third highest was the Black Country ICB at 45.5;
- Rates were highest in the most deprived areas of England 48.1 and lowest in the least deprived areas 18.7;
- Rates were highest for black or black British ethnicity 56.6 and Asian or Asian British ethnicity 50.8.

The infant death rate (under 1 year) in each region of England ranged from 2.9 to 5.3 per 1,000 live births, the West Midlands Government Region was highest.

These figures are a critical indicator of the increased likelihood of very poor outcomes for children correlating with underlying structural factors in the region. They also provide stark evidence of the likelihood of an exceptionally high human cost for those living in poor and racialised communities and those affected by heath inequity regionally.

The modelling we have undertaken draws on the work of Mark Bellis and colleagues (Bellis et al. 2019)[3]. This shows that adversity and subsequent ill-health has an estimated regional annual cost due to loss of GDP at £2,597 million (£2.6 billion). There are also extensive costs of responding to trauma likely to be significantly impacting on budgets of a very wide range of public agencies.

There is an intersection of a wide range of economic and social issues that create and sustain traumagenic environments and very high social and economic costs of adversity and trauma. These have led to the view that trauma-informed approaches need strengthening by looking beyond individuals to communities including by ensuring that structural factors that correlate with trauma are addressed.

The findings in this report suggest that for transformational change to take place a multi-layered and multi-sector overarching strategic approach is required to preventing and reducing trauma. The highest levels of which are to:

- Address the systemic and structural factors that cause and sustain traumagenic environments;
- Reduce the likelihood of adversity and trauma in families and communities and increase resilience;
- Maintain and further develop services to provide a spectrum of support for those affected by adversity and trauma from early help through to specialist and acute services for trauma recovery;
- Ensure that services do no harm, responding effectively to promote the wellbeing of communities and individuals who have been affected by adversity to prevent or heal trauma.

The levels above are the headlines for a multi-layered approach that needs to be developed in greater detail and sustained over a long time period. It will require a significant level of investment regionally and locally by public bodies. These costs needs to be considered and balanced against the need to reduce the extraordinarily high and escalating social and economic cost of adversity being estimated and the size and demographics of the population.

Proposals

The following proposals are intended to initiate and promote the multi-layered strategic approach proposed above. They should be considered in the context of the Regional Model *Systemic Trauma to Systemic Resilience™* outlined earlier. This includes that approaches should be Consensual, Inclusive and Equitable and address Inequality and Discrimination. Recognising the systemic nature of trauma and resilience requires that the responses developed are also systemic and underpinned by methodologies that consider and address complexity, including both ecological and intersectional approaches.

A fundamental pre-requisite for transformational change within the region, is to move beyond the individualisation of trauma and recognise that at a systems level trauma is a systemic phenomenon that requires the strengthening of families and communities by applying evidence based approaches that build systemic resilience. Consequently our **first proposal** is that:

> *At both a political and strategic level across all West Midlands public bodies, it should be explicitly recognised that strategically trauma is a systemic phenomenon that is structural and historic as well as inter-generational and occurs across the life-course. That responding to trauma and reducing the harmful social and economic impact, requires that the historic and structural*

factors which underlie trauma are identified and removed or reduced. That inter-generational transmission of trauma is disrupted and the systemic resilience of families and communities is increased.

The **second proposal** acknowledges that changing the structural and economic factors that underlie and sustain trauma require cross-party political support:

A concordat should be developed across all of the main political parties acknowledging that trauma is a systemic phenomenon that is causing immense social and economic harm. The concordat should agree that from the outset, all strategic, financial and economic decision making, including devolution of powers from central government, should always consider evidence on whether proposed actions will alleviate or increase systemic trauma and build community resilience.

Our **third proposal** relates to the need for all West Midlands public agencies to implement strategies to reduce and address trauma and increase resilience within communities, for service users and employees:

All public agencies should commit to developing and publishing a strategic ten year plan to reduce the levels and impact of trauma and promote the wellbeing and systemic resilience of service users, employees and communities. The plan should include evidence based actions at a service delivery level, to ensure agencies are consistently aligned on Trauma-Informed Practice and on achieving equitable outcomes for children and adults. An annual report on progress in implementing the plan should be published.

(Similar commitment should be sought from business, the third sector, trade bodies and unions, see below).

Our **fourth proposal** reflects the need to ensure that those who have suffered adversity and trauma are supported and where needed, can access specialist evidenced based support for trauma recovery. The following is directly applicable to universal and specialist health, social care and education services as well as a range of more specialist services e.g. homelessness services, youth justice services and probation services. The proposal is applicable to both commissioners and providers. Whilst applicable to these services, this is a strategic proposal that will need a regional approach and collaboration across authorities and agencies:

A needs and resources gap analysis should be undertaken. The purpose being to identify the levels of need in the region for services for those affected by adversity and trauma, the available range of services and the service gaps. This study should include geographic analysis and be used to identify communities with high needs and limited services. Consideration should be given to universal services and specialist and acute services. Services for both children and adults will need to be considered and will probably need segmenting further e.g. under fives and elders. In terms of specialist and acute services it will be necessary to consider waiting lists. In developing the analysis, consideration must be given to academic evidence of effectiveness of services.

Our **fifth proposal** is intended to strengthen the work of the Trauma Informed Coalition (TIC) and recognises the need for a sustained strategic, regional, multi-disciplinary focus at leadership and practice levels to reduce adversity and systemic trauma and build systemic resilience:

A strategic multi-disciplinary Trauma to Resilience Unit (TRU) should be created. The overarching

objectives of the TRU should be to reduce the levels and impact of trauma and increase the wellbeing and resilience of communities across the region. This should be undertaken by following the evidence in this report and the continually developing practice based and academic evidence, locally and more widely. The work of the unit would include:

- *To raise public awareness of the very harmful impact of adversity and trauma and the social and economic gains likely to accrue from addressing these issues;*
- *Developing approaches to ensure that all of the work of the TRU is informed by Experts by Experience and that their voice is given equal weight to the voice of other experts;*
- *To engage with third sector organisations businesses and trade bodies, to promote the social and economic case for businesses to operate and develop in ways that alleviate trauma and increase systemic resilience (this aligns with the third proposal above);*
- *Develop an evidence based ten-year strategic Trauma to Resilience Plan (TRP) in response to the findings in this report;*
- *To provide an annual report on progress in implementing the TRP;*
- *As part of the TRP to develop and monitor a range of key indicators of adversity trauma and resilience that can be applied regionally and at local authority level;*
- *To selectively scrutinise strategic, financial and economic decision making by public bodies and provide advice on whether proposed actions alleviate or increase systemic trauma and increase or reduce systemic resilience;*
- *Developing an accessible resource of practice based and academic evidence applicable regionally, for professionals communities, families and individuals to reduce adversity and trauma and promote resilience;*
- *To provide strategic advice to all public bodies on evidence based strategies that can reduce adversity and trauma and increase resilience and how to monitor and evaluate such approaches (including emergency planning);*
- *To provide evidence based advice on implementing and evaluating agency approaches and projects designed to reduce levels and impact of trauma and increase the resilience of service users and communities;*
- *To undertake or commission ongoing research on the social and economic determinants and impact of adversity and trauma in the region.*
- *To solely or jointly commission regional or placed based projects designed to reduce the levels and impact of trauma and increase the resilience of communities.*
- *To undertake or commission evaluations of the effectiveness of regional, local and agency initiatives designed to reduce trauma and build resilience.*
- *To maintain a register of regional and local projects where reducing trauma or increasing resilience was a key project objective.*

First and foremost the TRU has a strategic function to work regionally in an evidence based way to reduce the levels and impact of adversity and trauma and build systemic resilience. The TRU should operate as a multi disciplinary transformation and leadership body. Whilst it is vital that the TRU is academically informed, it is not intended to be an academic advisory unit. The TRU should be informed by public health and economic evidence of systemic approaches relevant to reducing trauma and building resilience. It is also critical that the TRU is highly responsive to those with lived and living experience of adversity and trauma.

Thought needs to be given to how the TRU is resourced, structured and managed and the operating model. Important considerations will be:

- Given the very high social and economic cost of adversity being evidenced, the funding and structure of the TRU should reflect a highly strategic "mission critical' role in improving the economic and social wellbeing of the region.
- The TRU should be an entirely independent (not for profit) body that is not managed or sponsored by any single public body or other entity.
- The accountability of the TRU to West Midlands agencies should be through a non-political Executive Board of Chief Officers from the Trauma Informed Coalition, with expert advisors, the Board should be independently chaired.
- An Advisory Board of Experts by Experience (ABEE) should be established, they should act in an advisory role to the Executive Board and be represented on the Executive Board (members should be paid for their time and expenses).
- The staffing of the unit needs to be multi-disciplinary and reflect a range of key West Midlands agencies and other specialist staff including academics.
- If the TRU is to succeed, the job descriptions and renumeration of staff will need to reflect the highly strategic role of the unit.

The establishment, role and function of the TRU should be subject to rigorous ongoing independent evaluation by subject experts who should be accountable to and provide an annual report to the Executive Board that always includes the views of the ABEE. The agreed terms of the evaluation should recognise that the effectiveness of strategies to reduce levels and impact of trauma and increase resilience in communities requires time-spans of multiple years or in some cases decades to evidence.

Whilst needing to be rigorous, the ongoing evaluation and review of the TRU should also recognise that this is an emergent area of public policy and development and that there will be a need to experiment and learn through experience.

A formal review of the impact and effectiveness of the unit should be undertaken by the evaluators after the first three years and thereafter triennially. If the third evaluation (after nine years) does not provide clear evidence of likely long term effectiveness of the TRU, it should either be closed or the operating model critically reviewed.

The evaluator(s) should be competitively chosen. Their appointment should be based on their ability to evidence a high level of knowledge evaluation. As well of high level of knowledge of the research evidence on effective approaches in reducing the levels and impact of trauma and increasing the resilience of both service users and communities.

Reference

[1] Taylor-Robinson, D et al (2023) Expert Report for the UK Covid-19 Public Inquiry, Module 2: Child health inequalities, University of Liverpool.
[2] Child Death Review Data Release: Year ending 31 March 2023, National Child Mortality Database, University of Bristol.
[3] Bellis et al (2019) Life course health consequences and associated annual costs of Adverse Childhood Experiences across Europe and North America: A systematic review and meta-analysis, The Lancet Public Health.

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Part Two

The Literature Review

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Introduction

> *TIC* [trauma-informed care] *is an amorphous concept that has been defined in a number of ways, making it difficult to evaluate TIC initiatives. Further, little is known about whether the various initiatives described as TIC actually result in improved outcomes for children and families or reduced costs. Trauma informed has become a standard term in our nomenclature and yet there does not appear to be clear consensus on what TIC actually means nor delineation of the specific components needed to achieve it. Similarly, the distinctions between TIC and good practice are not always clear.*
>
> **A critical look at trauma-informed care among agencies and systems serving maltreated youth and their families (Hanson and Lang 2016)[1]**

It was agreed that we would undertake *a focussed literature review* of the *best available evidence*, from multiple sources both nationally and internationally on the social and financial benefits of the West Midlands **region** becoming trauma-informed.

In addition, the review was to include an analysis of the evidence of the structural and possible organisational barriers to the **region** becoming trauma-informed. The other key purpose of the literature review was contribute to a financial analysis and benefits modelling. In particular the assumptions regarding costs and longer term financial benefits of becoming a trauma-informed region. Wherever possible, we were to draw on systematic reviews and rapid evidence assessments to evidence costs, benefits and barriers.

Significantly, it was recognised that formation of the Trauma Informed Coalition indicated that implicit commitment to becoming a trauma-informed region had already been developed. Consequently the project would be focussed on considering and enabling longer term cost effectiveness, social benefits and socio-economic value. (It was not part of our role to judge whether the region should become trauma-informed).

In the initial stages of the literature review it became evident that the harm caused by significant childhood adversity is very well evidenced. Whilst evidence of the social and financial benefits of trauma-informed approaches seemed relatively limited. Given the wide range of countries and regions both nationally and internationally that have invested in trauma-informed approaches this was unexpected. Nevertheless, as the literature review progressed, it became very apparent that high quality evidence of the success or outcomes of such approaches and of the longer term social and financial benefits are very limited.

The significant harm caused by childhood adversity has been shown in multiple studies of ACEs, including the links with poor health and poor social outcomes across the life-course. Some of these ACE studies had then led to or enabled economic studies of the cost of lost productivity (GDP) attributed to adversity through ACE studies.

At an early stage in the project, we reflected on the limitations of the available literature with members of the Trauma Informed Coalition. Including of the emergent evidence we were gathering of the very high current cost of trauma to the West Midlands region (£2.6bn from GDP alone). It was agreed that the most important financial aspect of the project was evidencing current cost. With the underlying question to be addressed being *What will it cost us if we don't become trauma-informed*?

This led to the development of financial models based on existing and accumulating cost of adversity and trauma. That analysis evidences the very significant current and likely future costs of adversity and trauma (see Part Three of this report).

The limited available evidence of outcomes being demonstrated from evaluations of trauma-informed approaches, has also more broadly affected the focus and scope of the literature review. Consequently, we sought evidence as to where the West Midlands can act effectively and within an evidence base to reduce the social and economic harm being caused by early adversity and trauma, across the life course. How the literature was considered and presented here, reflects that the region had already committed to become trauma-informed.

A stylistic approach deliberately adopted across the literature review is where appropriate to provide full quotes from documents rather than summaries. This stems from our desire to accurately reflect the language and emphasis adopted by the original authors (original spelling is retained). The reason underlying this approach is that it leaves the reader to decide for themselves what was meant. For similar reasons we have also included academic references from the original text.

Part Four, Project Approach and Development, provides further information on the scope of the literature review.

Trauma-Informed Terminology

The biggest barrier we identified in considering the costs and benefits of the West Midlands region (or for any area or organisation) becoming *trauma-informed* was in defining what *trauma-informed* means. That challenge is referenced frequently in the literature.

Addressing that issue and more broadly the language and terminology applied in this area of work, Wrexham Glyndwr University and the Welsh Government ACE Support Hub, undertook a scoping review of international literature *to explore how the term is used and operationalised across a range of settings* (Addis et all 2022)[2]. Findings included that:

> *Although there is general agreement in the literature that trauma-informed care refers to the integration of trauma awareness and understanding throughout an organisation or service system, there is currently no consensus-based definition on the particular practices or policies that comprise this approach for any service system (Branson et al., 2017).*
>
> *Hopper et al. (2010) argue that support for becoming trauma-informed is superficially common but lacks definition, methodical implementation, and standardised evaluation. In terms of definition, trauma-informed lacks specificity and terms are frequently blended and used interchangeably (Hanson and Lang, 2016). The evidence in this review notes a lack of consistency of a definition across a range of settings, including child welfare (Bailey et al., 2019); mental health services (Bloomfield et al., 2020); mental health policy (Lee et al., 2021) and health services (Bendall et al., 2021).*

The lack of any common definition of what it means to be *trauma-informed* creates a range of difficulties. These include evaluating the effectiveness of approaches that describe themselves as *trauma-informed,* consistency in commissioning and delivery of services and consequently whether such approaches provide social or financial benefits.

If something is ill defined it's hard to measure, to

compare effectiveness of approaches, to specify what services are required or to say if they deliver benefits. Lack of specificity as to the meaning of trauma-informed, impacts on clearly defining regional and organisational strategy and directing the focus of staff.

A linked question that has also been raised, is to what extent *trauma-informed* approaches differ from good care and good practice? This was also identified by Addis et a (2022) commenting that:

> *… professionals also perceive considerable overlap between good practice and trauma-informed practice (Isobel et al., 2020, Hanson and Lang, 2016) so identifying what is unique to trauma-informed approaches, the value that can be added by adopting these features, and the difference that makes to staff and people using a service, is hard to measure.*

In a critical overview of what trauma-informed care offers to social work and social care in Scotland Smith and Monteux (2023)[3] drew on a range of literature to assert a similar viewpoint:

> *Asmussen and colleagues (2022) concluded that although TI care is widely used and perceived to add value, there is a high degree of overlap between TI care activities and standard good practice in children's social care. Addis and colleagues (2022) note the considerable overlap between good practice and TI care, which limits the ability to identify what is unique to such approaches or to measure what difference they make for staff and people using services.*

The blurred line between *good practice* and *trauma-informed practice* also creates significant difficulty in attributing costs and potential benefits accruing from trauma-informed approaches.

A response to the above is that regional or local development or commissioning of services to prevent or address adversity and trauma need to have very clear service specifications and stated objectives and outcomes. Be informed by the best available evidence of effective practice and always integrate evaluation into the specification of projects.

The modelling in Part Three of this report**,** considers how this needs to include capabilities for services to begin to gather data on levels of adversity and effectiveness of responses. This knowledge in turn provides the possibility for effective strategic and financial planning to reduce systemic trauma and enhance systemic resilience. Consequently, improving services for children and hopefully reducing long term costs for a range of public services. Additionally, enabling application of this knowledge to reduce the social impact and harm of adversity and trauma.

The Welsh research considered above (Addis et all 2022) implies that one of the difficulties is *no consensus-based definition on the particular practices or policies that comprise this approach for any service system*. Consequently, the Trauma Informed Coalition needs to decide if it is practical or desirable to try to agree particular practices or policies regionally across all West Midlands organisations. Factors to consider include, the wide range of organisations within the Trauma Informed Coalition and significantly the risk of limiting innovation and constraining diverse approaches that might benefit service users.

We would note that in November 2022 the Office for Health Improvement and Disparities within the Department of Health and Social Care provided as guidance a *Working definition of trauma-informed practice*. This reflects the internationally recognised definition developed by the United States Substance

Abuse and Mental Health Services Administration (SAMHSA). An inherent limitation of the definition, is that it is intended for practitioners in the health and care sector.

Social Construction of Trauma and Suffering

Smith and Monteux (2023) also fundamentally challenge an underlying premise of trauma-informed care:

> *A trauma lens reflects a particular perspective on the impact of past experience (Edwards and colleagues, 2019), one that is rooted in a (clinical) psychological worldview, which can act to biologise social suffering (Canter, 2012). While there is passing mention of poverty and other oppressions within trauma-based approaches, these lack substance and do not draw on any social scientific literature to back them up or to propose how they might offer any suggestions of how they address structural issues in society.*
>
> *Viewing the past through a singular lens of trauma may limit the ability of people to understand and tell the stories of their lives in alternative, more adaptive and hopeful ways (Haslam and McGrath, 2020).*

Trauma can also be seen to be historical and structural and located within societies:

> *Emotional damage from inequity enforced through public policies, institutional practices, cultural images and behaviours which are built into the structure of the culture, and which reinforce social inequity* (THEN CENTER 2023)[4].

The above definition resonates with findings within the literature reviewed here, that trauma is more often experienced and found within poor communities and within racialised groups

The strategic framework agreed by the Trauma Informed Coalition, moving from Systemic Trauma to Systemic Resilience™ is a deliberate move away from individualisation of trauma towards a broader societal view of responding to adversity. Inherently, recognising the systemic and structural issues outlined above, including both povertisation and discrimination. The framework being underpinned by principles of inclusivity and equitability.

References

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National Policy and Evidence

> *While there is this variety of different ways we might seek to understand the linkage of past to present, Bath (2017) notes that in the space of little more than a decade, this has come to be understood through a lens of trauma.*
>
> **Trauma-informed approaches: a critical overview of what they offer to social work and social care (Smith and Monteux 2023)**[1]

> *The evidence of impact of adverse childhood experiences is compelling as is the case for action from a moral and financial perspective at an individual level and to prevent the repeated cycle of intergenerational transmission.*
>
> **Polishing the Diamonds – Addressing Adverse Childhood Experiences in Scotland (Scottish Public Health Network 2016)**[2]

In this first part of the literature review we consider the policy position of the four nations within the United Kingdom towards ACE aware (Adverse Childhood Experiences) and trauma-informed practice. We also consider relevant academic evidence, including critiques of these national policies. Some of the key areas covered are:

- On the deep social harms caused by adversity and trauma;
- The policy shifts away from purely ACE based approaches towards responses that build systemic resilience;
- Recognition of the complexity of responding to adversity and trauma and the endemic nature of the harm that is caused;
- Some of the critical debates and critiques on ACE and trauma-informed approaches.

At the outset it is important to recognise that the original policy driver for developing trauma-informed approaches at a national level in Northern Ireland, Scotland and Wales and in some areas of England, has been knowledge of the detrimental impact of ACEs. What will become evident from the policy review that follows is that the limitations of narrow ACE based approaches are also becoming widely recognised throughout the UK and a move towards broader trauma-informed approaches is evident.

The policy review also shows the social and economic value being placed on such approaches at a national level by Northern Ireland, Scotland and Wales. Whilst within England the government position is to leave decisions on ACE aware or trauma based initiatives at a local level.

At a policy level Scotland and Wales have developed political commitment to implementing ACE based and trauma-informed national programmes. Whilst Northern Ireland has provided government funding to develop ACE based research and professional training. These policy positions have been influenced by reviews of the underlying academic evidence. However, as will be seen in the following analysis these policy positions and the interpretation of the underlying academic evidence are highly contested.

In many regards at a national policy level England can be seen to be less advanced than other UK nations in addressing adversity and trauma. This places the West Midlands region in the beneficial position of learning from early adoption of such approaches in other UK countries. The absence of national policy direction also leaves the West Midlands in a position to determine how it responds to adversity and trauma. This report contributes to developing that local policy response.

It is also important to note that the West Midlands is one of the largest UK conurbations. The population of the West Midlands Metropolitan area is 2.9 million people. Whilst the population of Northern Ireland is 1.9 million, the population of Scotland is 5.5 million and the population of Wales is 3.17 Million. The West Midlands population is larger than Northern Ireland and very similar to Wales.

The following extracts from relevant national policy documents illustrate the policy position within Northern Ireland, Scotland and Wales towards childhood adversity and trauma and contrast these with the Westminster policy position. In each of these three nations there is national policy recognition of the significant social harms being caused within populations by adversity and trauma:

Numerous studies confirm the association between experiences of childhood adversity and trauma with an array of physical and mental health difficulties. Individuals who experience multiple adversities in childhood are at increased risk of chronic illness including ischemic heart disease, liver disease, and chronic obstructive pulmonary disease and are more likely to be morbidly obese and to engage in health-harming behaviours such as smoking or drinking heavily (Felitti et al. 1998; Bellis et al. 2015). In terms of mental health, increased exposure to adversity in childhood has been linked to lower mental well-being and lower life satisfaction and to increased risk of suicide attempt in adulthood (Felitti et al. 1998; Bellis et al. 2015) and whilst still in childhood or adolescence (Devaney et al. 2012).

Developing trauma informed practice in Northern Ireland: Health and mental health care systems (SBNI 2018)[3]

Findings from ACE surveys show that adverse experiences occur across the whole population but there is a relationship with deprivation. Using some of the measures used in adverse childhood experience studies, a Scottish study found that children at age 8 living in households with the lowest income had odds around seven times higher of having one or more adverse childhood experiences than the most affluent children.

Although undertaken on data in England, analysis has found an association between areas with high rates of child poverty and high frequency of adverse childhood experiences. Furthermore, a systematic review on the relationship between childhood socio-economic position (SEP) and ACEs concluded that there is a clear relationship between SEP in childhood and the risk of experiencing ACEs. The review authors propose that any approach which ignores this wider context is 'flawed'.

Ending childhood adversity A public health approach Public Health Scotland (2020)[4]

The levels of chronic disease diagnosed in those with four or more ACEs were similar to individuals aged around ten years older with no ACEs. Compared to those with no ACEs, those who had experienced four or more ACEs were: four times more likely to be a high-risk drinker; six times more likely to have had sex under the age of 16 years, to have had or caused unintended teenage pregnancy, and to smoke; and were sixteen times more likely to have used crack cocaine or heroin. Compared to those with no ACEs, those with four or more ACEs were fifteen times more likely to have committed violence against another person in the last 12 months and twenty times more likely to have been incarcerated at any point in their life.

The Welsh Government made tackling ACEs a priority for this Assembly term. It set out its commitment to tackling ACEs in its programme for government, 'Taking Wales Forward', and how it intended to do so in 'Prosperity for All: the national strategy'. Taking Wales Forward acknowledged ACEs as a barrier to all children having the best possible start to life and recognised the need to support families to reduce ACEs. Prosperity for All included action to prevent ACEs and mitigate their impact by creating 'ACE aware' public services, building children and young people's resilience and piloting Children First, a community led approach to reducing ACEs and improving resilience. The Welsh Government also agreed to support the establishment of an ACE Support Hub for Wales.

Review of Adverse Childhood Experiences (ACE) policy: report How the ACE policy has performed and how it can be developed in the future. Welsh Government (2021)[5].

Significantly, the policy extract from Scotland illustrates how Scottish approaches to ACEs are located within an understanding of the link between adversity and poverty. Within Wales the policy position on tackling ACEs is located within an economic strategy. This is significant, poverty is not a factor considered in the original ACEs model and poverty is very high in the West Midlands region. Also of note, is the reference to building childhood resilience in the Welsh policy extract.

The government at Westminster has not given similar levels of recognition of the impact of adversity and trauma. A report of the House of Commons Science and Technology Committee in 2019 found that:

There is now a body of evidence that clearly demonstrates a correlation between adversity suffered during childhood and an increased prevalence of health and social problems in later life. Despite a variety of proposed explanations for this correlation, the causal pathways linking childhood adversity or trauma to subsequent problems are less certain. Nevertheless, when delivered effectively, there is strong evidence that early intervention can dramatically improve people's lives and reduce long-term costs to the Government. The Government should ensure that it is making the most of the opportunity for early intervention to effectively and cost-effectively address childhood adversity and trauma, and the long-term problems associated with such experiences.

In response, rejecting the central recommendation of the report for a new national strategy to address adversity and trauma, the Government stated that:

This Government believes that local areas are best placed to understand the needs of their local communities, to commission early intervention services to meet those needs and to deliver interventions as part of a whole system approach to produce the best outcomes for families.

The above response could be viewed as a lack of central policy commitment from national Government towards trauma-informed approaches to reduce adversity. However, this provides an opportunity for the West Midlands region to provide leadership in this area, as well as leaving the region free to determine the most effective way to respond and address the regions particular needs.

The above policy extracts evidence the extent to which the social harm and by implication the associated financial harm of adversity and trauma are recognised in Northern Ireland, Scotland and Wales. Also evident in these policy documents is that:

- Adversity including ACEs are correlated with a significant range of poor life outcomes, evidence is unclear regarding causative relationships.
- The summary of policy documents in devolved UK nations, begins to reveal the recognition of the limitations of the ACEs model, including the need to view adversity more broadly.
- Recognition of the impact of structural factors including poverty and moves away from ACE based models towards more systemic trauma-informed approaches.

The above resonates with and reflects the regional model being adopted by the West Midlands Trauma Informed Coalition. Policy in Scotland and Wales, evidence and develop the thinking outlined above:

> *Advances in our understanding of human development from fields such as neuroscience, biology, and sociology are contributing to our understanding of health and disease across the life course. We do not as yet fully understand the causal biological mechanisms. Evidence from neuroscientific research has found biological mechanisms of the stress response which can alter children's neural architecture. In the absence of an environment of stable and supportive adults relationships which can reduce the impact of stress on a child, the accumulation of 'toxic stress' can negatively impact on the neuroendocrine system and brain development. This developing field, alongside our knowledge about how social processes are associated with childhood adversity and population health, provide us with a strong basis on which to build on strategies and activities which prevent adversity in children and families' lives.*
>
> *It is important to understand adversity in childhood within the wider social context of factors which impact children and families. It would be wrong to focus only on what happens in the home and family dynamics without recognition of the wider world in which we live and what impacts on our lives.*
>
> *A public health approach to childhood adversity recognises that we cannot prevent adversity in children's lives without understanding the social, political and economic environments which children live in and how decisions at those levels impact on the families and communities in which they live.*
>
> **Ending childhood adversity A public health approach**
> **Public Health Scotland (2020)**
>
> *The Welsh Government recognises there are other forms of childhood adversity and trauma which can influence someone's life chances and outcomes. It recognises there is a complex, inter-relationship between ACEs and other sources of childhood adversity and trauma and work is still required to understand these relationships. This is particularly true of the relationship between childhood poverty and ACEs.*
>
> *The evidence indicates the relationship between ACEs and outcomes is associative rather than deterministic, so even if someone experiences multiple ACEs, it does not necessarily mean they will experience poorer outcomes. While the evidence from the studies indicates ACEs are fairly common, with around half of the population likely to have experienced at least one ACE, poorer outcomes are less common. This is because individuals can experience adversity, and indeed the same adversity, in different ways due to their individual circumstances, personality traits and the sources of resilience and support available to them. Other factors which can influence outcomes*

include when the experience happened, how long it happened for and its intensity. The ACEs framework's failure to take account of these factors is one of the sources of criticism levelled against it, as is its failure to take into account other sources of childhood adversity, including structural and social inequalities, which are also associated with poorer outcomes.

Review of Adverse Childhood Experiences (ACE) policy: report How the ACE policy has performed and how it can be developed in the future. Welsh Government (2021)

As ACE based approaches have developed, the limitations of ACEs based models have become evident. A review of the Welsh ACEs model identified a range of stakeholder concerns, these included:

- *The ACEs studies are epidemiological research and only seek to identify the patterns and probabilities of disease at a population level, their underlying causes and how to prevent them.*
- *ACEs pathologises societal problems and seeks to apply clinical solutions to them. The approach tends to individualise the problems and place the responsibility largely on parental behaviours. It places the responsibility for improving outcomes upon parents for issues over which they may have minimal control or influence or ability to address.*
- *The ACEs framework ignores other sources and forms of adversity, like childhood illness, disability, bullying or bereavement; or the impact of other factors like structural and social inequalities, including poverty.*
- *It treats all ten ACEs exactly the same and does not account for the impact of factors like when the ACE happened, its severity, frequency or duration, or the individual's personal traits or support available to them, which could amplify or reduce the impact.*
- *ACEs represents a simplistic way of explaining the complex nature of the relationship, interdependencies and pathways between childhood adversity and trauma and life outcomes. ACEs are not deterministic and many who experienced ACEs will not experience poorer outcomes.*

In reviewing how the Wales ACEs based policy had performed, even the continued use of the term ACEs was questioned. It was concluded that:

The Welsh Government's current policy was seen as having been successful in raising awareness of ACEs in Wales. However, there was a recognition of the need to move into the next phase, which requires a focus on 'what works' and support for the 'development of effective practice'.

There was a general lack of concern about the use of the term ACEs, because of what was seen as the need to focus on other issues. This included the need to address the transformation of systems, processes and practices which inhibit effective early intervention, prevention and mitigation of the impact of ACEs. Many believed the Welsh Government should be focusing on system transformation, rather than whether to continue to use the term ACEs.

Such perspectives, have informed the model developed for the West Midlands, being based on systemic trauma and systemic resilience. Recognising the limitations of the ACEs model and developing the concepts of childhood adversity and traumas (CATs) and adult adversity and traumas (AATs). (See Part Three, Systems Modelling).

Systemic Trauma to Systemic Resilience™ the Framework developed for the West Midlands Trauma

Informed Coalition, resonates with the policy position around resilience being adopted in other countries within the UK, this is illustrated below:

> *... [R]esilience is not, and should not, be viewed as an issue of individual resources and capabilities. Resilience arises through children's interactions with their social and physical ecologies, from families, through to schools and neighbourhoods. Scaffolding child development by supporting families, building healthy and happy school environments and communities, and addressing social inequalities in access to resources is crucial for enabling vulnerable children exposed to adversity to navigate their way to success. Resilience therefore depends on the structures and social policies that determine availability and access to resources (Bowes, 2018, p.89).*
>
> **Developing trauma informed practice in Northern Ireland: Health and mental health care systems (2018)**

> *A complex issue such as childhood adversity requires actions at a number of levels. The World Health Organization promotes an ecological model for considering the complex factors which put children at risk of maltreatment. Such a model is useful in directing actions at each of these levels as part of an interacting system across society, community, through relationships and at the individual level.*
>
> **Ending childhood adversity A public health approach Public Health Scotland (2020)**

> *… Public Health Wales has also identified various 'resilience factors' that characterise those who tend not to encounter negative outcomes following exposure to ACEs. These include having a relationship with a trusted adult, participation in sport, or engagement with the local community. Professor McCrory made clear that such resilience related to the environment around a child. It is not something that is in the child or individual; it is how the child is able to elicit help and use it from around them, but it is also about the social and physical resources around the child.*
>
> **House of Commons Science and Technology Committee (2018)[6]**

From the above review of the UK policy position it can be asserted that the West Midlands becoming a trauma-informed region resonates with the developing policy position in Northern Ireland, Scotland and Wales. Despite the findings of a House of Commons Select Committee, this is an area where government in Westminster is leaving policy decisions on adversity and trauma at a local level.

Contesting the Evidence

However, having considered the policy position on trauma and adversity adopted in Northern Ireland, Scotland and Wales, it is important to also acknowledge this is a policy area where much of the underlying assumptions and evidence are contested.

As is outlined above, the House of Commons Science and Technology Committee recommended that; *Government should ensure that it is making the most of the opportunity for early intervention to effectively and cost-effectively address childhood adversity and trauma,* the Committee also noted that:

> *The Early Intervention Foundation told us that, although reviews of the available evidence "highlight the crucial role early intervention can play in preventing childhood adversities and in helping children recover from the effects of early trauma ... the evidence base for early intervention in the UK is still at an early stage". They added that "a sustained and substantive change [to child outcomes] will require an ambitious and long-term*

research strategy". A literature review commissioned by the Big Lottery Fund similarly commented that although cost-benefit studies "appear to make a compelling case for investing in early childhood", the "economic evidence base from published reviews is not strong"

House of Commons Science and Technology Committee (2018)

The above illustrates that whilst there is recognition of the need for early intervention to address childhood adversity and trauma, evidence of effectiveness of such approaches is viewed by authoritative sources as currently limited and in need of development.

The recommendations made by the House of Commons Science and Technology Committee were not entirely reflective of all of the evidence they received. Further illustrating this position was a submission made to the House of Commons Science and Technology Committee in which a group of social scientists (including five professors) stated that:

The notion of Adverse Child Experiences is the latest in a long line of diagnoses of, and simple solutions to, complex social issues in the search for interventions that 'work'. The ACEs approach is not a neutral, evidence-based diagnosis. Rather, it reflects certain presumptions and is driven by particular agendas and interest groups (for example, what has been labelled the 'First Three Years Movement'). The ACEs approach, as with other attempts to diagnose and label sections of the population as deficient, has the potential for damaging consequences for the children and adults who are said to possess such deficiencies. Further, viewing social issues through the prism of ACEs may well inhibit our ability to identify and respond to human needs.

Embracing the promise of prevention sounds positive and common sense, but the scientific basis for early intervention programmes is open to question, with evidence of success quite ambiguous and the negative consequences of prevention-thinking rarely acknowledged.

'The Problem with ACEs'. Edwards et al.'s submission to the House of Commons Science and Technology Select Committee Inquiry into the evidence-base for early years intervention (2017)[7].

Wales is considered to be advanced in this area of work nationally and internationally. A Review of ACE policy in Wales in 2021, concluded that:

Evaluating the effectiveness of a trauma-informed approach is … impacted by the lack of consistent definition and implementation. Effectiveness is measured by diverse and non-standardised measures and it is noted that the scarcity of research on measurement and evaluation of a trauma-informed approach makes it difficult to determine the effectiveness of initiatives and make decisions about the optimal approaches (Champine et al. 2019).

What is not yet clear is what impact the ACEs policy has had on improving outcomes and which actions and support can make a positive difference. As we are looking at the impact across the life course, it might be many years, even decades, before the full impact of the decision to adopt the ACEs framework will be known.

Review of Adverse Childhood Experiences (ACE) policy: report How the ACE policy has performed and how it can be developed in the future. (Welsh Government 2021).

The Institute for Research and Innovation in Social Services (IRISS) in Scotland (2023) challenged the Scottish Governments policy position on trauma-

informed approaches and the strength of the evidence base supporting the policy (Smith and Monteux 2023). A central argument that was made is that *trauma is but one perspective on human suffering, and it may not be the most helpful.* Building from that position they assert that:

> *If we become too narrowly focused on what is essentially a clinical construct of trauma transposed onto social care, we risk failing to name structural causes of social suffering but also of diminishing the importance of everyday supportive social networks, care relationships and access to good resources and, ultimately, the innate capacity we all have to move on in our lives.*

The authors directly question the conclusions being drawn from research in order to support the Scottish Government policy position:

> *The Scottish Government claims that 'trauma-informed practice' is effective and can benefit both trauma survivors and staff. Frameworks such as the recent Trauma-informed Practice Toolkit (Scottish Government, 2021) point to examples of research to support benefits for trauma survivors… Yet, when these claims are traced back to source, one finds that the authors are more equivocal in their assessment of the impact of trauma-informed interventions than the Toolkit suggests, highlighting methodological limitations and cautioning against making more generalisable claims from their findings.*

Smith and Monteux (2023) also argue that assertions based in neuroscience of how early adversity predicates poor outcomes later in life may be flawed:

> *… claims to neuroscientific provenance can be employed in policy as a rhetorical device which can, and is perhaps intended to, foreclose debate on a topic. Even if such neurological links do exist, they are likely to be far more complex than is accommodated in popularised understandings of neuroscience. In reality, neuroscience as an academic discipline is at a very early stage of development and explanatory power (Wastell and White, 2017).*

The Northern Ireland, Scottish and Welsh governments policy position on ACEs and responses to trauma have drawn on a range of academic evidence in their development. The above illustrates the validity and efficacy of ACE based intervention and trauma-informed approaches is robustly challenged by credible academics and respected policy institutes. This challenge is further evidenced in the Wider Literature Review that follows.

Careful consideration must be given to limitations in the evidence base, perhaps particularly of the limitations regarding the causative nature of the links between childhood adversity and poor life outcomes. Alongside this, the lack of knowledge of the effectiveness of trauma-informed approaches also needs very careful consideration in terms of both policy, commissioning and service delivery.

As the evidence base stands it cannot be simplistically assumed that adversity leads to traumatisation, damage to the physiological and neurological systems and poor life outcomes. Neither can it be assumed that trauma-informed approaches will lead to improved life outcomes, or that such approaches are beneficial and do no harm.

The evidence also suggests that poor and racialised communities that are often marginalised, are more likely to be affected by and impacted by adversity and harmed in ways that can be interpreted as

traumatising (Kinouni 2021)[8]. Against that backdrop and limitations of the evidence base outlined above there is a need to carefully consider the legitimacy of developing trauma-informed approaches. Consequently there is also a need to ensure that approaches are both inclusive and consensual.

In a rapid evidence review of trauma-informed approaches for NHS England, Buckley et al. (2021)[9] comment that:

> *'Trauma-informed' is a new label and it has come into being because of the spread of neuroscientific research underpinning our understanding on the way trauma damages human beings across the life-course. Neither the practice nor the science is new.*

This observation is significant. The very limited evidence for trauma-informed approach is further detailed in the Wider Literature Review that follows. Against that backdrop and the very high social and economic cost of trauma there is an imperative to identify evidenced based ways to prevent and ameliorate adversity and trauma.

Given the above, in the following section we have also reviewed evidenced approaches that whilst not usually described as being trauma-informed both address the underlying issues that may cause adversity and trauma and help to build resilience in families and communities.

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Wider Literature Review

In this second part of the literature review we further consider the *best available evidence, from multiple sources both nationally and internationally* to assist the West Midlands in development of trauma-informed services. The three areas covered are the:

- Limitations of the Evidence Base of trauma-informed approaches and practice;
- Evidence for Building Resilient Families and Communities; and,
- Barriers to Trauma Informed Approaches.

The initial main focus of the literature review is at a regional strategic policy level, although the evidence presented also of significance organisationally. In the final section we specifically consider the evidence of barriers to becoming trauma-informed both at a regional level and for organisations.

Limitations of Evidence Base

In the introduction to this literature review and elsewhere in this report, we have stated that whilst there has been widespread adoption of trauma-informed practice, including within the UK, there is limited evidence of the success of such approaches. Consequently there is also very limited evidence of the social and financial benefits that can accrue. The following outlines some of the key national and international research and publications supporting that position, across key public service areas.

The Department of Levelling Up, Housing and Communities (DLUHC) recently published Trauma-informed approaches to supporting people experiencing multiple disadvantage - A Rapid Evidence Assessment (2023)[1]. The report was commissioned from Revolving Doors with CFE Research. The report included:

> *There is a plethora of high-quality evidence showing how trauma can have a negative impact on different aspects of someone's life, including their health and wellbeing, employment and educational outcomes, and likelihood of experiencing multiple disadvantage (Felitti et al., 1998; Copeland et al., 2018; Watson et al., 2019). This has contributed to a broad uptake in trauma-informed approaches in both England and internationally. Those who advocate for trauma informed approaches highlight that trauma is widespread and has far-reaching consequences. Proponents argue that interventions need to address this trauma so that people can access and benefit from services organisations offer and ultimately thrive (SAMHSA, 2014; NPC, 2020).*

> *While there is some evidence of positive outcomes for people receiving trauma-informed support, there is a lack of robust evidence which can clearly isolate the contribution of trauma-informed approaches and identify the specific factors that make a difference. However, there is evidence that trauma-informed approaches improve people's experiences of services and enhance engagement – a pre-requisite for achieving other outcomes.*

Key conclusions included:

> *It is difficult to determine the effectives (sic) of a trauma-informed approach or understand how best to implement this because there is a limited amount of research evaluating trauma-informed programmes and services. A significant reason*

for this is that there is not agreed definition of a trauma-informed approach, so it is challenging to compare ways of working and isolate the impact of taking a trauma-informed approach from wider interventions.

Individual outcomes have been most commonly identified in the criminal justice system mental health sector, women's sector and housing and homelessness sector. This includes impacts on relationships, engagement with services, improvements to behaviours (such as reoffending and violence) and better mental health. … Although it is acknowledged that preventing trauma can help systems to reduce cost, there is a lack of data on cost-savings created by adopting a trauma-informed approach.

Whilst we view the overall findings of the DLUHC report as unequivocal regarding limited evidence of positive outcomes from trauma-informed approaches, they recognised that research into Psychologically Informed Environments (PIEs), showed clear evidence of improved outcomes. (PIEs are a specific approach to address trauma, frequently applied in providing services to the homeless). Commenting that:

Research has shown that PIEs achieve significant positive change for people experiencing multiple exclusion/deprivation and with histories of compound trauma (Cockersell, 2016). This includes improved housing outcomes, improved behaviours, improved use of services and improved mental health.

However, they qualified this by observing that:

… interventions taking a PIE approach have the flexibility to use different psychological frameworks and PIE and trauma-informed approaches are related but not the same, so again it is difficult to isolate the direct impact of trauma-informed ways of working in creating outcomes within services run as a PIE.

The overall conclusions within the DLUHC report on the limited evidence regarding outcomes from trauma-informed approaches are not new. Similar conclusions were reached in an earlier American study (Hanson and Lang 2016)[2]. They sought to identify the most rigorous empirical studies available related to trauma-informed care for maltreated youth and their families and to understand the costs or cost benefit of trauma-informed care.

Having undertaken an extensive literature search alongside a practitioner survey, they called for papers for an edition of the journal Child Mistreatment. None of the papers received or accepted for publication provided data that specifically examined the relationship between trauma-informed care and youth outcomes nor the costs or costs benefits of trauma-informed care. Finding, significant gaps in the research literature, they deduced that:

- *If efforts to establish TIC are to continue, it is imperative that researchers systematically evaluate the effectiveness of this approach, specifically as it relates to outcomes for youth.*
- *Further, it is important to delineate the relative importance of the various core components of TIC to youth outcomes in order to identify the most cost-efficient strategies to improve care.*
- *Otherwise, we may continue down a path which intuitively makes sense and is filled with good intention but lacks empirical support of its need or impact on what is most critical that is, the well-being of children impacted by trauma.*

An Early Intervention Foundation (EIF) study considered how trauma-informed principles had been adopted by English children's social care teams to improve the quality of services (Asmussen et al. 2022)[3]. Children's social care was chosen *explicitly because reducing children's and parents' experiences of trauma is core to their work*. Key findings were:

- *Trauma-informed care is widely used and perceived to add value to children's social care.*
- *No single model of trauma-informed care currently exists within children's social care teams in England.*
- *There is a high degree of overlap between trauma-informed care activities and standard children's social care practice.*
- *Trauma-informed activities rarely led to evidence-based interventions.*

Their findings also included:

> *Trauma-informed care was originally introduced to help engage vulnerable individuals in evidence-based mental health treatments. It has since been expanded to a broad set of principles that have been adopted by schools, child protection services and the criminal justice system. This expansion reflects widespread enthusiasm for the trauma-informed principles and optimism that their use will lead to measurable benefits for children and adults.*
>
> *However, we still do not yet know if these benefits can be realised, especially in the absence of trauma-specific treatments. Given the growing enthusiasm and investment in trauma-informed approaches, we believe this knowledge is essential for guiding future national policies and local practice decisions aimed at supporting vulnerable families through public services.*

The EIF report made three recommendations, summarised below:

- A need for key central government departments to work together to agree a core definition of trauma-informed care;
- The benefits of trauma-informed care must be identified and evaluated, government departments should prioritise robust evaluation of models of trauma-informed training and practice in different service contexts; and,
- Trauma-informed care should never be used as a replacement for evidence-based, trauma-specific treatments, availability of effective, trauma-specific interventions should be prioritised and linked to any future investment in trauma-informed care.

A qualitative study of health policies and professional perspectives on trauma-informed (TI) care in the UK was undertaken (Emsley et all. 2022)[4]. The study investigated *the UK-specific context through exploring how TI approaches are represented in health policies and how they are understood and implemented by policy makers and healthcare professionals*. Key findings from that study included:

> *Despite a 20-year history of the TI approach framework, several reviews have found limited evidence for their effectiveness in health systems, with most studies conducted in North America and only one qualitative study in the UK. Despite little evidence of acceptability, effectiveness, and cost effectiveness in the UK context, policies and guidelines at national, regional and organisational levels recommend implementing TI approaches in healthcare organisations and systems.*
>
> *Our document analysis of health policies and interviews with professionals found differing*

representation, understanding, and implementation of TI approaches in the UK with wide variations between geographical areas, services, and individual professionals.

The growing international evidence base for the impact of psychological trauma and the need for service response was used in documents and interviews to justify TI approaches as a pragmatic solution to these concerns. However, the documents and interview participants justified the need for TI care by citing US and Welsh epidemiological studies on ACEs, DVA and patient accounts of being re-traumatized in services. We found no references to intervention studies that demonstrated effectiveness, cost-effectiveness, or acceptability of TI approaches in the UK.

UK policies on implementation of TI approaches were not supported by UK-specific, methodologically robust, evidence for effectiveness, cost effectiveness and acceptability.

A literature review for NHS England, (Karen Buckley et al. 2021)[5] was undertaken to examine the effectiveness trauma-informed approaches (TIAs). The focus was on preventing adverse mental health and wellbeing outcomes, particularly for more vulnerable groups during the COVID-19 pandemic. Recognising the limitations of the evidence with regard to trauma-informed approaches, the findings included:

Whilst TIAs have been applied to a wide range of non-healthcare settings including wider systems, policies, organisations, and interventions; most evaluations are of small-scale interventions that do not capture outcomes across staff, end users and different levels.

There is a need for more experimental study designs; evaluations that capture whole system and end user outcomes for application of TIAs; longer term follow-up and for more studies outside of the US.

Most studies focussed on vulnerable groups known to institutions: there were no examples of evaluated interventions specifically aimed at vulnerability to poverty; ethnic groups, migrants, or refugees; or domestic abuse which are relevant to the current climate; although these groups are represented within the TIAs described and in the supplementary evidence.

Despite the prominence of TIA discourse and opinion papers, there remains limited evidence on effective application of TIAs in non-healthcare settings for mental health and wellbeing.

A systematic review of trauma-informed approaches in schools was undertaken by Maynard et al. (2019)[6]. This American study had a widely based global search criteria across ten years, including published and unpublished research, research registers and grey literature. The purpose of the study was to identify and synthesise the evidence of effects of trauma-informed approaches in schools. Commenting that:

While the intent of creating trauma□informed approaches in schools is a noble one, relatively little is known about the benefits, costs, and how trauma□informed approaches are being defined and evaluated (Berliner & Kolko, 2016). Adopting a trauma□informed approach in a complex system such as a school building or district is a time consuming and potentially costly endeavor and thus it is important to assess the effects of this approach to inform policy and practice.

Significantly no studies were found that met the criteria for inclusion in their review. Reflecting that:

> *Despite widespread support and growing adoption of trauma-informed approaches in schools across the globe, we found no studies to provide good evidence to suggest that this approach is effective in achieving the stated goals. Given the degree to which trauma-informed approaches are being adopted in schools across the US and other countries, it is important that the effects of these programs be assessed.*
>
> *We suspect that schools may be calling what they are doing a trauma-informed approach, but what is actually being done from school to school or district to district may vary quite widely in the practice and implementation of this approach. Clearly, rigorous research is needed in assessing the effects of using a trauma-informed approach in schools and we encourage rigorously designed studies in this area. … Drawing from research on multi-tiered approaches in schools could help inform research approaches to assess the effects (and costs) of trauma-informed approaches in schools.*

A further *Systematic Review of School-Wide Trauma-Informed Approaches* was undertaken by Australian academics (Avery et al. 2021[7]) and published in the Journal of Child & Adolescent Trauma. This was another wide ranging study considering over 7,000 papers. They only found four studies (in American schools), that met the initial inclusion criteria, although none of these papers actually met a secondary criteria around risk of bias. Nevertheless they reviewed the four papers which evaluated separate school-wide models. They conclude that:

> *This review aimed to investigate current evidence for trauma-informed school-wide models, and to synthesize core elements and commonalities of approaches, drivers of change, and the challenges and learnings related to implementation and sustainability. The review found the strength of evidence for school-wide trauma-informed models was low.*
>
> *Although there is a great deal of enthusiasm for trauma-informed schools and a growing body of research, the current review highlights the dearth of robust studies into explicitly trauma-informed whole-of school approaches. Only four papers met the inclusion criteria of containing at least two of the three core domains of organisation-wide practice based on SAMHSA's guidelines (2014) with all four studies rated as weak overall in the assessment of risk of bias.*

Discussion of the Evidence Limitations

The wide range of evidence above, drawn from authoritative reviews and sources, illustrates a wide action-impact knowledge gap in effectiveness of trauma-informed approaches. As referenced earlier, Wales when considering the impact of their ACE based policy, identified similar issues:

> *What is not yet clear is what impact the ACEs policy has had on improving outcomes and which actions and support can make a positive difference. As we are looking at the impact across the life course, it might be many years, even decades, before the full impact of the decision to adopt the ACEs framework will be known.*
>
> **Review of Adverse Childhood Experiences (ACE) policy report: How the ACE policy has performed and how it can be developed in the future. (Welsh Government 2021)[8]**

Whilst a wide range of authoritative reviews, have found limited evidence of trauma-informed approaches making a significant difference to the lives of those who use a range of key public services. This is not the same as saying such approaches are misguided. Neither is it saying that such approaches don't benefit service users. What it tells is that there is limited evidence of effectiveness or improved outcomes for service users. However, given the finding from the reviewed literature it is not possible for us to conclude that social or economic benefits will accrue (swiftly or over the longer term), from the region adopting trauma-informed approaches.

The evidence gap creates a range of dilemmas. Whilst we were not tasked with considering if the region should become trauma-informed, (as that decision had already been taken). These dilemmas include the extent to which services should continue to invest in trauma-informed practice and related approaches.

Our perspectives on these dilemmas are as follows. Firstly the evidence within this report includes:

- Substantial evidence that significant proportions of the overall UK population have suffered adverse childhood experiences and that many people suffer significant adversity as adults.
- Good evidence that significant adversity in childhood leads to very poor health, a shorter lifespan and adverse social outcomes for a significant proportion of the population.
- Evidence that some sections of the community, including those who live in poverty, in deprived communities as well as Black and other racialised communities are more likely to suffer these adverse life outcomes.
- Evidence suggests that adversity, trauma and poor life outcomes are often inter-generationally linked.
- Through the Cost Modelling (see Part Three) we have also shown that the social and financial cost to society of significant levels of adversity within the population are not only very high but also likely to be increasing.

Nearly a decade ago in the United States (Harris 2014)[9], spoke of childhood adversity (ACEs) as *the single greatest unaddressed public health threat facing our nation today*. With our increasing knowledge of the lifelong harm caused by adversity and trauma alongside the broader social and financial cost, this analysis is applicable today in the UK. The evidence reviewed here, strongly suggests that the West Midlands region is particularly burdened by the harmful affects of adversity and likely trauma.

Against the backdrop outlined above of very high individual and societal harm and very high cost, doing nothing is in our view neither an ethical or financially justifiable position. Neither, is waiting years or even decades for others to hopefully evidence what works to reduce the harm of childhood and other adversity. If this position is accepted, (as it intrinsically appears to have been) this needs explicit acknowledgement.

However, it is hard to justify committing public funds and delivering programmes of work without being able to evidence that such programmes are likely to deliver improved outcomes. Both for those in receipt of services and for the public more broadly.

Consequently, whilst on balancing the evidence, we would encourage the West Midlands agencies to continue to provide and further develop trauma-informed services and trauma-informed practice. We are strongly of the view that this should only be undertaken in ways that draw upon and hopefully develop, a strong evidence base of improved

outcomes for service users and resultant social and financial benefits. Therefore, services need to be developed within a theory of change that applies existing evidence and incorporates evaluation, building an evidence base and a culture of effective trauma-informed service design and delivery.

To legitimise such an approach requires that the limitations in the evidence base need to be fully acknowledged. Caution is also needed regarding promoting the efficacy of trauma-informed approaches. Development or re-modelling of services to become trauma-informed needs to be undertaken in consultation with communities, service users and other stakeholders and be delivered within a fully transparent, consensual and collaborative framework.

Development of trauma-informed services needs to clearly detail the needs they are designed to address, the benefits they are intended provide and specify measurable outcomes, against which success or failure can be judged. Services then need to act within the best available evidence and evaluate initiatives in order to take all reasonable steps to ensure that they help and don't harm the people they serve. Consideration of best practice, during service commissioning and evaluation also needs to consider the financial costs and whether such costs offer good value for public funds.

The limitations of the evidence base for effectiveness of trauma-informed approaches, alongside the very high social and financial costs from poor outcomes related to adversity and trauma are evident. As is a backdrop of structural factors that either cause or exacerbate adversity and trauma. Collectively this suggests, that individually focussed trauma-informed practice approaches, are in themselves insufficient. Alongside trauma-informed approaches, much broader system wide approaches are clearly needed to enable the West Midlands to address systemic trauma and build systemic resilience.

Some of the wider approaches with good evidence of success, which have the potential to prevent and reduce adversity and trauma and in the longer term reduce the social and economic harms that are caused, are considered below.

Building Resilient Families and Communities

> *There is growing recognition that resilience in children is interconnected with the resilience of families, communities, governments, economies, and ecologies.*
>
> **Ordinary Magic: Resilience in Development**
> **Ann Masten (2014)[10]**

> *The communities in which we live are important in preventing and protecting children from adversity and play a vital role in creating safe places for children to grow up and develop in. Statutory services alone cannot address childhood adversity and it is recognised that improving Scotland's health requires action across the whole system, with a focus on place and communities.*
>
> **Ending childhood adversity**
> **A public health approach (2020)[11]**

The very limited evidence of effectiveness of trauma-informed approaches, alongside the very high social and economic impacts of adversity and trauma, creates the necessity to consider other evidenced approaches that can be recognised (or re-purposed), to reduce the affects of adversity and trauma.

Whilst evidence of effectiveness must always be fully studied. Failure to consider approaches on the basis that they aren't termed *trauma-informed,* risks

increased cost and lost opportunities to prevent or negate the affects of adversity and trauma. Buckley et al. (2021)[12] comment in a rapid review of trauma-informed approaches (TIA) for NHS England that:

> *A TIA is essentially an evidence-informed reframing or renaming of a public health approach to preventing adverse outcomes when people are faced with physical or emotional harm and/or experiencing adversity, including poverty. …*
>
> *A TIA should therefore not be considered in isolation to the much broader evidence base in addressing adversity. Future researchers and practitioners should consider the role of TIAs in addition to existing pathways to address social determinants of health as well as access to trauma specific care where necessary; and seek to evaluate implementation and effectiveness in context.*

In the following section we will consider well established approaches where there is good and in some areas very good evidence of highly effective approaches, which could be strategically applied to address adversity and trauma and promote resilience. The first of these areas are parenting interventions to support those who parent children in helping their children develop and thrive. We also briefly consider programmes of support in a child's early years. The second area is supporting communities so that those communities thrive socially and economically, being better able to respond to adversity and reduce trauma.

Note: In our judgement, the information presented in this section comes from reliable sources. However, the evidence comes from a range of literature including briefings and policy papers. Consequently not all of the sources can be viewed to be independent from contracting agencies, or providers. Information sources are referenced.

Perhaps particularly in the area of parenting support but also in the area of strengthening communities such approaches may not have been originally conceived as responding to trauma. This may be related to the fact that the approaches are long established. Pre-dating the increasing understanding of the potential for serious longer term harm from the affects of adversity and trauma. It may also reflect that the benefits they offer have not been identified or promoted in this area.

As is explored below, the literature reviewed suggests that increased support for parents and strengthening communities are both applicable system wide. There is also good or very good evidence of both social and financial benefits from broadly addressing adversity and trauma through such programmes.

Supporting Parents and Families

> *Providing support for parenting and nurturing caregiving at the population level acts as an accelerator for preventing neglect and abuse and their costly and lifelong impacts on mental and physical health across the life course. Positive parenting can also buffer the effects of community violence and other negative influences.*
>
> *Once initial start-up costs have been covered, the cost of delivering parenting interventions per family is roughly comparable to the cost of a routine childhood vaccination programme.*
>
> **Universal parenting support to prevent abuse and neglect: A policy call for national governments (World Health Organisation & United Nations)[13]**

An area of practice that has longstanding high quality

The section on parenting interventions has not been subject of an extensive literature review. Nevertheless we are satisfied from the sources of the literature, that this is an area where there is high quality evidence of effectiveness.

evidence of social and economic benefits for children and their families from participating, are parenting programmes or as we refer to them here, parenting interventions. Reflecting the strength of the evidence, the quotes above show that parenting interventions, are promoted to governments jointly by the World Health Organisation and the United Nations.

Effective parenting is critical in both preventing childhood adversity and where that occurs in reducing the impact on the child. Sampaio et al. (2021)[14] recognise this alongside other factors influencing child development:

> *There is a widespread acceptance that the interplay between the child and her environment, composed of many layers including family, peers, and social structures, contribute to the child's development. Of all protective and risk factors influencing child development, a key part is the quality of parenting that children are exposed to.*

Reflecting the above, in an evidence review[15], *Foundations For Life: What Works to support parent child interaction in the early years,* (Asmussen et al. 2016) the Early Intervention Foundation[a)] (EIF) detail the significance of models that underpin such work. One model they draw upon is Bronfenbrenner's ecological systems model of child development. Noting that:

> *Not only did Bronfenbrenner maintain that human development was fundamentally a social process, he observed that its course was determined by increasingly complex reciprocal interactions occurring across multiple social systems.*

[a)] In 2023, the Early Intervention Foundation merged with What Works for Children's Social Car to create, Foundations - What works Centre for Children and Families.

The EIF report links the ecological systems model with the foundational role of Bronfenbrenner in developing the Head Start programme in the USA. Identifying that *Bronfenbrenner was also one of the first to identify the ways in which social disadvantage negatively impacted children on multiple ecological levels.* Head Start was developed in the USA in the 1960's as part of President Johnson's War on Poverty (Tregaskis 2015)[16]. When he launched the programme Johnson said that:

> *Five and six year old children are inheritors of poverty's curse and not it creators, … Unless we act, these children will pass it on to the next generation, like a family birth mark.*

Over the following 50 years, Head Start went on to provide 32 million children with health educational and family support services and remains in place today. Whilst being conceived within child development, the ecological systems model has strong resonance with the overarching framework adopted by the Trauma Informed Coalition, recognising trauma as a systemic phenomena and the need to build systemic resilience.

Bronfenbrenner's ecological systems model has had a very significant influence in terms of thinking on child development. Consequently, also on the development of parenting interventions, including the UK Family Nurse Partnership (FNP) (Tregaskis 2015)[17] and the Triple P parenting programme which is delivered both in the UK and internationally (Sanders 2023)[18].

Sampio et al. (2021) undertook a systematic review of economic evaluations of parenting interventions:

> *The existing evidence suggest that parenting interventions are likely to be a cost-effective use of societal resources, with respect to preventing child*

externalizing and internalizing behaviors, as well as home-visiting programs to prevent child abuse and neglect.

Evaluations positively reviewed by Sampaio et al. included programmes from the Triple P - Positive Parenting Program® and the Incredible Years parenting program, both of which provide programmes within the UK. Summary comments were that:

Among the studies deemed high quality, parenting interventions showed good value for money, in particular for preventing child externalizing and internalizing behaviors. High-quality evaluations of widely used parenting interventions, such as the Incredible Years and the Triple P, show that they, either: (a) were cost-effective at local WTP (willingness-to-pay) *thresholds; or, (b) could be cost-saving over the long-term.*

Ronald Prinz is a Distinguished Professor in Psychology at the University of South Carolina and also an Honorary Professor at the University of Queensland and a consultant to that university's partner, Triple P International. In a paper *A Population Approach to Parenting Support and Prevention: The Triple P System,* Prinz (2019[19]) draws on the Triple P Programme to argue for a population wide, public health approach, to prevent child maltreatment including access to parenting support. Prinz draws on a range of evidence in support of that position. His propositions are summarised as follows:

- *Official records grossly underestimate the extent of problematic parenting;*
- *Communities need to normalize involvement in parenting support programs rather than singling out or stigmatizing parents;*
- *A population approach could have many benefits, such as preventing behavioral and emotional problems in early childhood, encouraging greater school readiness, and reducing the risk of problems during adolescence;*
- *Compared to strategies that target a narrow segment of parents and children, a population approach may create a climate of positive social contagion for positive parenting.*

Importantly, Prinz concludes by recognising that:

Having a cogent parenting support system in place doesn't obviate the need to address other critical issues. Parenting support can and should work hand in hand with other efforts, such as programs to address the toxic elements of poverty, full access to efficacious treatment for parental substance use, early childhood education, and access to adequate health care.

In a recent online blog, *Why investing in parenting support is crucial to eradicating the disadvantage gap,* Donna Molloy, Deputy Chief Executive of Foundations - What works Centre for Children and Families (Molloy 2023)[20] comments that:

There is a very compelling case to invest in the models of parenting support shown to be effective and for those locally to work to ensure they reach the families who need this the most.

I'd argue, where we have good evidence about interventions shown to improve outcomes, we should be using this rather than reinventing wheels or developing new service models.

We need to give renewed attention to scaling up effective support for parenting. This has the potential to reduce income-related disadvantage gaps in education, but also yield wider benefits in

terms of reducing pressure on the NHS and criminal justice system.

If we want to develop systemic resilience for children, we have to build resilience in families. Enhancing the quality of the child's parenting is critical in this regard. The relationship between families and communities is symbiotic. To strengthen communities we need to strengthen families and to strengthen families we need to strengthen communities.

Given the evidence of effectiveness of parenting interventions, investment in such approaches should be a significant component of regional and local strategies to significantly reduce adversity and trauma. Including an agreed approach to developing both universal and targeted parenting interventions.

The evidence reviewed within this report shows that childhood adversity and trauma are frequently intergenerationally linked. Investment in a wide range of parenting interventions, has the potential, perhaps within a generation, to significantly fracture the links that cause families and communities to be impacted by adversity and trauma across many generations.

Looking more broadly at programmes of support for children and parents in a child's early years. The EIF (Asmussen et al. 2016) in their review *Foundations For Life: What Works to support parent child interaction in the early years,* concluded that:

> *Although the overall evidence base for programmes available in the UK needs further development, there is a range of well evidenced and promising interventions that, if carefully commissioned to ensure they fit with local need and context, are likely to be effective in tackling problems identified in the early years …*

Also observing that:

> *Overall, the evidence is strongest for programmes that target based on early signals of risk, such as child behaviour problems, insecure attachment, delayed development of speech and lack of maternal sensitivity.*

In a very specific study of outcomes from Sure Start programmes, *The health impacts of Sure Start* (Cattan et al. 2021) the Institute for Fiscal Studies considered subsequent hospitalisations of children who had been involved in Sure Start. Findings included that;

> *We find strong evidence that access to Sure Start affects children's hospitalisations. In the earliest years of life, Sure Start increases hospitalisations as families get more support to use health services and as children are exposed to a wider range of infectious illnesses. But after the first few years, Sure Start decisively reduces hospitalisations, with stronger immune systems, better disease management, safer home environments and fewer behavioural problems all potentially playing a role.*

These two studies only represent a snapshot of the research into broader parenting and early years support programmes. These were included here as they are from credible sources and illustrate further that well evidenced programmes with much wider objectives than being trauma-informed, demonstrate good evidence of addressing underlying issues in children's lives and building resilience.

In responding to the need to reduce the long term impact of childhood adversity and potential trauma, whilst needing to be informed by further review of the evidence, broader parenting and child support programmes should be considered as potentially

being a key part of addressing childhood adversity and increasing community resilience.

Strengthening Resilience in Communities

The other area where we have found significant evidence of effectiveness (including social and financial benefits) is in the development of approaches that strengthen resilience in communities. Evidence showing that such approaches can reduce adversity and potentially trauma. An evidence review published by NHS Wales in 2021[21] found that:

> *In the United States particularly, over the last decade, there has been an emerging movement to build resilient, trauma-informed communities. Such initiatives bring together stakeholders from different community sectors, community members, parents, youth, policymakers, health and social service providers, funders, and researchers to develop coordinated community responses to ACEs that can promote resilience (Matlin et al., 2019). Examples in the US include Strong Communities and Building Community Resilience (BCR) and in the UK, Strengthening Families Initiative (SFI) and Communities that Care (CTC).*

> *Studies indicate that neighbourhoods can have a significant effect on parenting behaviours and child outcomes, demonstrating potential positive effects a neighbourhood can have in mitigating childhood adversity. Years of research have repeatedly shown that community factors such as poverty, violent crime, and drug trafficking influence rates of child maltreatment so addressing these conditions matters when trying to prevent child maltreatment (Brennan et al., 2020).*

Whilst accepting the above, a systemic perspective also considers the reflexive nature of the inter-connected relationships between children, families and neighbourhoods. Recognising for example, that child maltreatment also contributes to adverse community factors such as poverty, violent crime and substance misuse. The NHS Wales review included:

> *The literature indicates that the complex and pervasive nature of ACEs suggests that there is no single or simple solution, instead system wide strategies involving multiple interventions are required to adequately prevent and reduce the impact of ACEs (Asmussen et al., 2019). Within this, involving and empowering local communities, particularly disadvantaged groups, can promote health and wellbeing and reduce inequalities. Key within this are participatory approaches which can directly address marginalisation and acknowledges the importance of community engagement as a strategy for health improvement, particularly as it leads to services that better meet the community member's needs (Public Health England, 2020).*

The need for system wide strategies is integral to the broader findings in this report. The review by NHS Wales also considered that:

> *Community-based interventions that strengthen neighbourhood-level resources may be most effective in buffering the toxic stress response in children while positive environmental changes can improve childhood outcomes, even in extreme cases of adversity. Community based interventions have been shown to be effective and long-term follow up of children involved in interventional programs exhibit enduring behaviour and health effects (Franke, 2014). However, system-wide strategies for preventing or reducing ACEs are not easy or cheap and the evidence suggests that the successful delivery and integration of effective*

activities requires time, skill and commitment that is not currently available in most community systems.

The reviewed literature that follows further reinforces evidence of effectiveness of community interventions. However, the findings above suggest that system wide strategies to strengthen communities are neither *easy or cheap*, certainly in terms of cost, that is not a perspective shared by all commentators. The World Health Organisation and Unicef (2021), (quoted in the section above on Supporting Parents) promote universal parenting interventions to governments stating this is no more expensive than a childhood vaccination programme. They also stress that:

> *Providing support for parenting and nurturing caregiving at the population level acts as an accelerator for preventing neglect and abuse and their costly and lifelong impacts on mental and physical health across the life course. Positive parenting can also buffer the effects of community violence and other negative influences.*

The programmes considered below provide further evidence of significant social benefits and high cost effectiveness of a range of community interventions.

One of the American States that has been using approaches to strengthen communities is the State of Washington. Their experience in developing programmes to strengthen communities spans more that 30 years. One model that has evolved and developed in Washington has been conceptualised as *Self-Healing Communities* (SHCM) *A Transformational Process Model for Improving Intergenerational Health*. Broadly, the model is based on developing cultural strategies that increase the capacity of a community to reduce adversity. Systems have also been developed to measure community capacity (ACEs and Resilience Collective Community Capacity (ARC) survey, see communityscience.com).

A report commissioned by the Robert Wood Johnson Foundation (Porter, Martin and Anda 2016)[22] described that:

> *The SHCM is based on 15 years of promoting community capacity and culture change in communities across Washington State, where health outcomes were dramatically improved as a result. In the SHCM, as communities develop the capacity to shift typical cultural patterns, individuals within the community gain new knowledge and skills, and the community as a whole becomes proficient at critically evaluating all of the underlying assumptions that shaped previous action. Residents and professionals co-create practice-improvement cycles that produce stunning results. Investments in culture change processes are vital for this success.*

The State of Washington supported the SHCM model in 42 communities. Porter, Martin and Anda (2016) drew on data (Schueler et al. 2009)[23] showing that communities applying the model for eight or more years reduced rates of seven major social problems:

- Child abuse and neglect;
- Family violence;
- Youth violence;
- Youth substance abuse;
- Dropping out of school;
- Teen pregnancy; and,
- Youth suicide.

It was estimated that per annum, avoided case-load costs in child welfare, juvenile justice and public medical costs from births to teen mothers was over

$601 million. This figure was based on an average annual savings of $120 million for a cost of $3.4 million per annum. One author of this report was Robert Anda MD author of the original ACEs study.

A journal article (Hall et al. 2012)[24] reported on Washington State studies on the impact of development of community capacity (CC) in two county areas. Comparing these two areas with other areas where funding for such programmes had been withdrawn. Community capacity had been developed in these areas through building community networks:

> *Community networks convene and empower the local citizenry to work together to solve the communities problems. They do not run programs, nor directly deliver services, rather they create collaboratives among local service providers from multiple disciplines to best align resources and services to meet local community needs. Thus, we view this intervention as an element of a larger complex system of relationships, processes, and events, rather than simply the implementation of specific programs within communities.*

These two studies looked at the effectiveness of community networks in reducing chronic social problems over time. The first of the studies looked at county level changes in community health and safety problems over a 10-year period. Concluding that, *Rates of major social problems improved over time* compared with areas which had lost funding to develop community capacity. *Further, these improvements were not related to county level differences in socioeconomic factors.*

The second of these studies assessed the impact of high CC *networks on community ACE prevalence.* The study considered 18-34 year olds who were *the first generation exposed during childhood to the full impact of these community network efforts.* The findings were that:

> *The ACE prevalence of young adults (age 18–34) was lower in communities with a high rating of CC. … Further, the prevalence of high (three or more) ACE scores was lower among young adults in high capacity communities when compared with low capacity communities. Not only do high CC networks appear to reduce ACE prevalence for young adults overall, they appear to specifically reduce the number of young adults with high multiple ACE.*

The overview of SHCM programmes developed in the State of Washington and the outcomes they have achieved, adds credence to the perspective that strengthening resilience in communities can be evidenced as an effective approach. Not only in reducing harmful and problematic behaviours but also lowering levels of adversity in those who grow up in communities with increased capacity. Whilst recognising that public services and social needs differ in the UK, what is also very encouraging is the significant financial savings to public services that were accrued.

Communities That Care (CTC) is another longstanding evidenced based American model, originating in the State of Oregon in the 1990's in community drugs prevention programmes. Subsequently the model has been applied much more broadly within the USA, Canada, Australia, Europe and for a period within the UK. The focus of the model is on reducing substance misuse and crime. The model has been broadly described as follows:

> *The CTC system works by guiding a community coalition of decision makers through an assessment and prioritization process that identifies the risk*

and protective factors most in need of attention in their communities, and links those priorities to prevention programs proven to work in addressing them[25].

Within the UK in the late 1990's the Joseph Rowntree Foundation provided £1m of funding for establishment and adaption of the CTC model to a UK context and CTC UK was established. However, operations in the UK ceased in 2009. Whilst there were some early evaluations of CTC projects these were focussed on establishment by way of process evaluation. There is no substantive evidence of the success or otherwise of CTC in a UK context[26].

The European Monitoring Centre for Drugs and Drug Addiction (2017)[27] undertook a review of five studies evaluating the effectiveness of CTC and one narrative review of international organisations, mainly from outside the EU. They concluded that:

Overall, our analysis suggests some evidence of effectiveness of the CTC approach as a drug prevention initiative in the non-EU studies. As cultural factors probably play an important role in the implementation of this sort of community mobilisation approach, this review suggests that effectiveness still needs to be assessed in a European context.

Given the findings from existing studies and the well-developed theoretical model behind CTC, further investigation of this prevention model within the European context appears to be merited.

One of the areas in America in which CTC has been widely applied is in the State of Pennsylvania. A briefing from the Evidence-based Prevention and Intervention Support Center at Penn State University in 2011[28] provides a summary of research they had undertaken into CTC. Findings included:

A longitudinal study … examining changes in youth over a 5-year period. The study followed 419 classroom groups of students from 2001 to 2005, and included more than 231,000 youth reports. The study found again that youth in CTC communities using evidence-based programs showed significantly better adolescent development than youth in comparison communities. The CTC youth had stronger bonds to their schools, families, and communities, and were less influenced by antisocial peers. Most importantly, the youth in CTC communities reported nearly 11% less delinquency over the 5-year period, and more than 33% better academic achievement.

They also reported that:

Nationally, researchers from the University of Washington also recently concluded a 7-state randomized controlled trial (the most rigorous type of scientific evaluation) comparing two groups of communities, half of which used the CTC model. Again, the researchers found that youth in the CTC communities had significantly lower levels of risk and significantly lower rates of delinquency than youth in the comparison communities.

Whilst differently focussed in terms of the objectives they are trying to achieve, both the SHCM and the CTM model have significant similarities in approach. They are both evidenced based and underpinned by clear theories of change. Both are based on working with agencies and communities to address issues as the communities see them. Neither are project based and both have clear evaluation measures and process to measure change. Importantly, both models have

good evidence of effectiveness. They both seem to be strengthening communities and increasing resilience.

A more recent development again from America and also based in Washington, is the Building Community Resilience learning collaborative. In a special issue of Academic Pediatrics, (Ellis and Dietz 2017[29]) developers of the model described it as follows:

> *The Building Community Resilience (BCR) model is an innovative, transformative approach that will foster collaboration across child health systems, community-based agencies, and cross-sector partners to address the root causes of toxic stress and childhood adversity, and build community resilience.*

Whilst the model is currently being tested in five states it is included here as a promising approach. It appears to resonate strongly with the overall model proposed for the West Midlands of moving from *Systemic Trauma to Systemic Resilience™*. Examples of the thinking underpinning BCR are as follows:

> *We define community resilience as the capacity to anticipate risk, limit effects, and recover rapidly through survival, adaptability, evolution, and growth in the face of turbulent change and stress. In effect, resiliency is the capability to endure and thrive despite adversity. Although we cannot prevent all adverse exposures, we can reinforce social supports for vulnerable children, families, and communities so that together they may thrive. Community resilience is a measurable quality that is increasingly recognized as an important ingredient in preventing childhood adversity and building stronger communities to support child health and well-being.*
>
> *The BCR approach aims to provide a seamless continuum of cross-sector cooperation and services to build the 'social scaffolding' that will support children and families and contribute to community resilience. BCR will create an integrated network of partners across several sectors to engage community members in a collaborative effort to promote health, create stronger community and organizational linkages, and increase social supports for families and individuals. BCR is framed within the Collective Impact model, which includes development of a common agenda, mutually reinforcing activities across a diverse set of partners, continuous communication across stake-holder groups, leveraging a backbone organization, and creation of a shared measurement system.*

There are clear similarities with the BCR model and both the SHCM and CTC models. However, there appears to be strong alignment between the BCR model and West Midlands intent to reduce systemic trauma and build systemic resilience. Exploration of applying and adapting the BCR model in the West Midlands to a UK context might accelerate a process of developing a theory of change and of beginning to implement programmes in local communities.

Throughout the report there has been evidence of the links between adversity and poverty and how those living in deprived communities are more likely to be negatively affected by adversity. We will conclude this section of the literature review by considering the need to build the economic resilience of communities and the economic case for such investment.

Punishing Abuse (Chard 2021)[30] studied eighty children in the West Midlands justice system. The report outlined the concept of systemic resilience and was a significant driver for establishing the Trauma Informed Coalition. The findings included that:

Deprivation and poverty impact powerfully and perniciously. Poverty is the most significant structural issue to be addressed, in reducing the likelihood of children becoming involved in crime. Reducing poverty is also a moral imperative and essential for a just society, which is physically and psychologically healthy.

The proposals included that:

The findings within this report need to be reflected in actions within regional and local economic strategies.

Ways need to be found to target resources that successfully impact on those families who are at highest risk of social exclusion and intergenerational disadvantage. This includes:

- *Training and employment as well as support to access such opportunities;*
- *The need to reflect the fact that primarily single mothers parent these children;*
- *Overcoming the reluctance of some socially excluded families to engage with services.*

At the start of this section of the literature review, we questioned whether strengthening communities was costly. Whilst upfront investment is very clearly required, American findings outlined above indicate that very significant cost saving can accrue in the longer-term through building community resilience.

What has also now been well evidenced in the UK is that building economic resilience of communities is cost efficient and effective. A recent report[31] on the Futurebuilders Fund, set up under the Blair Government was published by the Department for Digital, Culture, Media and Sport and the Social Investment Business (SIB), which managed the Fund.

The report assessed the economic impact of social investment using a hyper-local analysis. The methodology was akin to a randomised control trial and compared areas that received funding with other closely comparable Lower Layer Super Output Areas (LSOAs). Key findings were that:

- *The fund saw £142 million of loan, grant and blended finance invested into 406 charities and social enterprises between 2004 – 2010.*
- *… a significant portion of FBE funding went to the most deprived areas.*
- *When comparing changes in deprivation levels between 2010 and 2019, we found FBE LSOAs compared to neighbouring non-FBE LSOAs, saw improvements in their deprivation levels.*
- *Deprivation levels improved by 12% when the FBE investment exceeded £3 million and over 17% when the FBE investment exceeded £4 million.*
- *This shows deprivation change in the FBE LSOAs is more favourable than the neighbouring LSOAs that received no FBE investment.*
- *And tellingly, the larger the FBE investment, the greater the improvement in deprivation compared to non-FBE LSOAs;*
- *This suggests that those areas that received FBE investment have managed to develop stronger levels of economic and social resilience.*

The research also used Gross Value Added (GVA) to measure the impact of social investment on economic output and productivity in these communities:

- *When comparing GVA changes, we found increases were higher in FBE areas compared to non-FBE areas. The difference in GVA*

change between FBE LSOAs and their surrounding non-FBE areas, for social investment exceeding £500,000, is 14% (between 2010-2019).

- *The GVA change between FBE LOSAs and non-FBE LSOAs rises to 42% for FBE social investments exceeding £3 million and rising to106% for FBE social investments exceeding £4 million between 2010-2019.*

The Chief Executive of SIB Nick Temple, comments in The Observer[32] that the loans had mostly been repaid:

- *At the time, it was viewed as quite risky because these were charities and social enterprises that no one else would lend to, primarily in the most disadvantaged areas of the UK*
- *It returns money to the government because the organisations have paid back over £100m of that loan. The organisations have created more jobs, they're in a stronger position in terms of their finances, and it's really having an impact on their communities.*
- *This should be music to the ears of policymakers – it's very rare to have this 20-year or 15-year view of these sorts of investments.*

The Observer article on Futurebuilders gave two local examples of Futurebuilders areas:

Save the Family in Chester, which supports vulnerable homeless families. It was able to expand its site after receiving a £2.5m loan and £1.4m grant, to include more homes, a children's centre and other facilities, and is close to paying back the whole of the loan.

The Women's Organisation, which supports and trains women in Liverpool to create businesses, was able to buy new headquarters with space to develop new businesses. It has now helped more than 60,000 women create more than 4,000 businesses.

Strong American evidence shows how to build more socially resilient communities that save the public money. The Futurebuilders Fund provides strong evidence of the ability to develop programmes that increase the economic and social resilience of communities through a viable economic model. The West Midlands is well positioned to take learning from both these approaches. This suggestion offers a conceptualisation of a possible development based around two different models.

This would need further detailed research. However the evidence indicates that a model could be developed that might significantly reduce the social and economic costs of adversity and trauma to West Midlands communities. The UK evidence also suggests that such a combined model could be implemented in a way that it would in time repay much of the upfront investment in improving economic outcomes that would be needed.

Barriers to Trauma-Informed Approaches

As a part of the literature review we were asked to provide evidence of the barriers to the region becoming trauma-informed and to include known or assumed challenges or conflicts within organisations.

In considering barriers to trauma-informed approaches there is a need to acknowledge that

firstly, becoming trauma-informed is not a new process in the region. Some organisations have been on this journey for a number of years. Secondly, becoming trauma-informed is akin to many other change and development processes that have an extensive literature base. Our focus here, is where the literature considers barriers specific to becoming trauma-informed. Whilst intrinsically connected, these can be broadly viewed in the following areas:

- Regional pan-organisational strategic responses to the social and financial costs of adversity and trauma for individuals and communities;
- Becoming trauma-informed as an organisational developmental process.

Whilst there is some helpful literature, referred to below, related to the process of becoming trauma-informed, what is evident is the limited literature that evidences barriers to developing trauma-informed responses either at a regional level or within organisations. In an *Evidence Review: Enablers and Barriers to Trauma-informed Systems, Organisations and Workforces,* published in 2023 by the Scottish Government[33], it was concluded that:

> *The main findings of this evidence review indicate that the (sic) while research about the implementation of trauma-informed approaches in different systems, services and organisation is* [a] *growing area, it is still at an early stage. The evidence reviewed was also constrained by inconsistencies and methodological weaknesses,* …

Although much of the literature is health related, given the strategic and organisational focus, we view the findings as much more broadly applicable.

Health Equity and Trauma-Informed Approaches

When considering both strategic and organisational barriers to provision of trauma-informed services, health equity should be a fundamental consideration. The West Midlands population is highly diverse and there are many communities with very high levels of poverty. We have already identified that both racial and cultural heritage and poverty can exacerbate the impact of adversity and trauma.

Intersectionality provides a clarifying lens on health inequality and trauma. In a paper for the Minnesota Department of Health, Shramko et al. (2019)[34] contend that:

> *Health equity "is a state of affairs where everyone has what they need to be healthy and no one is prevented from being as healthy as they can be by unjust or unfair barriers" (MN Statewide Health Assessment, 2017). Barriers to health equity in maternal and child health are often systemic in nature and rooted in trauma caused by intersecting systems of oppression. Specifically, intersecting social categories (e.g., gender, race, rurality, ability) and interlocking systems of oppression (e.g., racism, sexism, able-ism) may become barriers to women, children, and families having what they need to be healthy.*

When designing and delivering trauma-informed services the structural factors which for many communities and individuals create and exacerbate trauma as well as ensuring that the unequal impact of trauma and equitable access to services should always be addressed. In arguing for Action for Healing and Justice as part of systems change, Shramako et al. (2019) also consider that:

Both intersectionality and trauma-informed approaches also push us to move beyond analytically identifying trauma/oppression to actually applying the knowledge to processes of systems change. In both perspectives, transforming systems is a necessary condition to promote health equity.

First, action and moving towards or pursuing social justice (e.g., health equity) is an essential part of the intersectionality perspective. A trauma-informed lens, thus, inherently emphasizes inward transformation of systems of social services, health, criminal justice, and education to be trauma-informed.

The above needs to be considered in the context of recent figures from the National Child Mortality Database[35], showing that areas in the region have the highest rates of child deaths (both infants and older children) of anywhere in England.

Regional and Strategic Barriers

The mental health system and virtually every other social service component that interacts with the mental health system have been and continue to be under conditions of chronic stress. Many systems have individually and collectively experienced repetitive trauma, and are functioning within an overall social and political environment that is complacent about, if not overtly hostile to, the aims of recovery. It is a "system under siege".

Organizational Stress as a Barrier to Trauma Informed Service Delivery (Bloom 2010)[36]

The most significant barrier already identified is the very limited evidence of effectiveness of trauma-informed practice juxtaposed with the very high social and financial costs of adversity and trauma.

As considered in the sub-section above *Discussion of the Evidence Limitations*, doing nothing to address adversity and trauma is in our view neither an ethical or financially justifiable position and we concluded:

- On balancing the evidence, we strongly encouraged the West Midlands agencies to continue to provide and further develop trauma-informed services.
- We also stressed that public agencies need to act in ways that are evidence based and publicly accountable.
- This requires public services to act within the best available evidence and evaluate initiatives and to take all reasonable steps to ensure that they help and don't harm the people they serve.

As we also detailed in the sub-section Discussion of the Evidence Limitations above, limited evidence of effectiveness also raises other fundamental issue or barriers related to the legitimacy of trauma-informed services including proposing that:

- Trauma-informed services and interventions should be implemented and delivered collaboratively with full consideration to the need for informed consent.

In the introduction to the Literature Review we identified that one of the other main barriers to becoming trauma-informed was, what does trauma-informed mean? We also noted that another closely linked area was, to what extent trauma-informed approaches differ from good care and good practice? We identified problems these factors present:

- Evaluating the effectiveness of approaches that describe themselves as trauma-informed;
- Consistency in commissioning and delivery of services;

- Whether such approaches provide social or financial benefits.

To enable the region to overcome the definitional barrier of trauma-informed approaches we propose that a broad statement defining adversity and consequential trauma for the region should be agreed by the Trauma Informed Coalition, alongside definitions and standards for what comprises *trauma-informed* approaches.

This statement should include the agreed broad model of addressing and recognising the need to address Systemic Trauma and develop Systemic Resilience as outlined in *A Regional Framework,* in Part One. The statement should recognise that trauma and adversity needs to be addressed strategically and organisationally as well in delivery of services to individuals and communities.

In terms of trauma-informed practice the following from NHS Scotland provides a useful starting point:

> *Being 'trauma-informed and responsive' means being able to recognise when someone may be affected by trauma, collaboratively adjusting how we work to take this into account and responding in a way that supports recovery, does no harm, and recognises and supports people's resilience. (NHS Education for Scotland, 2017)*[37]

Whilst we propose adopting a regional strategic position, it should be recognised that individual agencies are entirely free to decide how they specifically define and address adversity, trauma and how they promote resilience, the definition being to guide not constrain. Our reasoning for this flexibility is that there should be no limits on individual agencies in terms of how they define and address adversity and trauma. This reflects that this is a developing area of work, that evidence of effective practice is limited and that there should be no impediments that might inhibit service development.

Nevertheless, we would also suggest that the statement includes that regional or local development or commissioning of services to prevent or address adversity and trauma always needs to have:

- Very clear service specifications including stated objectives and outcomes;
- Be informed by the best available evidence of effective practice; and,
- Always integrate evaluation into the specification of projects.

An area which we view as problematic is *to what extent trauma-informed approaches differ from good care and good practice?* There is not in our view a viable way to easily distinguish between empathic, caring and emotionally responsive services and something that might be defined as trauma-informed. This is a problem of attribution and accounting which needs to be recognised. However, both approaches are synergistic and in practice there may be limited differences. Both should be encouraged. Perhaps needing to accept that some of the caring human interactions that make such an important difference in all our lives can't always be counted or delineated.

The most comprehensive analysis we have found, of the barriers to trauma-informed services is an Australian policy report[38]. *Trauma and young people - Moving toward trauma-informed services and systems*. This report was published in 2018 by two children's mental health organisations. The report included considerations of *A 'systems approach' to young people and trauma*:

Human and social support systems in Australia have been moving toward a 'trauma-informed paradigm' that has been more fully realised in the US. Nationally and internationally it has been recognised that the multifaceted needs of people with trauma experiences require responses across a number of services and systems (not just mental health).

However, Australia is a long way off having the national and jurisdictional leadership, policies, frameworks, work force and service infrastructure to achieve a 'systems approach' to trauma. This would require: a) a system-level recognition and a consistent understanding of the prevalence and impact of trauma across a person's life; and b) the integrated and coordinated delivery of care and supports across human services, justice, education providers and mental health services, to enable multiple issues to be addressed simultaneously.

The analysis above has strong resonance with the position of the West Midlands. In the move towards trauma-informed services, the need for a consistent understanding of the prevalence and impact of trauma across a person's life and the integrated and coordinated delivery of care and support across the range of human services is vital. All of these areas, can also be seen to barriers that the West Midlands needs to overcome, for children and also for adults.

Within the Australian report they detailed a range of potential barriers, that may also be familiar within the West Midlands (some of these have already been identified). These barriers included:

- One of the clearest challenges for system-wide approaches has been the inconsistencies in the understanding of trauma-informed care.
- Being unable to identify a common assessment tool in youth-focused (12-25 years) services to screen or rapidly assess for trauma.
- Workforce challenges across a number of systems working with vulnerable and/or traumatised young people including recruitment and retention of qualified and experienced staff in child protection, juvenile justice, mental health and youth/social work related services.
- The siloed nature of health and human services delivery, along with limited resources and capacity and competition for policy prioritisation and funding present many road blocks to services working together in a collaborative way.
- As identified through experiences in the UK, without systems collaborating together, there is "no effective way to share, and flag, evidence of young people's and familial involvement, so that professionals could see if levels of adversity or symptomology were escalating".
- Currently "a `merry go round' of unintegrated care, risks re-traumatisation and compounding of unrecognised trauma". The lived experience of this failure to integrate and coordinate care has been articulated by young people in the UK.
- In their extensive work on adversity among young people in the UK over recent years, YoungMinds has frequently identified the need to establish interagency collaboration to ensure all of the young person's needs are being addressed.

It is interesting to note the range of UK evidence the above analysis relied upon. With regard to a systems approach to young people they concluded that:

Innovative and regionally responsive mechanisms for cross-sector collaboration for young people experiencing heightened risk and vulnerability (more often than not as a result of trauma experiences) have been developed in Australia and internationally. These approaches have

demonstrated improved outcomes for these young people, including in education and housing security.

With specific regard to mental health services they concluded that:

Current mental health policies do not adequately describe or emphasise the extent of exposure to trauma among young people, the impact of trauma and adversities on mental health and wellbeing, or explicit direction on the need for trauma-informed responses to be embedded in youth mental health interventions and services.

In a paper addressing *Trauma-informed care in child/family welfare services*, linking organisational approaches with broader systemic change Wall et al. (2016)[39] commented that:

Creating change at a systemic level is more than providing practitioners and organisations with tools. It requires changes to funding models to support outcomes rather than outputs, and changes to education for mental health practitioners, social workers and other specialists. Essentially, this is about a move towards a more holistic understanding of the inter-related biological, psychological and social dimensions of trauma.

We would suggest that most if not all of the above areas, represent barriers to trauma-informed care in the West Midlands. The Trauma Informed Coalition with the Combined Authority should consider the extent to which the above analysis is applicable regionally including how these can be resolved within the framework From Systemic Trauma to Systemic Resilience™ and the Transformational Proposals made in Part One.

Organisational Barriers

A significant review of the literature on the evidence of effectiveness of organisational change interventions was recently published. This considered trauma-informed approaches in primary and community mental health care settings. The authors (Lewis et al. 2023)[40] undertook a systematic review of the effects of such approaches on health care providers and adult patients. They concluded that:

Our first important finding is that the empirical evidence base for the effectiveness of trauma-informed organisational change interventions in primary care and community mental healthcare is very limited. Despite exhaustive searches, we only identified three nonrandomised quantitative studies and three qualitative service evaluations of different intervention models.

The research was undertaken by the Centre for Primary Care at the University of Bristol, their website outlined the findings:

Trauma-informed organisational change programmes may improve conditions for staff and patients in primary care and community mental healthcare, … Evidence was very limited and conflicting, but researchers found potential improvements to: staff readiness and sense of community, patient readiness for disease management and their access to services, staff and patient safety and some patient health outcomes.

Researchers found some evidence to suggest that implementing programmes at an organisational level may change organisational culture and create safe environments for patients and staff. Very limited evidence suggests that these programmes may improve patient quality of life, chronic pain,

and mental health. No studies measured adverse events, harm, cost effectiveness, or staff health.

This further demonstrates the limitations around evidence of effectiveness of trauma-informed care in a health context. Strengthening the need to ensure that development and commissioning of trauma-informed approaches draw on the available evidence and always evaluate outcomes for service users.

Addressing organisational challenges in implementing trauma-informed care, Wall et al. (2016) also further evidence findings identified in this literature review, stating that*; It is difficult to align organisational change to a specific practice without a shared understanding or vision of what trauma-informed care actually is*. They outlined that:

- *the field still lacked clear definitions or understandings of concepts;*
- *there were assumptions that children's social and behavioural difficulties were necessarily trauma related without clear assessment; and*
- *there was a lack of guidelines for assessment and treatment of trauma.*

In addition to the array of terminology and concepts that are sometimes used interchangeably and inconsistently, there is a lack of evidence-based guidance for specific settings and systems to assist with coordinating how trauma-informed practice should be provided for particular service settings and specific populations of service users.

The reviews by Lewis et al. (2023) and Wall et al. (2016) both expand and amplify the range of organisational barriers we have already identified.

An article by Sweeney et al. (2018)[41], was authored by *trauma survivors and service providers*. They considered specific challenges or conflicts within organisations in a mental healthcare context. The article draws on a wide range of literature. Learning objectives for the article included:

… how to practise trauma-informed approaches, including in 'trauma-uninformed' organisations, and the potential barriers to and opportunities from doing so …

The article explored *systemic barriers that can prevent individual staff from fully engaging in trauma-informed relationships*. Including in UK services:

- *austerity, underfunding and lack of resources, particularly staff shortages, can make the working environment stressful and at times overwhelming;*
- *grappling with top-down, unpredictable and frequent change in public services, coupled with a regular plethora of new initiatives to implement, can lead to confusion and exhaustion;*
- *low morale and high staff turnover, … can prevent meaningful long-term change;*
- *organisational cultures can fail to support, or can actively conflict with, trauma-informed working methods, an example is a risk-averse culture that encourages staff to engage with service users using 'power-over' approaches;*
- *a general lack of supervision, training and support, coupled with a specific lack of training on trauma-informed approaches;*
- *little exposure to the notion of social, urban, historical and cultural trauma;*
- *understanding the extent of trauma exposes human nature as cruel and perverse, challenging our worldview and making it difficult to accept that reality.*

In an American scoping review, *Facilitators and Barriers in the Implementation of Trauma□Informed Approaches in Schools* (Wassink - de Stigter et al. 2022)[42] the researchers set out to answer the question; *What are facilitators and barriers in the implementation of school-wide trauma-informed approaches and school-based trauma-specific interventions?*

At the outset of the paper recognising a major barrier to becoming a trauma-informed school, stating that:

> *There is no specific set of prescribed practices or interventions that are sufficiently concrete to guide the successful implementation of trauma-informed practices. What is essential to a trauma-informed school approach has not yet been clearly operationalized at the organizational and operational level (Baker et al., 2015; Maynard et al., 2019). This makes it difficult to pinpoint what changes need to be made in schools to become a trauma-informed school (Carter & Blanch, 2019).*

From an extensive analysis of the literature, applying a framework of implementation[b)], the barriers and facilitators found were detailed under a range of drivers. The barriers found were as follows.

Considering an ***organisation driver***, they outlined:

- Lack of strategic implementation planning;
- Lack of implementation knowledge: and,
- Fragmentation of intervention programs.

Considering a ***leadership driver***, they outlined:

- Lack of leadership support;
- Lack of resources;
- Lack of engaging stakeholders;
- Lack of caregiver involvement;
- Lack of collaboration between stakeholders and school staff;
- Lack of access to clinical support;
- Confidentiality concerns regarding students and families.

Other factors, including ***buy in***, they outlined were:

- Lack of buy-in;
- Conflict of socio-emotional and academic needs;
- Lack of trauma awareness;
- Impact of teachers;
- School climate: stress, lack of organizational consistency and workforce stability;
- Teacher attitudes and beliefs;
- General resistance to change; and,
- Punitive discipline.

In terms of the evidence analysed, they observed that:

> *… this review established that only 16 of the 57 sources (28%) studied (aspects of) implementation of trauma-informed approaches empirically. Most of these sources used a qualitative design and majority of these sources were not peer-reviewed. Hence, empirical evidence is scarce, and our findings are mostly based on (expert) opinions, ideas and practice-based experiences with implementing trauma-informed educational approaches.*

One of their key conclusions was that:

> *In order for trauma-informed educational (sic) to be effectively implemented it seems crucial that general guidelines are more concretely operationalized into practices. This helps schools to*

[b)] The framewok of implementation drivers was derived from implementation science, and carried out within the National Implementation Research Network (NIRN).

pinpoint what changes need to be made in schools to become a trauma-informed school (Carter & Blanch, 2019). This prevents schools from reinventing the wheel and helps moving forward to a successful and sustainable implementation of a trauma-informed school climate. Schools will be able to move from "what is a trauma-informed approach and what needs to be implemented" toward "how can we effectively implement the trauma-informed approach while sustaining program integrity."

The broader findings of the literature review lead us to believe that there are many similarities in the above findings related to schools, that can also be found across a much wider range of service areas.

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Part Three

Systems Modelling

(Modelling the Impact of Adversity and Trauma)

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Introduction to the Modelling

This section introduces the systems modelling and provides a guide to the reader in considering the findings in the following two sections. The first section is Regional Systems Models which outlines key conceptual frameworks that have been developed, the second section Cost Modelling applies and develops these conceptual frameworks.

The conceptual frameworks developed in the section Regional Systems Models enabled the development of two spreadsheet models:

- ACE Cost Model; and,
- Cost Modelling.

These spreadsheets are available with the report and are best studied alongside the Cost Modelling section and may also be helpful when reading this commentary.

The approach that underpins all of the modelling is viewing trauma and resilience systemically. The thinking stems from the overarching Regional Framework, *From Systemic Trauma to Systemic Resilience™*, discussed in Part One. This recognises that trauma can become woven through individual lives and communities. Creating and sustaining resilience for an individual is intrinsically linked to reducing trauma and promoting resilience within that persons family and community.

The concept of building systemic resilience, as well as the evidence regarding accumulated adversity and trauma indicates how overall effectiveness of services needs to be considered. This includes, the extent to which services are responsive to adversity and trauma and whether services are meeting the trauma related needs of those they serve. To be effective also requires services provide beneficial social outcomes and are judged to be cost effective.

The focus within this report is on public sector organisations whose purpose is to deliver suitable high quality services that benefit communities. Consequently, this leads to the view that reducing the financial and social costs of trauma requires a sustained leadership focus on reducing the burden of trauma on individuals and communities, including:

- Preventing adversity and trauma for individuals and communities, including by addressing the underlying structural issues;
- Providing services in ways that avoid traumatising or re-traumatising individuals and communities;
- Where trauma has occurred, ameliorating the impact for individuals and communities.

The modelling illustrates the cumulative impact of adversity and trauma. Where recovery opportunities are not available, the levels of adversity and trauma accumulate in a population, with possible amplification of adversity, risk and vulnerability. As individuals age, the number of agencies who may become involved are likely to increase, effectiveness may decrease and costs will rise.

This informs the view, that being trauma-informed is only ever a beginning. To be effective requires an ongoing focus on preventing trauma, actively identifying those who have been traumatised and ensuring they receive appropriate help and support. Failing to identify individuals who have suffered adversity and trauma both as children and adults is likely to lead to significantly increased cost for a range of agencies across each individual life course.

Understanding the likely cumulative harm and cost of adversity and trauma also informs the view that the underlying structural factors that may cause or sustain adversity and trauma need to be addressed. Failing to systematically address systemic factors linked with adversity and trauma risks increasing the proportion in the population with much poorer life course outcomes and further increased costs for a range of agencies. This in turn contributes to the view that there is a need to systemically address adversity and trauma and that transformational change is needed.

Through thinking systemically the modelling presents a very significant shift in the conceptualisation and understanding of the impact of trauma and adversity. This includes revealing the inter-relationship between services in *holding* and *helping* children. Including how costs are likely to increase if skills, knowledge, awareness and resources are not aligned and optimised, thereby ensuring children's needs are met and children are *held*.

In addition to *holding* and *helping* children the modelling also demonstrates the need to provide services in ways that avoid traumatising or re-traumatising individuals and ameliorating the impact of trauma for individuals and communities. Achieving all of these objectives requires:

- *Service Sufficiency* and accessibility to meet a person's relational needs; and,
- *Trauma-Informed Practice Alignment* to address the specific needs of those who have been traumatised.

The concept of *Service Sufficiency* has featured within government guidance to the public sector but is often limited to ensuring there is an adequate supply of a service. Here we are using the term more broadly to both encompass adequate supply of a service in a local context and that the service is of a high quality, having the capability to meet the diverse range of needs of the intended service users.

The concept of *Trauma-Informed Practice Alignment* draws on a wide range of management literature that recognises that to achieve organisational objectives requires organisational alignment. The literature typically includes the need to align strategy, leadership, culture, organisational processes and employees on organisational purpose (Senge 2006)[1]. To impact successfully on the adverse effects of trauma regionally, requires all organisations to be consistently aligned on Trauma-Informed Practice, including achieving equitable outcomes. Highly focussed leadership is also critical for delivering *Trauma-Informed Practice Alignment*.

The modelling also identifies the potential benefits of systems leadership to create *Trauma-Informed Practice Alignment* of multi-agency prevention and early help services. These services potentially have a key role in reducing traumatisation and amplification of trauma and trauma accumulation, lowering the cumulative burden of social and financial harm for individuals, families, communities and public services. If the above is recognised as a main purpose of prevention and early help services, these could be explicitly defined as supporting and strengthening universal services in order to *hold* and *help* children and enable recovery from adversity and trauma.

Related purposes of aligned prevention and early help services would become:

- Reduce risk of adversity and trauma;
- Identify and resolve adversity and trauma at the earliest opportunity;
- Building systemic resilience within families and communities; and,

- Enabling ongoing system learning to evidence where *sufficient* support for recovery improves individual and community outcomes.

Linked with the understanding of the very high cumulative social and financial impact of adversity and trauma, this lends significant weight to the need to ensure effective structures and governance of highly integrated prevention services. Together with flexible alignment within agencies to collaborate and pool resources to focus on the changing support needs and risks in localities.

A model to consider locally and regionally, is for prevention services to operate independently of the separate agencies with pooled resources. Achieving effective prevention and early help services also requires co-production with local communities to purposely respond both to prevent and ameliorate adversity and trauma and build systemic resilience.

CATs and AATs

Building on evidence in the literature review (see Review of National Policy and Evidence), we responded to the limitation of ACEs by considering how multiple adversities and traumas manifest in human lives. We have created a broad framework to address adversity, conceptualising Childhood Adversity and Traumas (CATs) and Adult Adversity and Traumas (AATs). This framework acknowledges that:

- CATs recognise a wider range of adversity than ACEs and intrinsically recognise that repeated events exacerbate risk and trauma related harm;
- Applying AATs allow services to move from just considering childhood adversity to consider the impact of adversity and trauma in adulthood;
- Both CATs and AATs enable the consideration of cumulative adversity across the life course.

The use of CATs and AATs enables a much more comprehensive assessment of the wellbeing and physical health risks and impact of adversity and trauma on individuals across the life-course.

Importantly, the conceptualisation of CATs and AATs facilitates a practical and universal way to capture data regarding 'what has happened to you'.

Developing Data Systems

There are a range of aspects of data recording and collection that are important in understanding the impact of services in ameliorating or amplifying trauma and providing effective help. For example:

- Children may be negatively impacted by breakdowns in school and care placements and subsequent moves, such events may cause significant stress for the child, loss of supportive relationships with adults and peers, this may further traumatise an already vulnerable child;
- Recognising this potential re-traumatisation makes such events highly significant to understanding if services do no harm and in considering the impact on the child;
- Where needs have not been met and the harmed and traumatised child journeys into adulthood, evidence show that they are more likely to endure poor outcomes e.g. health issues, homelessness, substance misuse, early parenthood and being criminalised;
- Recording life course events, including a person's journey through systems is significant in terms of creating an ongoing understanding of what's happened over their life-course;
- This enables the recording of emerging evidence of unmet need and of potentially poor immediate and life course outcomes.

Use of CATs and AATs enables the data recording and collection outlined above. Wide use of CATs and AATs also allows analysis of the extent and depth of adversity in communities. CATs and AATs enable:

- Much more sophisticated approaches to monitoring the appropriateness and effectiveness of service design and delivery;
- Over time, building a rich dataset of needs at key points as people journey through systems.

Proposed models for the development of Practice Based Evidence, utilise CATs and AATs, enabling aggregation of individual data to develop evidence of effectiveness. The modelling also suggest the need for more sophisticated approaches to monitoring flows in service systems, generating knowledge regarding the appropriateness and effectiveness of service design and delivery. Used effectively, this data could be used to shape service provision and better meet needs.

If data is structured appropriately, then a picture can also be built of services that are less effective and need support to manage and provide trauma aware services. Aggregating such data could also potentially make visible the underlying dynamics of effective access and engagement with people and services to help create more resilient communities.

We also wish to emphasise the importance of the West Midlands building the trauma-informed practice evidence base. Appropriately adapting information systems to enable insights to be generated from enriched datasets, for example, youth justice, early help and education databases (e.g. admissions, exclusions and school systems) would provide evidence of trauma in pathways through systems to help validate the modelling in this report. Ongoing enquiry of datasets along with health and police data could help to visualise accumulating adversity and trauma demand in localities over time. Targeted trauma-informed commissioning could then be considered against these findings and used to develop ongoing whole system modelling to continually optimise, manage and measure trauma-informed responses and service impact.

Reference

[1] Senge, P (2006) The Fifth Discipline, 2nd Edition, Random House Business.

Regional Systems Models

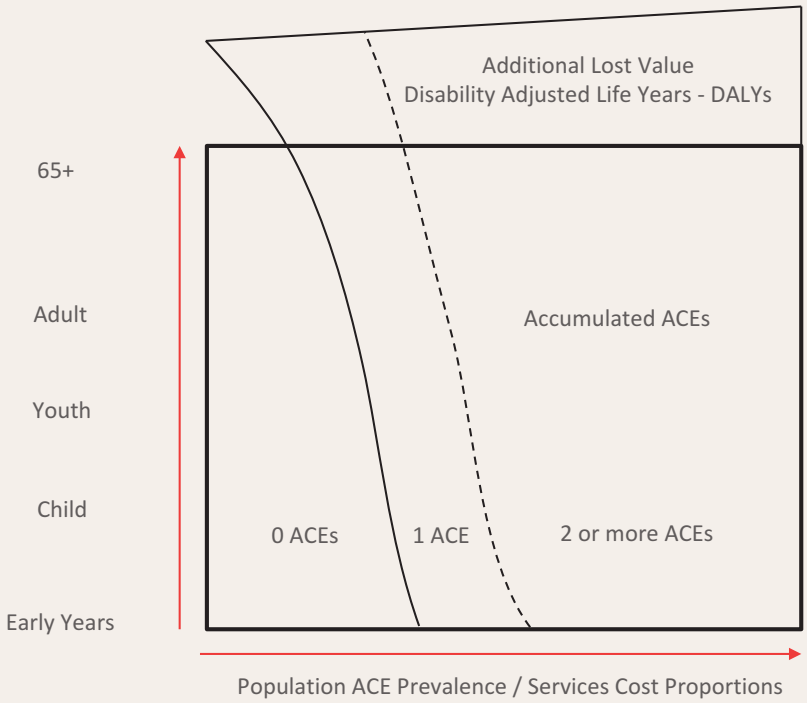
This section of the report builds upon the strategic framework From Systemic Trauma to Systemic Resilience™ in Part One of the Report. Including the academic evidence and applying that to develop systems models. This section also provides much of the underlying thinking for the Cost Modelling in the section that follows.

The concept of addressing systemic trauma through building systemic resilience reflects research which shows that adversity from childhood experiences often causes trauma and long term harm to individuals. Furthermore it is apparent that harm can accumulate and the impact of harm can resonate across the life course (Anda et al. 2006[1] Lewer, et al. 2020). The human impact (social cost) to individuals affects a very wide range of life course factors and outcomes including health, wellbeing, relationships, achievements, productivity and longevity (Bhushan et al. 2020). Such factors may also have significant individual economic costs.

The human impact then generates financial cost to society from a wide range of factors. These can include additional costs for example to education, health, social care systems and criminal justice systems as well as lost productivity. The overall level of unresolved harm in a population or system is reflected in accruing social and financial costs. In order to reduce the social and financial cost and harm there is a need to both prevent harm to individuals and communities and when harm occurs there is a need to ameliorate the impact and heal the harm.

Research and subsequent public strategy in this area has principally considered the prevalence of ACEs, with higher numbers of ACEs being shown to result in higher levels of consequential harm and trauma. In estimating the financial cost of lost productivity, an indicator (or measure) used is Disability Adjusted Life Years (DALYs). DALYs are a measure the World Health Organisation uses to consider the burden of disease born by different populations. DALYs combine in one consistent summary measure a) the burden from mortality, years lost because of premature death due to disease b) morbidity, years of life lived adversely affected by disease. Time lost to premature death is compared to a standard life expectancy, usually 80 years for men and 82 years for women. (The Nuffield Trust 2019)[2].

This is illustrated in the diagrams below and overleaf. The left axis represents the accumulation or reduction of adversity across the life course, whilst the lower axis represents levels of adversity from ACEs.



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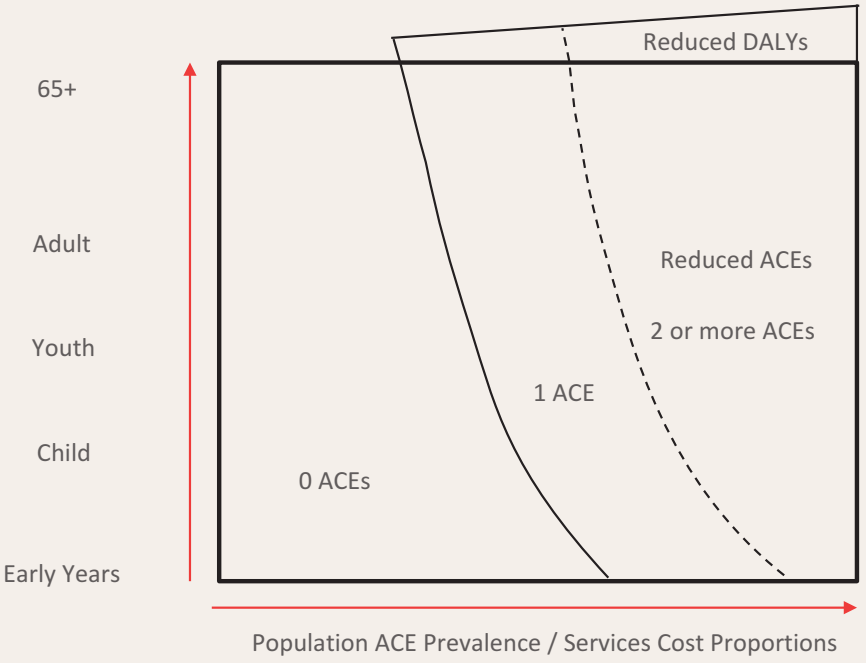


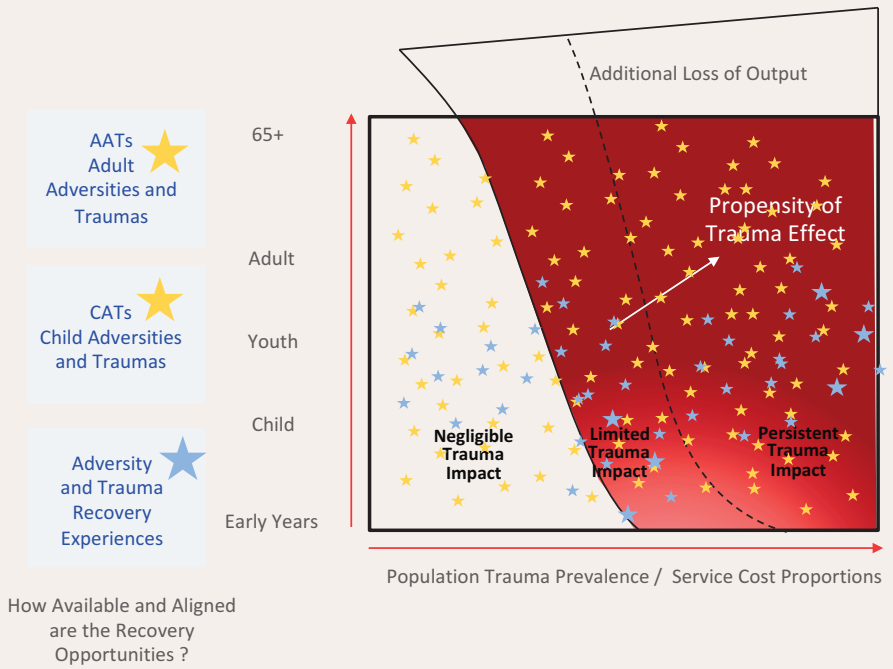
Improved System

As the levels of ACEs in a population are reduced or their impact ameliorated the productivity of the community, represented in reduced DALYs increases. Other positive impacts from reduced ACEs would include reduced public sector financial costs from lower demands on a wide range services. The social benefits would be likely to include improved wellbeing and lower levels of negative social impact including from factors such as homelessness, substance misuse and crime, which have been frequently shown to correlate with ACEs (Couper 2016)[3].

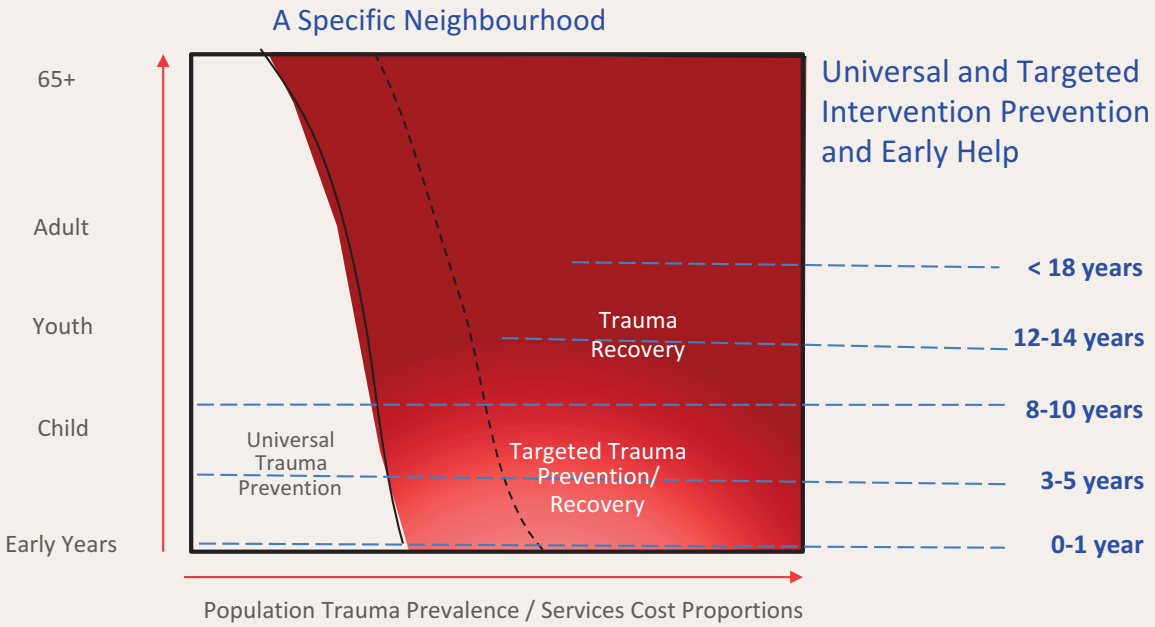
Two further diagrams here and overleaf illustrate and develop this thinking. We have conceptualised adversity and the impact it may have more broadly than ACEs, considering childhood adversity and trauma (CATs) and adult adversity and trauma (AATs).

This reflects that the concept of ACEs is limited in various ways including that the ACE's model usually considers childhood adversity based on just ten indicators of adversity and fails to account for cumulative adversity. (Also see the National Policy Review section of the report regarding ACE limitations).

The first adjacent diagram (A Local System - Extending the Concept) is illustrating opportunities for recovery from adversity. This also poses the important question as to how available and aligned the opportunities for recovery are for individuals and communities.



A Local System - Extending the Concept



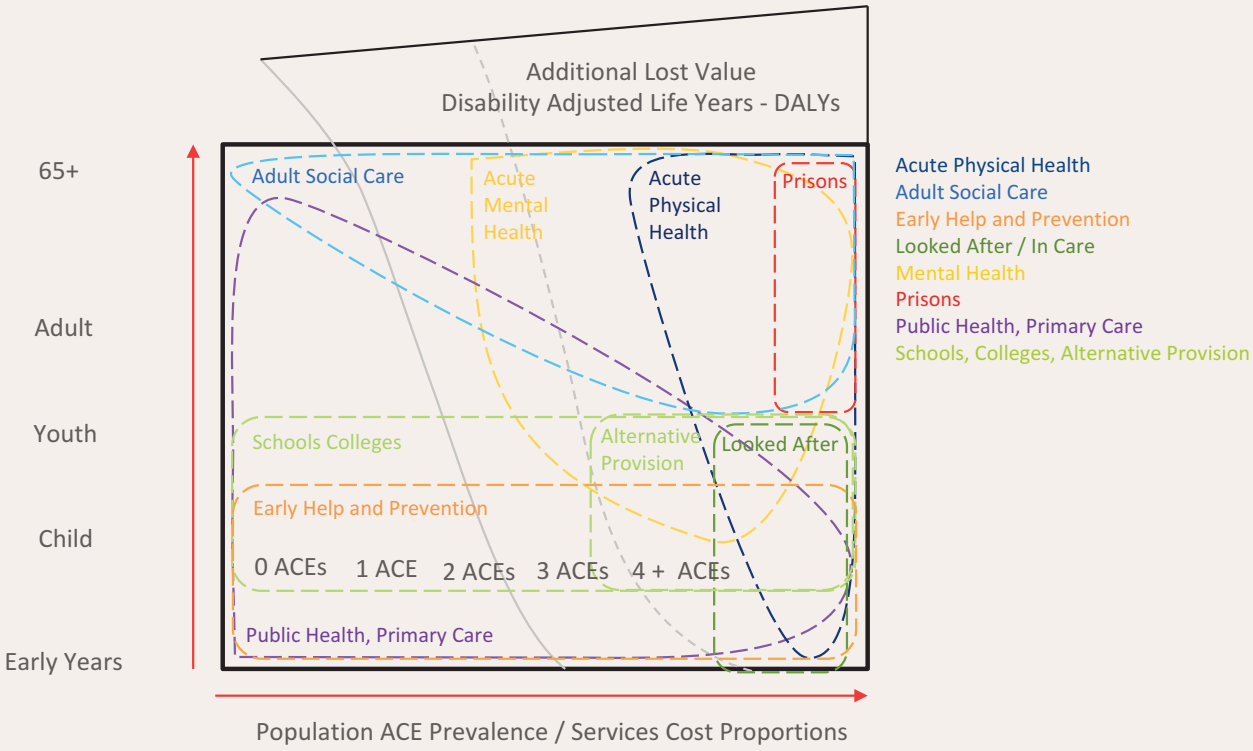
The Local Services System

The second diagram above (The Local Services System) considers services in a specific neighbourhood (but could also be more broadly applied). The age banding is important and reflects that the impact of traumatic experiences on children in the context of their developmental needs and stages will vary according to their age.

What age banding also potentially allows is to develop ongoing tracking of adversity and trauma experiences of children by age. Trauma aware, contextually structured recording and problem solving assessments as children pass through different services has the potential over time, to build a rich picture of effectiveness of interventions at different stages in the journeys of children moving through systems. Aggregating individual data effectively can then be used to shape service provision and prevention to meet needs leading to better outcomes.

The effectiveness of services in preventing and ameliorating trauma impacts on the extent and depth of trauma in the community and short and long term social and financial cost is illustrated. Part of the conceptual framework underpinning the diagrams is that in areas where there are higher levels of adversity, resultant trauma and the impacts may be amplified through reduction in amenities and increasing hazards and risks. Examples include, increased levels of anti-social behaviour, gang violence, and increased vulnerability of children to exploitation, potentially causing a greater propensity in a population to trauma and re-traumatisation.

Continues Overleaf



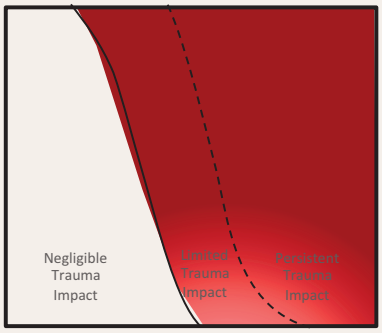
Typical Multi Agency Services System

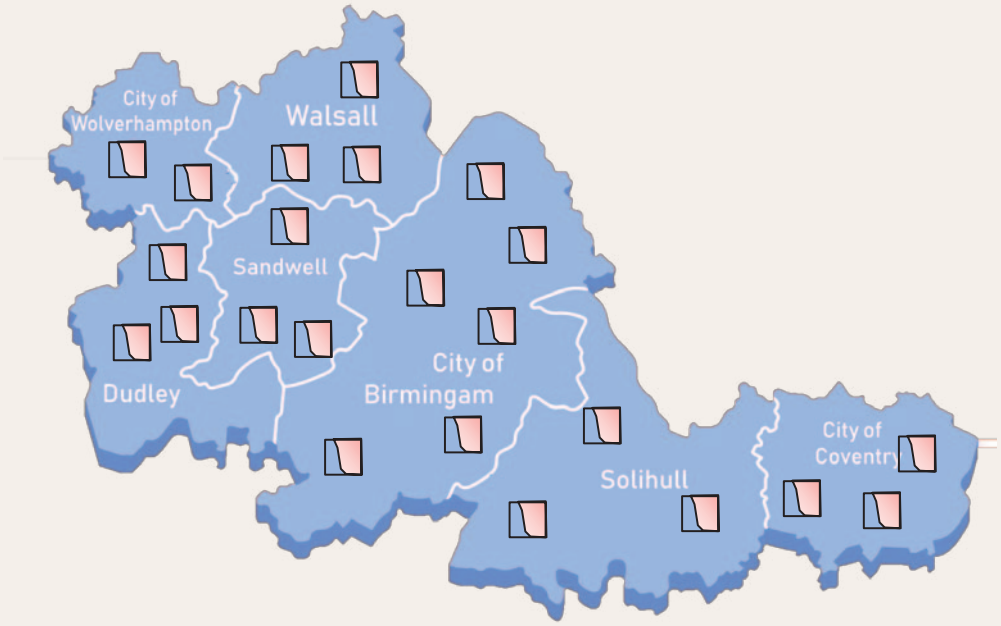
The diagram above (Typical Multi Agency Services System), shifts the focus towards multi-agency service provision. The diagram is representative of the likelihood that as adversity increases in a population and as individuals age, the number of agencies who may become involved are likely to increase and costs will also rise. (The agencies represented are only illustrative and the illustration is not proportional in terms of service involvement).

However, whilst only a partial representation, what this demonstrates is the complexity of service provision and the extensive overlaps in services both for individuals and for populations. This also begins to show the overlaps of expenditure and duplication of effort. When we consider a trauma aware perspective of **do no harm** this also begins to lend weight to developing integrated services. Alongside the likelihood of differing levels and causes of adversity in different communities this also supports the need for locally aligned prevention and early help provision that is able to meet local demand, this is explored further below.

Continues Overleaf

Individual, Family and Neighbourhood Context, Data and Evidence e.g. Deprivation, Risk, Service Trauma Alignment & Sufficiency





Mapping Trauma and Resilience

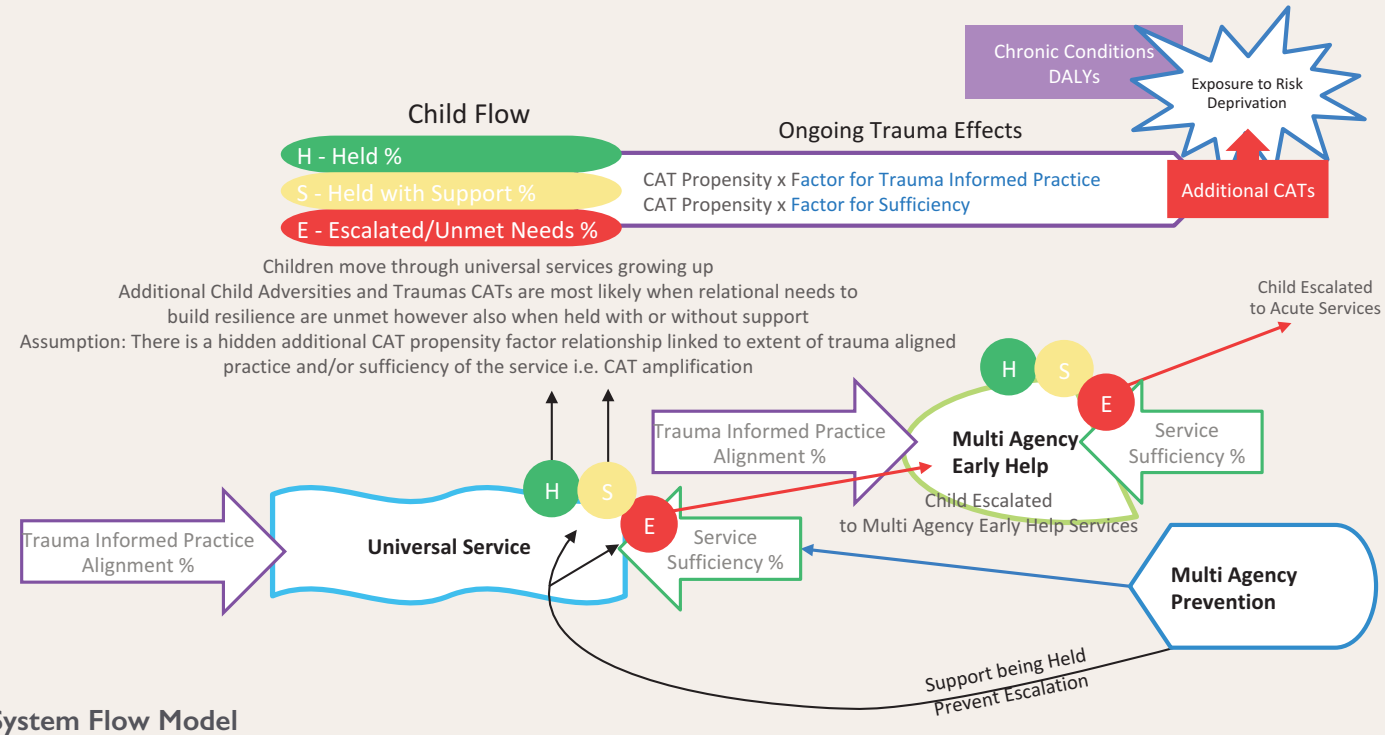
The ACE Index model devised by Dan Lewer and colleagues (Lewer et al. 2020)[4] used a wide range of data (including police, social services and education) to estimate the extent of adversity in local areas and provided local scores. (Summary of data for the region is given in the spreadsheet Service Costs).

The ACE Index model indicates widely differing overall levels of trauma across different authorities in the region. More broadly the model also showed the association between ACEs and child poverty providing evidence that deprivation increases the risk of adverse experiences in childhood.

The diagram above, (Mapping Trauma and Resilience), illustrates (with available data) the possibility to use the understanding of differing levels of local trauma on a locality basis. If applied regionally this could reveal differing levels of need within communities. Indicators of systemic trauma in an area or neighbourhood that could be applied might include the Indices of Deprivation, levels of crime, particularly violent crime, child abuse, domestic violence, unemployment, infant and child deaths and reduced life expectancy.

Conversely it should also be possible to develop indicators of systemic resilience which might include lower levels of the indicators of trauma discussed above, but also include indicators of social cohesion.

Continues Overleaf



System Flow Model

Extending the thinking further, the diagram above represents a Systems Flow Model. Applying CATs and AATs to consider how children move through services, (CATs and AATs provide a much wider view on trauma and adversity than ACEs). For illustration, we have applied the model with a focus on a school (as a universal service) and links to external services. The model incorporates a holistic view of the child's needs e.g. education and learning skills as well as emotional development and regulation skills. Considerations in viewing the model:

- The catchment area of the school will affect the proportion of pupils that may have had adverse childhood experiences (pupil premium could be used as a proxy for levels of adversity);
- Children who have faced significant adversity have a greater likelihood to have experienced trauma and consequently are more likely to suffer with mental health issues, have special educational needs and/or learning difficulties;
- The extent to which the policies and teaching practices within the school are **Aligned on Trauma-Informed Practice** affects the extent to which children are **Held** by the school or **Held with Support** or **Escalated with Unmet Needs**;
- The overall **Service Sufficiency**, how well resourced the school is to meet the child's diverse learning needs will also impact on outcomes for the child and if they are **Held** by the school;
- Behaviour policies and teaching approaches within the school have the potential to either ameliorate and help heal the trauma the child experienced or could exacerbate the impact of their adversity and further traumatise the child;
- Services outside the school also impact upon how well a child who has experienced adversity and possible trauma is **Held,** whilst the outcomes for the child are also affected by how **Aligned on Trauma-Informed Practice** external service are, as well as the **Service Sufficiency** with which they meet the child's needs;

- A child who is **Escalated** because their needs are not met, who transfers schools or is excluded faces loss of adult support, loss of friends and may feel failure and experience shame. This may cause further childhood adversity and trauma (CATs) for the child and their family and expose the child to further risk of trauma.

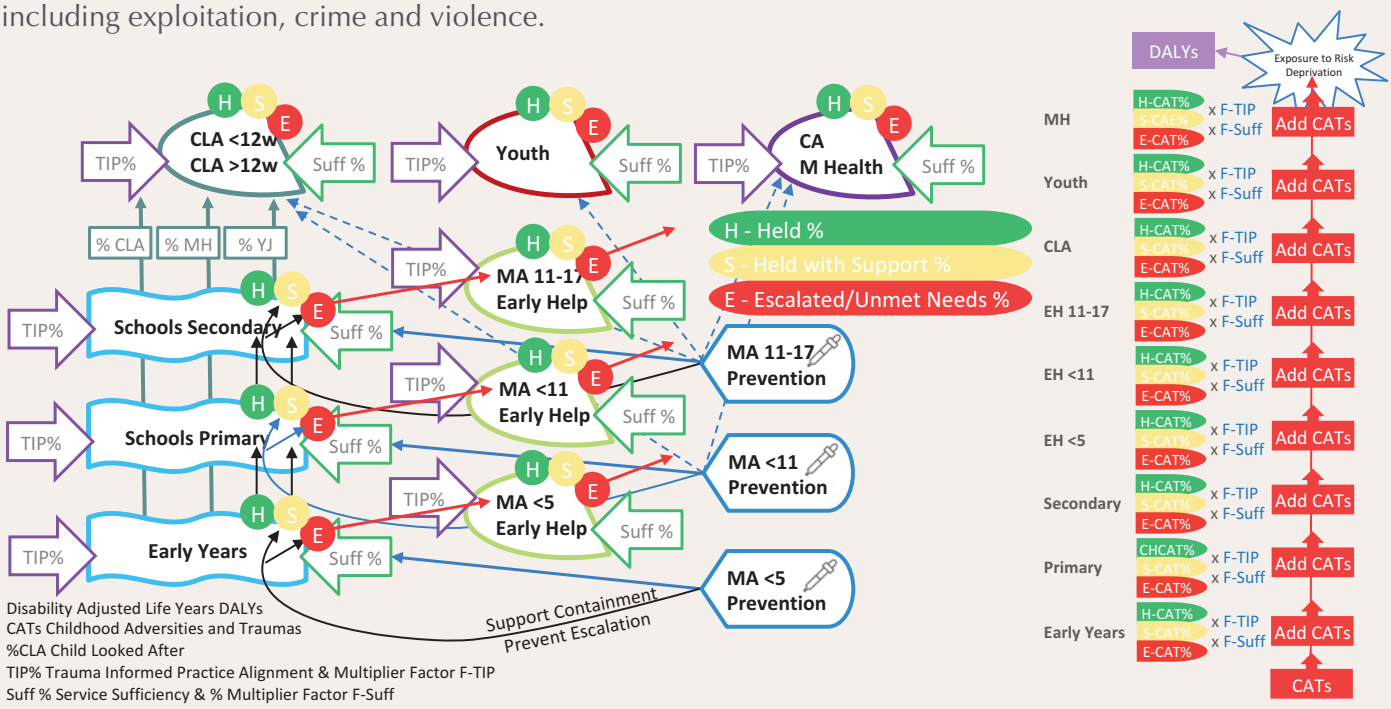
Whether the school as a service **Holds** the child, with **Additional Support** if needed, from external agencies, will determine whether the child is escalated to more acute services such as alternative education provision or becoming looked after. Such escalation may harm the child and is likely to increase system costs, possibly very significantly, e.g from the turbulence of multiple school and childcare placements.

A gap in the child's education including from exclusion or a lack of a suitable placement, may further impact the family including their ability to work or care for other children. Being out of education will leave the child more vulnerable to risk including exploitation, crime and violence.

The Services System Model diagram below illustrates how the Systems Flow Model (above) is scaleable and enables the consideration of the interaction and flows between services, in this case early years services and schools. The model is applicable and scaleable across all service areas for either adults or children. (As per the Systems Flow Model above, the Services Systems Model shown below utilises CATs and AATs).

The model has led to the development of a cost model that enables hypothesising on the impact of **Trauma-Informed Practice Alignment** and **Service Sufficiency.** The model has been applied in the next section of this report, Cost Modelling.

So far as we are aware, the major academic studies providing system modelling of the costs of ACE's and adversity have been based upon lost productivity from ACEs (calculated by the impact of DALYS on GDP) (Bellis et al. 2019)[5]. Significantly, what the Systems Flow Model (above) provides is a dynamic



Services System Model

view on how the responses services make to those experiencing adversity and trauma, affect how children flow through public service systems. This includes whether services ameliorate or increase adversity and trauma which affects the flow through systems and how this may affect costs particularly through escalation into more specialist services.

We believe this modelling represents a very significant shift in the conceptualisation and understanding of the systemic impact of trauma and adversity. Offering the West Midlands not just a reconceptualisation of how adversity and trauma affects systems and costs but capabilities for services to begin to gather data on levels of adversity and effectiveness of responses.

This in turn provides the possibility for effective strategic and financial planning to reduce systemic trauma and enhance systemic resilience, improving services for children and reducing long term costs both for children's services and broader public services. At the same time also reducing the social impact and harm from adversity and trauma. The Cost Modelling section that follows explores this thinking.

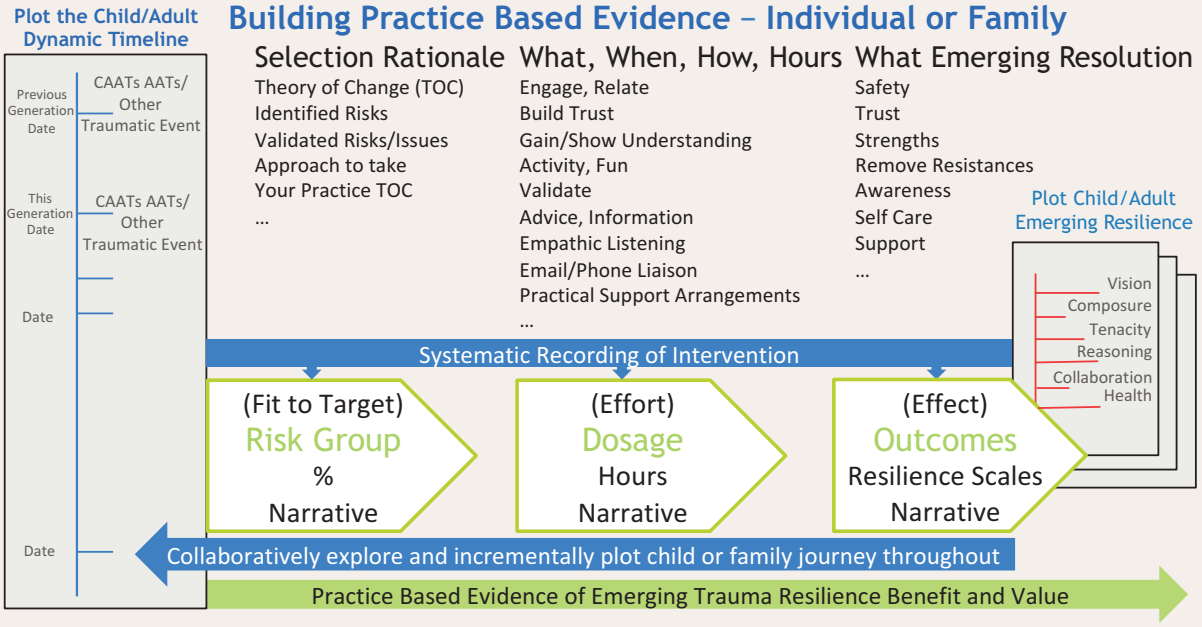
Developing the Evidence Base

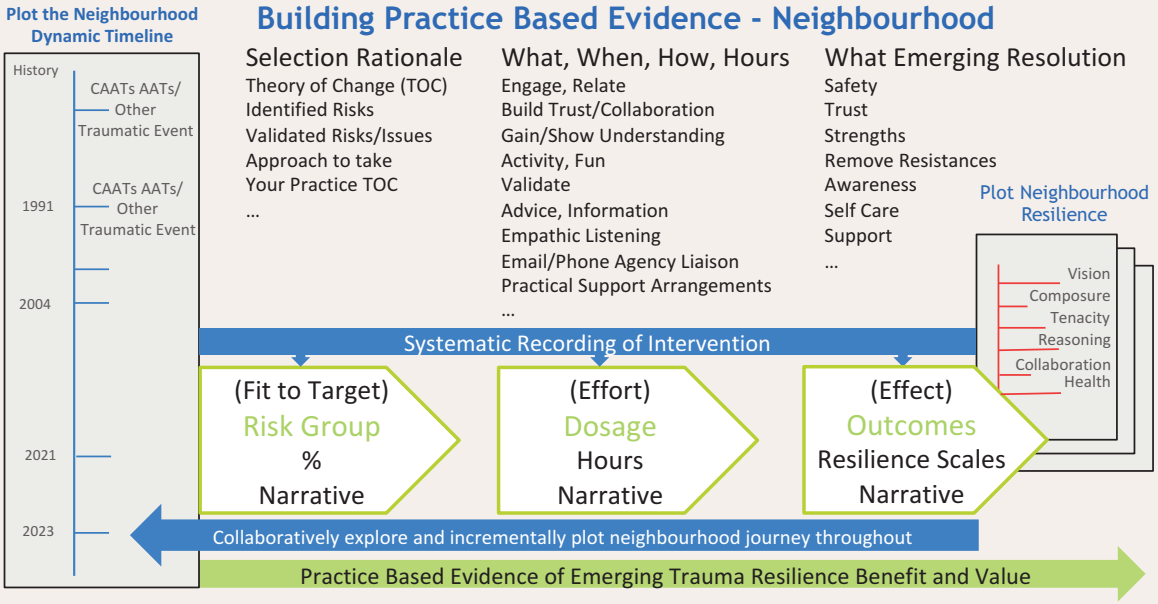
Whilst there is evidence that building community resilience can be successfully achieved we have also identified in the National Policy Review and in the Wider Literature Review that the existing evidence on the impact on outcomes of trauma-informed practice have significant limitations.

Consequently we are of the view that re-modelling of services to reduce trauma and build resilience needs to be located within a theory of change that incorporates evaluation and building the evidence base around effective service design and delivery.

The following two diagrams (one overleaf) outline an approach (or theory of change) that can be applied to working with individuals, families and communities.

The models provide a mirrored approach across the areas of work with individuals, families and communities. They represent a shift towards recognising that individuals, families and communities futures are shaped by their lived





experiences (including adversity and trauma) and that this past lived experience for the individual is relational and systemically intertwined with their experiences in families and communities.

The models recognise the importance of the chronology of unfolding events that affect and reflect both trauma and resilience and suggest the need for developing measures of resilience for individuals, families and communities. Whilst the models can be applied distinctly (i.e. to an individual), given the systemic nature of trauma and resilience and how impact and outcomes may be impacted by all three areas, we are of the view that the greatest impact lies in application of the model across all three areas.

The models also recognise that risk of future traumatic harm for individuals, families and communities resonate within the dynamics of families and communities as well as in an individuals history and experience (Chard 2021)[6]. This has implications for developing practitioner knowledge of how historic trauma affects individuals, families and communities.

Evidence of earlier and ongoing adversity and trauma also needs reflecting in recording of information including the need to develop structured timelines of events for individuals, families and communities. The way trauma resonates, also requires development of assessment systems and performance management systems to facilitate integrated resourcing and working.

One purpose of this is to build shareable practice evidence of what happened to the child and their context (structured data and narrative), so that it can be shared across agency systems. More effectively meeting the child's needs by enabling greater service integration and developing multi-agency responses which causes less harm and builds better outcomes.

As is suggested in the section above, the data generated can also be used to track and measure the underlying CAT or AAT picture and in addition can be aggregated to enable strategic optimisation of resourcing for prevention and early help services. Importantly also providing the basis for ongoing evaluation of service effectiveness and impact.

References

[1] Anda, R.F, et al (2006) The enduring effects of abuse and related adverse experiences in childhood. European Archive of Psychiatry Clinical Neuroscience.
[2] Nuffield Trust (2019), International comparisons of health and wellbeing in adolescence and early adulthood.
[3] Couper, S, Mackie, P, (2016 'Polishing the Diamonds' Addressing Adverse Childhood Experiences in Scotland, Scottish Public Health Network.
[4] Lewer, D, et al (2020), The Ace Index: Mapping Childhood Adversity in England, Journal of Public Health Vol 4, Issue 4.
[5] Bellis MA, et al (2019) Life course health consequences and associated annual costs of Adverse Childhood Experiences across Europe and North America: A systematic review and meta-analysis, The Lancet Public Health.
[6] Chard, A (2021) Punishing Abuse, WMCA.

Cost Modelling

Our original agreement with the WMCA was to provide an analysis of costs and potential financial benefits to the West Midlands of becoming a trauma-informed region. However, at an early stage it was evident from the literature reviewed that evidence of the social and financial benefits of developing trauma-informed approaches were very limited. Whilst there was very good evidence of the cost of adversity calculated from levels of adverse childhood experiences (ACEs).

As detailed in the Literature Review, there are many instances where various areas (e.g. Northern Ireland, Scotland, Wales and American States) have taken political and policy action to address adversity. It became apparent that the adoption of trauma-informed approaches in many contexts were based upon the mounting evidence of the significant harm that childhood adversity cause to individuals and populations, alongside the increasing evidence showing that the accruing financial costs from the impact of ACEs is extraordinarily high. This has created an environment in which ACE and trauma-informed practices have flourished, whilst evidence of improved outcomes and cost effectiveness from trauma-informed approaches remains very limited.

Consequently it was agreed that the most important and viable approach to financial modelling was evidencing the cost of adversity and trauma. With the underlying question to be addressed being *What will it cost us if we don't become trauma-informed*?

Typically a cost benefit analysis is used by agencies to consider the desirability of a particular policy or strategy and specifically to consider if the identified benefits of investments outweigh likely costs. The scenario within the West Midlands is more specific, with implicit commitment to becoming a trauma-informed region having already been developed. This decision having been based on the factors outlined above for other areas, with regard to high harm as well as high cost from ACEs.

Reflecting the above, the conceptual frameworks developed in the previous section Regional Systems Models enabled the development of two spreadsheet models:

- ACE Cost Model; and,
- Cost Modelling.

These spreadsheets, available with the report, are best studied alongside this section of the report. The financial modelling in the spreadsheets explored here, expands the thinking developed in the previous section Regional Systems Models. Providing conceptual financial models that add cost elements.

These models enable interaction with variables to explore key concepts presented in the Regional Systems Models. The financial models allow consideration of:

- Annual projected cost of lost future economic productivity as a consequence of impact of earlier childhood adversity or trauma;
- Improved projected costs of lost future economic productivity by earlier childhood adversity or trauma being ameliorated.

The modelling also allows consideration of how children flow through systems and how *holding* children or their escalation through systems, can affect cost. Limitations of data availability from these flows and limited academic evidence preclude definitive local costings. However this aspect of the

modelling is likely to be significant in terms of considering ameliorating the impact of adversity and trauma on children via services and systems.

Spreadsheet Models

The following provides an overview of the functionality of these spreadsheet models and examples of the key insights they provide. The modelling draws upon methodologies and data published by academics linked with organisations including the World Health Organisation (WHO), Public Health Wales and Bangor University. (Bellis et al. 2019[1], Hughes et al. 2021[2]).

These academic papers draw upon data of ACE frequency in populations and attributable fractional cost of disease attributable to ACES and Disability Adjusted Life Years (DALYs; modelling the financial cost of ACE through lost gross domestic product (GDP). DALYs are a World Health Organisation (WHO) measure of time lost to premature mortality, years of life lost due to years lived in less than full health, or years of life lost to disability (See discussion in the previous section Regional System Models and who.int Global Health Observatory).

Our reason for modelling projected costs based on this approach, reflects that the impact of ACEs on lost productivity due to ill health and premature death is the most studied area we have found. Providing the strongest academic evidence of where some of the recurring financial cost of adversity lies.

A limitation of the cost modelling is that in addition to costs of lost productivity due to adversity there are very significant costs of responding to the affects of adversity and trauma to a wide range of public services (e.g, education, health, police and social care). However, beyond some individual service areas, we are not aware of any comprehensive attempts to model or project these costs in the UK.

Internationally such studies are also limited. Where studies do exist, the differing public service models (i.e. health and social care) mean that costs are not directly comparable to the UK. Consequently the wider costs to public services of adversity and trauma have not been modelled here. Given the wide range of service areas affected across the life course, these costs whilst not modelled, will be extremely high and are additional to the costs outlined below.

It is important to note that in making projections we have drawn on data and made assumptions that are at the lower end of the scale in terms of estimated costs of ACEs. Consequently, in our view the figures below probably understate the significant financial cost of adversity and trauma in the region. Whilst based within the best available academic evidence, these are theoretical models. The cost modelling here and within the supplied spreadsheets is intended to be illustrative and is not intended to be relied upon to predict future costs or potential cost savings.

ACE Cost Model Spreadsheet

The ACE Cost Model spreadsheet (at tab GDP ACE Estimated Savings), considers ten prevalent health conditions, (harmful alcohol use, illicit drug use, smoking, obesity, anxiety, depression, cancer, cardiovascular disease, diabetes and respiratory disease). Drawing on European data the spreadsheet calculates the projected annual financial cost that accrues as a result of lost productivity (Gross Domestic Product (GDP)) due to the impact of adverse childhood experiences (ACEs) on long term health and premature death.

	ACEs	GDP Lost Cost from Conditions Millions	Millions Saved Annually if ACEs Reduced by 10%	Speculative Annual Lost Cost	Speculative 10 Year Lost Cost
Birmingham	716,335	1,038	£103.841	£88,712,978	£1,067,030,732
Coventry	233,371	370	£37.030	£28,901,304	£347,621,965
Dudley	200,664	210	£21.035	£24,850,768	£298,902,520
Sandwell	205,386	256	£25.615	£25,435,563	£305,936,377
Solihull	135,119	348	£34.824	£16,733,475	£201,268,542
Walsall	179,513	179	£17.949	£22,231,368	£267,396,641
Wolverhampton	164,877	194	£19.421	£20,418,853	£245,595,905
Region	**1,835,262**	**£2,597**	**£259.714**	**£227,284,308**	**£2,733,752,682**

Note: In the table above the set average prevalence of ACEs in the population with 2 or more ACEs is 3.25 (this figure is derived from a UK based estimate of ACE prevalence (Bullock 2019). Annual inflation is set at 5% and annual increase in ACEs at 2%.

The ACE Cost Model (in tab GDP ACE Estimated Savings) also provides calculated annual savings from reducing the incidence of ACEs. The default is 10% but this can be changed. However, we are not aware of published research or data that identifies explicitly the relationship between levels of ACE reduction and improved GDP output. Given the complexity of these relationships, the GDP gains would probably not be proportionate to the level of reduction of ACEs.

The ACE Cost Model (in tab ACES to DALYs) uses the number of ACEs in the tab GDP ACE Estimated Savings. It creates an indicative proxy cost using proportions from the research literature and assumed defaults associated with the different conditions.

A summary of the analysis that can be undertaken is as follows; a) the prevalence within a given population of each condition b) the proportion of the condition that is estimated to be attributable to ACES and c) the percentage impact this is estimated to have on gross domestic product (GDP). The estimated loss of GDP is based upon DALYs. These estimates are provided for the West Midlands Metropolitan Area and for each of the seven local authorities. (See commentary in Spreadsheet Models above regarding DALYS).

Note: as stated above, we have drawn upon European projections on the impact of ACEs on GDP, to project the annual cost of lost GDP attributed to ACEs. This reflects the fact that the European projections are at the lower end of estimates made in such studies. Consequently in our view the estimates are also at the lower end of likely impact on GDP of ACEs and also of beneficial increases in GDP as a result of reductions in ACEs.

The population profile of the West Midlands, with areas of high levels of deprivation and ethnically diverse populations indicate high prevalence of ACEs. This also suggests that at both a regional level and for the majority of authorities, that the model probably under estimates the levels and financial impact of ACEs.

Drawing on the model, the table shown above, (derived from Bullock 2019)[3] in the column **ACEs** shows the estimated numbers of ACEs for each authority and for the region. The column **GDP Lost Cost from Conditions** shows the estimated annual cost of ACEs (linked with the ten prevalent health conditions) for each local authority area and for the region. The regional annual cost of ACEs due to loss of GDP is estimated at £2,597 million (£2.6 billion).

The table then shows in the column **Millions Saved Annually if ACEs Reduced by 10%** the projected financial gains from a 10% reduction in the level of ACEs in the population.

The model at tab ACES to DALYs utilises data in the tab GDP ACE Estimates to consider the impact on costs of cumulative adversity. Whilst some of those affected by adversity will recover, the model reflects the evidence that those who have been affected by adversity in childhood (particularly those most badly impacted) are often those who accumulate further adversity across the life course (Anders et al. 2006)[4].

The defaults within the spreadsheet allow varying the proportion of the population for each condition where there is lost productivity (Assumed ACE DALY Relationship) and variation of the number of years for this accumulation. The fractional increases which these projections take account, are in the defaults tab. The percentage figures across the conditions vary, these have been estimated based upon the percentage of the population affected by the condition as well as the fraction of that population where ACEs are believed to have attributed to that condition.

The table above in column **Speculative Annual Lost Cost** shows the potential impact on costs within a year and the in the column **Speculative 10 Year Lost Cost** across 10 years.

Whilst a theoretical model, it demonstrates that very small percentage increases in adversity (ACEs) across the life-course have the potential for very significant increases in lost productivity and earnings. If this position is accepted, then it provides further evidence of the social and financial need to ameliorate the impact of childhood adversity. This is a key economic argument of the need to address the underlying structural issues that may create and sustain adversity and trauma and heal the harm caused. Including, ensuring that wherever possible, how services are governed and delivered, reduce rather than amplify the impact of adversity.

Cost Modelling Spreadsheet

The second spreadsheet Cost Modelling, is also a theoretical model aiming to illustrate and identify how trauma and the impact of trauma-informed practice could positively affect how children move through universal education, early support and specialist services. The model is structured to potentially capture flows from the universal provision of individual schools. Illustrating the need to identify critical gaps in capability and to effectively respond to diverse adversity and trauma demand.

The model uses publicly available data from Sandwell and is modelled on a single authority. However, it is scaleable and applicable to all authorities locally.

The Modelling draws on the concepts of Disability Adjusted Life Years (DALYs), Childhood adversity and Trauma (CATs) and Adult Adversity and Trauma AATs as outlined earlier in the Regional Systems Models section. The modelling also relies upon two key concepts introduced in the Regional Systems Models, these are as follows:

- The concept of *Service Sufficiency* encompasses adequate supply of a service in a local context and that the service is of a high quality, having the capability to meet the diverse needs of designated users for the intended service design;
- The concept of *Trauma-Informed Practice Alignment* recognises that to achieve organisational objectives there is a need for operational alignment. To successfully respond to behaviours that may relate to the effects of adversity and trauma requires the leadership and workforce to be consistently and consciously aware of the possibilities and to develop skills in creating safety and relational practice to ameliorate harm and promote recovery. The aim being to achieve more equitable access to local resources and establish the necessary positive pathways leading to better outcomes for children and adults.

Data Flows, Linked Tabs and Projected Costs

The data flows through a series of inter-linked spreadsheets in a series of tabs. Conceptually, the flow is based upon the Systems Flow Model also shown in the Regional Systems Models section. This Illustrates how children may flow through universal provision of education and other increasingly specialist and expensive children's services. These tabs and their functions are as follows:

- The **tab Services Costs** allows specific service provision i.e. individual school cohorts or overall service provision stage i.e. secondary to be evaluated in terms of Sufficiency and TIP alignment as well as capacity to hold cohorts.
- The **tab Flow** aggregates cohort data in the **tab Services Costs**. It also draws in numbers of Childhood Adversity and Trauma Experiences (CATs) based on population figures and assumptions about percentage of the population being impacted. This is drawn from **the tab CATs to DALYS** as well as additional effects e.g. deprivation in the **tab Defaults.**
- Aggregation in **tab Flow** uses either *overall* or *detail* indicated in tab **Services Costs** Column D.
- The **tab Flow** also operates a propensity multiplier (TIP and Sufficiency) see **tab Defaults**. This aggregates CATs Out for each service level. This Illustrates total CATs out as well as numbers with no service.
- The **tab CATs to DALYs** calculates the cost of the totals in **tab Flow**.
- The **tab Flow** shows increases in CATs based on figures in the aggregation model. Over a period of 4 years CATs are shown to increase by 65%.

Using the values set out in Data Model Inputs v1.3 available alongside the report, the modelling applies an assumed relationship and assigned values between ACEs, CAT's and the cost of DALYs. As outlined above, the model generates over 4 years an overall increase in CATs of 65% for Sandwell. These assumed relationships represent £277 million annual future lost cost of DALYs for Sandwell.

In contrast using 2% improved values for prevention, 10% improved values for primary and secondary schools' sufficiency and 20% improved Trauma-Informed Practice Alignment generates (4% less CATs overall) and £259 million annual future lost cost of DALYs. A reduced future lost cost of £72 million over 4 years.

It is important to recognise that we have used assumed values within the modelling for these variables. The variables themselves are novel and data is not available to validate these figures.

Summary

What the output from the Systems Flow Model clearly illustrates is how variability in *Service Sufficiency* in meeting a child's needs and variability in the extent to which there is *Trauma-Informed Practice Alignment* affects flows into services and is likely to impact positively or negatively on service use and future cost. In addition the model:

- Enables basic evaluation of trauma-informed practice and the impact on system (flows);
- Illustrates the potential benefits of *Trauma-Informed Practice Alignment* of multi-agency early help and prevention via population flows which show escalation of service and possible amplification of adversity, risk and vulnerability;
- Supports movement across the region towards trauma-informed practice standards and kite-marking in schools.

Although not costed, the modelling shows the potential for significantly increased costs arising from the need for more acute services both in the short and long term. The modelling also begins to link the output of flows from universal services to the longer term costs of amplifications of trauma impact. In the broadest terms what the modelling illustrates is the need to ensure that the whole system of universal and additional support services are aligned on the delivery of trauma-informed practice.

We are also of the view that the principles in the modelling including *holding* and *helping* children in order to prevent escalation into more acute services are applicable for a broader group of children. Not just those identified as being impacted by adversity and trauma. Consequently, the modelling has wider application supporting reduction from the potentially negative impact on children of inappropriately moving provision, thereby causing escalating cost. If it is recognised that the model has wider applicability, then irrespective of evidence of effectiveness of trauma-informed practice, the model has the potential to refocus operational practice, the performance management of services and how services are delivered to children.

The modelling illustrates children being escalated through the system, however it is not directly addressing children moving out of the system, e.g. truancy, exclusion and home education. Numbers of children missing education and those being home educated are rapidly increasing (DfE 2024)[5]. These are children whose future life may be harmed as a consequence. Their future social and economic contribution lessened or in some cases becoming harmful. These children also need *holding* and *helping,* for their benefit and the broader benefit to society.

In conclusion escalation, children moving out of the system and amplification of trauma are likely to lead to very significant future loss of productivity represented in future reductions in GDP.

The modelling strongly suggests the need for integrated arrangements between services to focus prevention and early help provision to enable holding of children and ameliorating the long term impact of trauma. Consequently reducing levels of avoidable escalation through specialist and acute services. This requires building capability across services to identify the presenting effects of trauma and acting appropriately to reduce these.

Overall Limitations of the Modelling

In considering the Cost Modelling it needs to be recognised that key concepts such as ***Service***

Sufficiency and ***Trauma-Informed Practice Alignment*** used within the model and in particular the way they are being applied in this context, are novel and untested. It is also important to recognise that as far as we are aware there is neither research, nor available data that addresses identifying and engaging with unresolved trauma and the effect that this demand has on flows through public service systems and increased or reduced costs. In addition, at this stage of regional development of trauma-informed practice, there is an absence of data:

- Relating to the availability of trauma aligned early help responses;
- Identifying where trauma needs have been identified and ameliorated (met or held) through intervention; or,
- Escalated due to due to inappropriate responses and gaps in capability to address need.

In addition, there is no common local or national definition of multi agency prevention and early help service or their governance structures.

The services and data related to multi agency prevention and early help across the seven WMCA authorities are diffused across services, including health and social care. This prevents the aggregating of costs both in local areas and regionally. As a result, it has not been possible to use actual (real world) validated data within the spreadsheet model. It should also be recognised that:

- The model is a simplification of a highly complex system e.g. individuals can flow within (churn), up and down, only up is represented);
- The model is static versus dynamic e.g. prevention effects will change flows/costs over time and does not show sustainability of outcomes and system costs over time;
- The model illustrates effects for 1 school population i.e. 4-5 Years;
- The model is based on novel concepts and objectives for multi agency prevention (and early help) focusing on recognising and mitigating effects of trauma;
- Local information including numbers and costs of services and trauma-informed practice effectiveness is not yet available e.g. prevalence of ACEs/CATs and impact of interventions;
- The model does not include effects of instability in a child's life due to factors such as unstable housing, looked after moves and disruption that could be significant;
- The model makes assumptions about relationships e.g. holding/escalation and CATs, CAT accumulation and the relationship to DALYs that cannot be better validated without CAT screening data and longitudinal research in localities;
- The model is of one authority and does not show crosstalk between authorities e.g. from issues such as group/gang recruitment, exploitation effects etc.

The calculations within the models draw upon the available academic evidence. However there are many variables and unknowns and in some areas, professional judgements have been made within the models. Consequently the indicated costs and savings should not be considered as definitive predictions. However, the assumptions about the population impacted by trauma provide a broad indication of annual DALY lost cost from adversity.

With limited exception, (see Literature Review), there is sparse evidence of the outcomes or cost effectiveness of trauma-informed interventions. This is in part due to the variation in definitions and understandings of trauma and trauma-informed

practice but also that such work remains, including within a UK context, as an emerging area of practice.

The academic evidence indicates that both for individuals and broader societal trauma impact, that there are complex interactions at play which are not fully understood. For example, there are indications that certain adversities e.g. longstanding neglect are particularly harmful for individuals. This has not as far as we are aware been factored into any projected societal costs models of ACE's and are consequently not included here.

Another factor at play is the extent to which some populations may already have been successfully helped to address trauma, through for example provision of early years services or child mental health services. Effective early measures to reduce or alleviate childhood adversity may have very significant impact on the lifelong impact of trauma.

Conclusions

In terms of evidencing the financial cost of trauma we have drawn on the available evidence which indicates the very high financial cost of lost productivity due to the long term health impacts of childhood adversity. Whilst lost productivity (GDP) is the area where the best evidence lies, these costs are simply one aspect of the long term financial cost of childhood adversity and trauma.

Although not comprehensively analysed and evidenced, significant additional costs also arise in providing public services to those harmed by trauma. These very significant costs accrue to education, health, housing, social care systems and criminal justice agencies amongst others.

The evidence we have presented through the Cost Modelling shows that if those who suffer adversity and trauma are not effectively helped, then the ongoing costs of carrying the societal burden of trauma are likely to be amplified significantly over time.

There is a lack of contextually structured data captured about trauma and adversity in peoples lives. Additionally, the level of complexity and unknown factors in the long term interaction between adversity and trauma and effective help, limits our ability to provide detailed projections of long term costs.

Nevertheless, there is compelling evidence of very high social and financial costs accruing through unresolved childhood adversity. The uncertainty lies in just how high those costs are and will become.

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Part Four

Project Approach and Development

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Project Approach and Development

This part has the following sections:

- Project Requirements;
- Project Team;
- Development of the Project and the Report;
- Literature Review;
- Addressing Limitations of the Literature Review.

The purpose is to provide context and the approach and methods we applied for this report. The Introduction to the Modelling in Part Three outlines the approach applied in that area of the project.

Project Requirements

> *The overall objective of this project is to provide the best available information from multiple sources both nationally and internationally on the social and financial benefits of the West Midlands region, becoming trauma-informed.*
>
> **YCTCS Ltd Proposal to the West Midlands**

Following a request for quotation we submitted the successful bid to the TIC and WMCA. Based on our proposal the work agreed was in three linked areas:

- A focussed literature review of national and international evidence of the benefits of the region becoming trauma-informed;
- Financial analysis and benefits modelling including a systems model diagram;
- Community of practice and webinars.

The literature review would be used to inform all the other areas of project activity. We also agreed to develop this project report that provides analysis and reporting of the project findings.

At an early stage in the project it became evident that the academic evidence on social and financial benefits of trauma-informed approaches was limited. It was agreed the focus of the modelling should be to evidence the economic costs of adversity and trauma. The underlying question to be addressed being *What will it cost us if we don't become trauma-informed?*

In writing this report we were also cognisant that the Trauma Informed Coalition (TIC) had been approved via the community recovery roadmap by Chief Executives and leaders of the local authorities and was looking to the report to help take forward a regional approach to trauma-informed responses and care. So whilst being academically informed this is principally a strategic policy report. Reflecting this in our proposal to the region we stated that we would:

> *… approach this work from an appreciative collaborative position, seeking to provide services that support agencies in the West Midlands who have formed the Trauma Informed Coalition, to proceed to implement trauma-informed evidenced based practices; both in approach and in providing social and economic benefits for the populations they serve. An important feature of the proposed approached is providing knowledge and expertise, that recognises the commitment and progress already made and creates added value by developing a legacy of pan-organisational learning.*

To create learning we agreed to provide a secure online Community of Practice that would create a dedicated collaborative space to develop the project, alongside the other conversations we would have.

In addition, at the start of the project we held a webinar for an audience of West Midlands staff and managers to inform and develop the programme. At the conclusion of the programme we will be holding a further webinar to outline the findings.

Project Team

The project was a collaboration between three individuals from three organisations:

- Dr Alex Chard - Director YCTCS ltd led the project, undertook the literature review and was the overall author and editor of this report.
- Sarah Leon - Digital Director CareKnowledge provided online hosting of a Community of Practice and hosting webinars for the project.
- Marc Radley - Strategic Director, CACI Children's and Young Persons Business Unit, undertook the Systems Modelling co-authoring Section Three in this report.

The above outlines the distinct roles and responsibilities of each of those involved in development of the project. However, the report has entailed significant collaborative working. Sarah and Marc having contributed their knowledge and thinking throughout the project, including providing ongoing feedback on this report. Short biographies of the project team are included in an appendix.

The collective experience of this team has been an essential aspect of this project. Bringing together; academic knowledge, analytic skills, organisational consultancy experience, knowledge curation and creation, data and systems management and knowledge of relevant literature. Marc and Alex both have experience of managing and delivering services to harmed and traumatised individuals in a range of services. Sarah and Alex have relevant qualifications, experience and knowledge of creating individual, organisational and pan-organisational learning.

Project and Report Progression

The contract for the project was agreed with the WMCA in March 2022. Work was commenced on this project in 2022. However, due to extended illness of one member of the project team, key aspects of the project were delayed until December 2022. We are grateful to the WMCA for their understanding during this period.

An important early milestone was the agreement at the Initial Webinar in March 2022 of the Regional Framework, *Reducing Systemic Trauma Developing Systemic Resilience™*. This Framework (developed by Dr Alex Chard) informed the systems modelling and has also been reflected in the policy findings and proposals. Importantly, the thinking that informed the Framework has since been further validated by the findings from the Literature Review and the Systems Modelling. The Framework has also been reflected in the policy findings and proposals.

There was a recursive relationship between the Literature Review and Systems Modelling. It was important that the modelling reflected the findings in the literature review. The Modelling in turn influenced our understanding of the findings from the Literature Review and the implications for the West Midlands. An important example of this was the evidence in the literature review regarding building community resilience. Another was the academic recognition of the limitations of the Adverse Childhood Experiences (ACEs) model and in response, our broader conceptualisation of Childhood Adversity and Trauma (CATs) and Adult Adversity and Trauma (AATs).

As the literature review progressed it became apparent that robust academic evidence of the effectiveness of trauma-informed practice was limited. However this was against a backdrop of significant social and financial investment in the UK in devolved areas of government in trauma-informed approaches. This investment seemingly being driven by evidence of the high social and economic cost of responding to adversity and trauma. This also reflected that in our proposal we had identified *ideological investment and commitment to trauma-informed approaches* [that] *indicates a belief that such a financial and ideological investment is necessary for the future wellbeing of the West Midlands*.

This led to considering the dissonance between the academic evidence and the UK policy positions. This shaped the presentation of the Literature Review findings, that has two main sections, National Policy and Evidence followed by the Wider Literature Review. The tensions revealed are further discussed in the Summary of Policy Findings and Proposals where we consider the Two Findings in Tension.

Consultation

Our consultations on findings and thinking was an important aspect of this project and the development of this report. We consulted with the Trauma Informed Coalition and other interested parties as follows:

- Roundtable Webinar - agreed the Regional Framework (March 2022);
- Trauma Informed and Attachment Aware Schools Conference considered the conceptual framework and systems modelling (October 2022);
- Trauma Informed Coalition Reset Conference, we detailed the key findings from the literature review and systems modelling (May 2023).

The report has been the subject of six main drafts/stages. These were as follows:

- Partial first draft February 2023;
- Second draft April 2023;
- Third draft July 2023;
- Fourth draft October 2023;
- Near final draft February 2024;
- Revised final draft May 2024.

We began consulting with the WMCA and members of the Trauma Informed Coalition on the first drafts. There has been wide consultation locally and nationally with interested and informed individuals including academics and policy makers since the third draft in July 2023. Overall across the drafts we had feedback from fourteen individuals of whom seven are members of the Trauma Informed Coalition. (see acknowledgements).

The conversations have been extremely valuable and have helped to shape the report. Feedback from members of the Trauma Informed Coalition has been particularly important in locating findings and proposals in the report in the local context. The range of consultations have been reassuring to us there having be no significant challenge to the key findings.

Transformational Proposals

When the report was nearing finalisation in February 2024 the WMCA indicated to us that in principle the report and findings were accepted. However, on behalf of the Trauma Informed Coalition they requested that we make proposals for Transformational Change. Whilst this had not been a part of our original contract we felt ethically compelled to respond to this request.

As acknowledged within the section Transformational Change this was a challenging request. Not least

because of the complex structural issues we believe underlie the likely very high rates of adversity and trauma in the region but also the very high social and economic cost of trauma to the region and limited evidence nationally and internationally of the effectiveness of trauma-informed approaches.

Consequently, this caused us to review the report and findings and to think very carefully about what to propose to the region. Ensuring that what we proposed fully reflected the findings from the Literature Review, Systems Modelling and Regional Framework. Whilst looking to ensure that what we proposed was an effective long term response to these complex systemic issues of human harm and suffering and their reduction. This process led to a restructuring of the report and the final report presented here.

Literature Review Approach

It was agreed that we would undertake *a focussed literature review* of the **best available** *evidence*, from multiple sources both nationally and internationally on the social and financial benefits of the West Midlands region becoming trauma-informed. Other agreed approaches to the literature review were:

- Wherever possible, we would draw upon systematic reviews and rapid evidence assessments, providing the most robust academic sources to evidence costs, benefits and barriers;
- We would include academic journals, government reports and policy papers and social policy institute papers;
- The findings would contribute to the financial analysis and benefits modelling including longer term financial benefits of becoming a trauma-informed region;
- An analysis of the evidence of the structural and possible organisational barriers of the region becoming trauma-informed.

Search Approach

We used keywords to search the following academic databases, International Bibliography of the Social Sciences (ProQuest), the Science Citation Index Expanded (Web of Science) and Deepdyve. Search terms we applied were:

- Trauma informed evaluation.
- Trauma informed outcome.
- Trauma informed social benefits.
- Trauma informed economic benefits.
- Trauma informed evidence review.
- Trauma informed cost.
- Trauma informed resilience.
- Trauma informed return on investment.
- Trauma Informed barriers implementing.
- Trauma Informed organisational barriers.

We also applied the above terms in boolean searches e.g. “Trauma Informed” and “organisational barriers”

We used the same keywords to search for non academic papers (grey literature) in the following specialist organisational databases, Butler Trust Knowledge Exchange, National Institute for Clinical Evidence (NICE), Social Care Institute of Excellence (SCIE), Substance Abuse and Mental Health Services Administration (SAMHSA).

We also used Google advanced searches applying the same terms to government websites including from Australia, New Zealand, South Africa, Scotland, United Kingdom and Wales.

These searches were initially commenced in January 2022 and completed in May 2022. We searched for papers from January 2012 written in English. Further searches were also undertaken in June 2023. As we found key papers we identified further papers from the references.

The identification of the most relevant papers was a two stage process. Online rapid screening of abstracts or summaries and in some cases conclusion led to a downloading of the most relevant papers. The academic papers were downloaded to Petal an online review platform for academics. Across the searches we downloaded a total of 308 papers. Alongside a limited number of papers we were already familiar with, the detailed review led to the direct referencing within this report of 72 papers or other publications. In addition, nine papers on systemic practice drawn from previous work of the main author were cited.

Addressing Limitations of the Literature Review

The effect of our agreement requiring the *best available evidence* drawing on *systematic reviews and rapid evidence assessments* and considering *the most robust academic sources* shaped the literature we included. In our view the Trauma Informed Coalition were correct in agreeing the high bar that the above represents. An academic challenge to the Scottish Government included within the literature review, illustrates some of the reasons we believe that agreeing a high bar was appropriate:

> *The Scottish Government claims that 'trauma-informed practice' is effective and can benefit both trauma survivors and staff. Frameworks such as the recent Trauma-informed Practice Toolkit (Scottish Government, 2021) point to examples of research to support benefits for trauma survivors… Yet, when these claims are traced back to source, one finds that the authors are more equivocal in their assessment of the impact of trauma-informed interventions than the Toolkit suggests, highlighting methodological limitations and cautioning against making more generalisable claims from their findings.*

However, the review criteria can be viewed both as a strength and a limitation. Dr Geoff Debelle, a member of the Trauma Informed Coalition, commented on an earlier draft:

> *You make clear and rightly so, the lack of a strong empirical basis, both at organisational and intervention levels for trauma-informed programmes, BUT is there a danger that this emphasis might prove self-defeating?*
>
> *Should we come at it from another direction? It begs the question of 'what is good for society'? How much do we need to rely on the 'scientific method' to answer such a moral and ethical question? Could we not look at what is good for the child, the pupil in school, the adult and the community and link that with our intentions to do good with whatever levers and interventions we have?*
>
> *So, are we measuring the right thing? What do those with … 'lived experience' call 'good': what is the right thing to measure and how, and by what means, and how this is best achieved?*

These are both ethical and practice based dilemmas that we entirely recognise including acknowledging the need to have user voice and experience influencing service development. There is an inherent suggestion of the need for wider forms of evidence to

inform development of trauma-informed approaches in the region, again we agree with that viewpoint.

In terms of our response to the limitations of the evidence base this has informed this report in a number of areas. Our overarching position is that whilst the evidence of positive outcomes from trauma approaches is very limited the strength of evidence of very high harm and high social and financial cost of adversity and trauma, suggest to us that doing nothing to address these issues is indefensible, socially, financially and morally.

However, we are also clear that whilst we would encourage the West Midlands to continue to provide and further develop trauma-informed services, we are strongly of the view that this should only be undertaken in ways that draw upon and develop a strong evidence base of improved outcomes for service users and resultant social and financial benefits. We proposed that:

- Services need to be developed within a theory of change that applies existing evidence and incorporates evaluation, building an evidence base and a culture of effective trauma-informed service design and delivery.
- To assist with ensuring legitimacy of approach, development of services needs to be undertaken in consultation with communities and service users and applied via a consensual framework.

Within the Systems Modelling, based on evidence in the literature review, we responded to the limitation of ACEs by considering how multiple adversities and traumas manifest in human lives. Creating a broad framework to address adversity, conceptualising Childhood Adversity and Traumas (CATs) and Adult Adversity and Traumas (AATs).

The use of CATs and AATs enables a much more comprehensive assessment of the wellbeing and physical health risks and impact of adversity and trauma on individuals across their life course. The conceptualisation of CATs and AATs facilitates a practical and universal way to capture data regarding 'what has happened to you'. Consequently, albeit over a long time span, these proposals offer the opportunity to develop longitudinal data of what works in individual service areas and system wide.

In taking forward the findings of this report and in shaping services from a strategic to an individual level, wherever possible we are of the view that such approaches should be informed by good academic evidence. However, where evidence of effectiveness is limited the choice is either to take no action or to take forward what are frequently termed promising approaches, whilst always evaluating effectiveness.

We have also emphasised that there is a need to look beyond approaches defined or promoted as being trauma-informed and look at where evidence lies of approaches addressing adversity and building resilience for communities, families and individuals.

In conclusion through action research and ongoing evaluation the West Midlands needs to build an evidence base of identified demand and what works to reduce adversity, ameliorate trauma and build resilience. Responding to adversity and trauma in evidence based ways and building practice based evidence has been threaded through the proposed *Transformational Changes*, as has the need to hear and respond to the voice of lived experience. If these proposals are acted upon then this will begin the process of closing the evidence gap and build the regional evidence base of effective practice.

Team Biographies

Dr Alex Chard is an organisational consultant, independent academic and author. He has a Professional Doctorate in Systemic Practice. His doctorate focussed on creating systemic change in public sector services. He is Director of YCTCS Ltd.

A recent publication Punishing Abuse, was a detailed study of 80 children in the West Midlands justice system. In the Foreword, Anne Longfield (Children's Commissioner for England) described the report as *comprehensive and harrowing … a powerful reinforcement of the need to support all children who have suffered …* Punishing Abuse has been highly influential regionally and nationally in developing understandings of the depth and impact of adversity on children. Dr Chard presented summary findings of the report to the opening plenary of the Royal College of Paediatrics and Child Health Conference in 2023. His published work also includes:

- Systemic Resilience, HMI Probation Academic Insight, extended thinking in Punishing Abuse;
- Troubled Lives Tragic Consequences a review of six children involved in very serious violence;
- Systemic Inquiry, co-editor and author of a book on systemic approaches to research;
- Defending Young People, co-author of three editions of a legal reference book.

He is a member of the Academic Oversight Group for the NHS Violence Reduction Academy for London. Previously he was a visiting Senior Lecturer at the University of Bedfordshire teaching systemic practice to masters and doctoral students. He also contributed to the revalidation of the Professional Doctorate.

He has 35 years consultancy experience in public services. This includes writing practice guidance for national government and the Local Government Association. He was the Independent Chair of the Learning and Workforce Development Group for a London Safeguarding Children Board.

As a service manager, he managed both social work services and youth justice services. In the very early years of his career he established some of the first community-based projects as direct alternatives to custodial sentences.

Marc Radley is an established social entrepreneur, information system designer and organisational leader. Marc has an MSc (Distinction) in Information Technology and Management and is also a qualified social worker. He is Strategic Director at CACI Children's and Young Persons business unit. He is also active in various advisory roles including Peer Power and Tech4Good South West.

Marc has significant experience in technology service and organisational design in the social care sector. He employs action research and learning approaches with the aim of stimulating innovation and continuous service improvement. A personal driver for him is in creating information and insights from the practice evidence base to optimise outcomes for children. This includes developing systems and tools to derive benefits, optimise services and make contributions to social justice.

In the last 25 years, Marc has been lead designer of several information and case management systems. In the late 1990's he established Social Software to develop early help, prevention and youth justice information systems.These systems supported services to facilitate research and evaluation as well as case

management and statutory compliance. One of these information systems was implemented in 110 youth justice services in England and Wales.

Following this Marc's team was integral in the monitoring and evaluation of the national Youth Inclusion Programmes operated by the Youth Justice Board and Sport England. Providing both the data capture and reporting systems, training and support as well as data aggregation for evaluators. Marc continues to collaborate with customers and domain groups to promote innovation, a recent example is a health needs innovation project in Halton, Warrington and Cheshire YJS.

In the early part of Marc's career his experience encompassed youth and community projects developing social education and engagement activities. As a social worker he worked across the full range of children's service including early years, looked after children, youth justice and adoption and fostering. This led to using evidence from research and evaluation to apply operational learning across associated services. For example increasing use and capability of family-based placements and revisions to purchasing of private sector services.

Sarah Leon is Digital Publishing Director for CareKnowledge. She has a BA (Winchester University) and MA (Sussex University) in Education Studies. She studied the nature of education and learning through a philosophical lens, engaging with rich and complex thinking about the value of education and its purpose, how knowledge is transferred and learning is experienced and the relation between teacher and student.

Sarah has 22 years' experience in the publishing sector serving social care professionals. During that time she has developed considerable expertise in building online learning and development platforms for social workers and other professionals serving vulnerable children and families, adults and older people.

Sarah is a 'hands on' content and engagement specialist, leading the CareKnowledge content team to curate, commission, and create impactful and formative learning experiences that aim to close the 'Know-Do Gap'.

During her time on CareKnowledge Sarah has developed a highly successful and impactful free webinar model in collaboration with Dr Alex Chard that has provided thousands of training hours to a range of professionals at all levels of seniority; established the CareKnowledge Bookshelf; and supported member organisations to build online communities of practice using CareKnowledge' Community Group features.

Sarah is a former Digital Director for Reed Business Information's social care market, where she was responsible for both Community Care and Community Care Inform. She played a key role in the design, build and roll out of Community Care Inform and worked closely with stakeholders to ensure the service was built with and for its users.