



Monitoring a Fragile Child Protection System: a Longitudinal Local Area Ecological Analysis of the Inequalities Impact of Children's Services Inspections on Statutory Child Welfare Interventions in England

DAVARA L BENNETT MSc* , **DANIELA K SCHLÜTER PHD***,
GABRIELLA MELIS PHD*, **CALUM JR WEBB PHD**** ,
STEVE REDDY MSc, MBA***, **BEN BARR PHD***, **SOPHIE WICKHAM PHD***
AND DAVID TAYLOR-ROBINSON PHD*

**University of Liverpool, Department of Public Health, Policy and Systems*

***University of Sheffield, Department of Sociological Studies*

****Liverpool City Council*

Corresponding author, email: davara.bennett@liverpool.ac.uk

Abstract

Child protection systems monitoring is key to ensuring children's wellbeing. In England, monitoring is rooted in onsite inspection, culminating in judgements ranging from 'outstanding' to 'inadequate'. But inspection may carry unintended consequences where child protection systems are weak. One potential consequence is increased child welfare intervention rates. In this longitudinal ecological study of local authorities in England, we used Poisson mixed-effects regression models to assess whether child welfare intervention rates are higher in an inspection year, whether this is driven by inspection judgement, and whether more deprived areas experience different rates for a given inspection judgement. We investigated the impact of inspection on care entry, Child Protection Plan-initiation, and child-in-need status. We found that inspection was associated with a rise in rates across the spectrum of interventions. Worse judgements yielded higher rates. Inspection may also exacerbate existing inequalities. Unlike less deprived areas, more deprived areas judged inadequate did not experience an increase in the less intrusive 'child-in-need' interventions. Our findings suggest that a narrow focus on social work practice is unlikely to address weaknesses in the child protection system. Child protection systems monitoring should be guided by a holistic model of systems improvement, encompassing the socioeconomic determinants of quality.

Keywords: child protection; child welfare interventions; inequalities; longitudinal analysis; inspection

Background

Ending violence against children is a public health priority, central to the United Nations 2030 Sustainable Development Agenda (United Nations, 2015). Globally, in 2014, an estimated 1 billion children, at a minimum, experienced emotional, physical or sexual abuse (Hillis *et al.*, 2016). The negative consequences for children's health and wellbeing throughout the lifecourse, and for societies at large, are vast in scope and scale (WHO, 2016). There is broad international consensus on the need for national child protection systems to coordinate action – including preventative action – and robust monitoring and regulation to ensure that systems are working as intended (UNICEF *et al.*, 2013).

Applying UNICEF's typology of child protection systems, England's system can be characterised as formal – that is, regulated by the State through legislation and policy; and complex, in that the system is governed and financed by the State from domestic resources and employs a professionalised workforce (UNICEF *et al.*, 2013). Yet the English system has also been described as structurally fragile, weakened by successive waves of intense public criticism following high-profile child deaths, leading to inquiries focussed on professional error, reforms mandating compliance with imperfect performance indicators, and, ultimately, defensive practice by demoralised and transient staff (Munro, 2011). These challenges risk tilting the English system further towards a 'child-protection' orientation focussed on protecting children from harm often through legalistic and coercive interventions, and away from a 'family support' orientation that prioritises working with families to reduce harm (Biehal, 2019; Spratt *et al.*, 2015; UNICEF *et al.*, 2013).

It is in this context that the child protection system has come under increasing strain. Contemporary policy analyses trace a costly move towards more crisis intervention (The independent review of children's social care, 2021). Over the past decade, rates of children entering local authority care have increased (Bennett *et al.*, 2020). Austerity-driven cuts to local authority budgets have led to the rationing of scarce resources, particularly for preventative services, and more so in more deprived areas (Hood *et al.*, 2020a; C. J. R. Webb and Bywaters, 2018). This has heightened concerns about 'failure demand' in child protection, whereby a failure to effectively address emerging needs leads to cascading acute interventions, ultimately overwhelming the system – with socio-economic deprivation as a catalyst (Hood, 2015). This is already an established narrative among some child protection teams: social workers trace a direct, causal link between cuts to support services, rising caseloads, and more routinised, less child-focussed work (Murphy, 2021b, 2021a). Quantitative research has established the potential of preventative support to reduce rates of children in need and young people becoming looked after (Bennett *et al.*, 2021; C. Webb, 2021). The withdrawal of support erodes this potential.

There is a need for monitoring and evaluation systems attuned to these structural risks (C. J. Webb *et al.*, 2022).

Monitoring and oversight of the English child protection system falls to an inspectorate, the Office for Standards in Education, Children's Services and Skills (Ofsted). Ofsted aims to set standards, assess quality, and drive systems improvement in each and every English local authority (Ofsted, n.d.). Although inspection frameworks have changed over time, in response to criticism and consultation (appendix 1 table 1) (Ofsted, 2016, 2017), all comprise cycles of onsite inspection and routine analysis of 'key performance metrics', culminating in narrative reports and judgements on a four-point scale, ranging from 'outstanding' through to 'inadequate'. Typically, local authorities' Children's Services have undergone graded inspections, lasting between 9 days and 3 weeks, once every three years, sometimes with little or no formal notice – though the relatively predictable 3-year cycle structures expectations. The timing of inspections for particular local authorities may also be informed by the data Ofsted hold – based on this intelligence, an apparent deterioration may trigger inspection (Ofsted, 2021). Poor judgements are consequential. They occasion additional monitoring and re-inspections, and Children's Services must demonstrate rapid improvement or risk being wrested from local authority control (Local Government Association, 2019).

Monitoring and evaluation processes may have both beneficial and deleterious effects on the quality of child protection and outcomes for children. Where poor judgements are accompanied by intense media scrutiny or political opportunism, or coincide with other challenges, such as the implementation of changes following a serious case review, the consequences for local authorities may be amplified, or unpredictable (Purcell, 2020). Significantly, given the context of fiscal austerity, Ofsted has been slow to recognise the role of deprivation in determining service quality (C. J. Webb *et al.*, 2022), and rejects a link between spending and outcomes despite emerging evidence of the salience of prevention spend (C. J. Webb *et al.*, 2022). This suggests that there may be important blind spots in the inspectorate's vision of quality and approaches to surveillance. Figure 1 outlines, in white, a logic model of continuous quality improvement through monitoring and inspection. It also posits a dark logic model of possible unintended consequences (Bonell *et al.*, 2015), drawing on the peer reviewed and grey literature (ADCS, 2009; Gibson, 2016; Hood *et al.*, 2019; Hood *et al.*, 2020b; Local Government Association, 2015; Local Government Association, 2015; Ofsted, 2016, 2017; Wilkins and Antonopoulou, 2020b).

One possible unintended consequence is increased care entry. The inspectorate looms large in qualitative research within Children's Services Departments. 'Ofsted Anxiety Disorder' (Murphy, 2021a) may be pervasive, saturating emails, memos and team meetings, steering audits and disciplinary

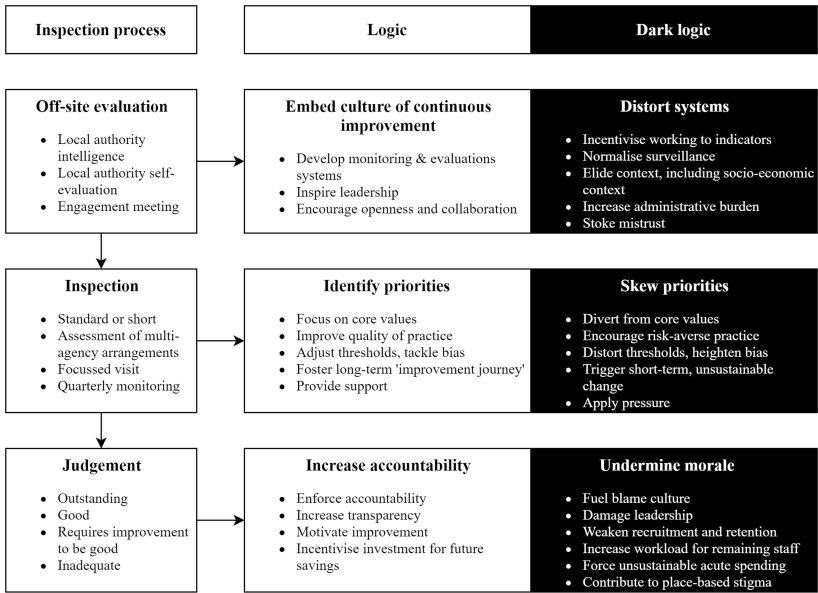


FIGURE 1. Logic and dark logic model of the impact of current children’s services monitoring and evaluation systems (Ofsted, 2021).

procedures, and ensuring a constant focus on ‘Ofsted-readiness’, understood as evidence of compliance rather than child-centred practice. This anxiety intensifies when an inspection is thought to be imminent (Murphy, 2021a). Poor quality, bureaucratic practice may impede family engagement and increase the likelihood of escalating risk and more acute intervention. Reflecting on long-term trends in care entry rates, some of our own study participants, local area policymakers in the child protection system, have spoken of anxious, risk-averse practice in the run-up to inspection, and, in response to negative judgements, lower thresholds for acute child welfare interventions as a shortcut to guaranteeing children’s safety and placating the inspectorate (NIHR School for Public Health Research, 2018). These same phenomena could also be viewed as the consequence of necessary adjustments to inappropriate thresholds, and ultimately in the best interests of children. Either way, local authorities may experience a sharp rise in child welfare interventions in the year of an inspection. By this dark logic, child protection systems monitoring may reflect and exacerbate, rather than identify and redress, failure demand.

There is emerging evidence that poor judgements may precipitate increased demand, but limited evidence that this increased demand extends to children in care. In a 2019 report, the Local Government Association warns local authorities of a possible spike in referrals following inadequate judgement – there is no mention of the impact on more acute interventions (Local Government Association, 2019).

Identifying local authorities expected to receive an inadequate judgement between 2011 and 2013 based on an assessment of performance indicators, Hood *et al.* compare those that conformed to predictions with those that defied them. Their results suggest that local authorities judged inadequate may experience increased child protection investigations, conferences, and plans in the year following inspection (Hood *et al.*, 2016). They do not report on changes in care entry however, and the restricted sample size does not allow for a definitive assessment of the impact of inspection on statutory child protection interventions.

More recently, Hood and Goldacre analysed trends in median local authority child welfare intervention rates, centred on a notable inspection year. The discontinuity they observed was borne out by an interrupted time series analysis, confirming the hypothesised rise in child-in-need and child protection interventions during an inspection year, particularly for local authorities judged inadequate – though again, no evidence of a spike for Children Looked After (Hood and Goldacre, 2021). In a survey of Directors of Children’s Services, the question of the flexibility of thresholds for care entry divided respondents (All Party Parliamentary Group for Children, 2018). Ultimately, though considered by some to be common knowledge in practice, or ‘widely known in the business’ (NIHR School for Public Health Research, 2018), the potential impact of high-stakes inspections on thresholds for care entry has not yet been established. Moreover, it is unclear whether any threshold effects vary by local area socioeconomic conditions, a critical consideration given rising inequalities in children entering care across England (Bennett *et al.*, 2020). Deprived local authorities suffering more acutely from failure demand and struggling with unmet need may ration scarce resources by raising thresholds across the spectrum of services. If the scrutiny of inspection prompts a recalibration of thresholds, these areas might be expected to experience a correspondingly greater spike in child welfare interventions, relative to less deprived areas.

This study therefore aims to assess whether rates of care entry are higher in an inspection year, whether this is driven by inspection judgement, and whether more deprived local authorities experience different intervention rates for a given inspection judgement. A secondary aim is to determine whether findings are consistent across less acute child welfare outcomes. This will offer insights into how child protection systems monitoring might continue working towards service improvement for children’s health and wellbeing, while mitigating unintended consequences.

Methods

Data sources and measures

We performed longitudinal analyses of trends in care entry at local authority level, using routinely available data from 147 English upper-tier local authorities between 2010 and 2020, based on 2019 boundaries. We refer to the financial year

(April to March) by the latter year throughout. The time period reflects a distinct social policy context, beginning with the introduction of the first austerity measures in the aftermath of the 2008 recession, taking us through a decade marked by deep and ongoing cuts to welfare benefits and public services, and ending in March 2020, on the brink of the first UK COVID-19 pandemic lockdown – the data are unaffected by the changes that followed. Four local authorities were excluded from our analyses. Bournemouth, Christchurch and Poole, and Dorset were excluded due to boundary changes that could not be reconciled across years; the City of London and the Isles of Scilly were excluded due to their small population size – as frequent extreme outliers, they are commonly excluded from local area-level analyses of child welfare interventions (Hood and Goldacre, 2021; National Audit Office, 2016).

Our primary outcome was the annual rate of children under the age of 18 starting to be looked after by local authorities in England ('CLA rate'). Panel data for the number of children entering care were drawn from the 'children looked after data return', submitted by local authorities to the Department for Education on 31st March annually (Department for Education, 2021b). Our secondary outcomes were the rate of children becoming the subject of a Child Protection Plan ('CPP rate'), and children beginning an 'episode of need' ('CIN rate'). Data for these outcomes between 2010 and 2020 were sourced from the Children in Need (CIN) Census records of children referred for social care support in England (Department for Education, 2021a). Missing data were rare, confined to CPP and CIN data in the early years of the CIN census (appendix 2 table 1). We therefore performed complete case analyses. Data on the local authority child population from which cases are drawn were sourced from Office for National Statistics (ONS) mid-year population estimates (Office for National Statistics, 2020).

Our main exposure was Ofsted inspection judgement. We used data on inspection judgements issued between 2010 and 2020, available from Ofsted (Ofsted, 2020). We considered all inspections resulting in a public judgement pertaining to children who need help and protection, or children not yet looked after, across inspection frameworks (appendix 1 table 1). Exposure to the inspectorate was modelled first as a binary variable ('no inspection'; 'inspection'), then as a categorical variable ('no inspection'; 'inspection with *good* or *outstanding* judgement'; 'inspection with *adequate* or *requiring improvement to be good* judgement'; 'inspection with *inadequate* judgement').

As a measure of local area deprivation, we used the multiple deprivation score of the 2019 Indices of Multiple Deprivation, encompassing the following deprivation domains: income; employment; education, skills and training; health and disability; crime; barriers to housing and services; and living environment (Ministry of Housing Communities and Local Government, 2019). These 2019 data were compiled from indicators measured around 2015, the midpoint

of our analysis, and were therefore the most fitting time-invariant measure of deprivation for the several judgements for each local authority over the decade. In descriptive analyses, we assigned local authorities to quintiles based on their multiple deprivation score. In regression models, we used a continuous measure of the multiple deprivation score: we ranked local authorities by their score, calculated the cumulative proportion of the 2015 child population in each rank, and derived a weighted rank by assigning a value from 0 to 1 based on the midpoint of the local authority's range in the cumulative distribution (Bennett *et al.*, 2020; Straatmann *et al.*, 2019).

Statistical analysis

First we summarised data in a table of descriptive statistics and visually assessed trends in CLA rates to see if obvious changes occurred with inspection. In visualising the data, we plotted trends in exposure and outcomes over the study period, grouped by local authority deprivation quintile. We used bar charts and horizontal line plots to examine trends in inspection frequency and dominant inspection judgement 'trajectories', and line plots to assess descriptive trends in child welfare outcomes. We then used trellis plots of care entry rates against time, faceted by deprivation quintile, lines coloured by annual inspection judgement, to explore visually whether large fluctuations in our primary outcome, CLA rate, coincided with inspection.

Second, we assessed statistically how CLA, CPP and CIN rates changed with inspection. To do this we fitted Poisson mixed effects regression models to the longitudinal local authority-level data for each child welfare outcome over time, using the log of the child population as an offset, and a time-varying indicator of inspection as the exposure (Atkins *et al.*, 2012; Atkins and Gallop, 2007; Donald and Robert, 2006). First, we used our binary inspection variable (inspected no/yes) as the main exposure; this model assumes a transient change in overall child welfare intervention rate in the inspection year, relative to no inspection. In a second model, we used the categorical inspection judgement variable as the main exposure; this model also assumes a transient change in overall intervention rate in an inspection year relative to no inspection, but the magnitude of the change is assumed to vary by judgement. In all models, we included multiple deprivation weighted rank and either a linear or quadratic time trend, according to model fit. Finally, to assess whether any association between exposure and outcome varied by area-level deprivation, we fitted a third model, testing for an interaction between the exposure and deprivation variable. In all models, we included a random effect on the linear term of the time trend to account for the correlation between measurements within local authorities over time. We accounted for overdispersion by adding observation-level random effects (Harrison, 2014). We estimated all model parameters by maximum likelihood, using generalized likelihood ratio statistics to compare nested models, and

testing for significance at the 5% level. Models were estimated using the `glmer` function from the `lme4` package in R version 4.0.5 (Bates *et al.*, 2015). Model formulae are presented in appendix 3.

Results

Descriptive statistics are presented in table 1. Between 2010 and 2020, local authorities were inspected three times, on average, at all quintiles of deprivation. Descriptive trends in exposure and outcome are presented in appendix 4 figures 1–3 and appendix 5 figure 1, respectively. The trellis plots, faceted by deprivation quintile (figure 2), show substantial heterogeneity in care entry rates both between local authorities, and within local authorities over time, irrespective of inspection judgement. However, visually there are notable examples of rates spiking in an inspection year, suggesting a potential association between inspection and a transient rise in CLA rates, more evident in more deprived areas.

Tables 2 and 3 outline the results of our Poisson mixed effects regression models. In Models 1, using the binary inspection variable (inspected no/yes), an inspection year was associated with a rise in child welfare intervention rates, including rates of care entry, the most acute outcome. Overall, between 2010 and 2020, inspection year was associated with a 2.3% increase in the rate of children entering care (95% CI 0.5%, 4.1%); a 3.0% increase in the rate of children being made subject to a Child Protection Plan (95% CI 0.8%, 5.3%); and a 5.2% increase in the rate of children recorded by the local authority as having begun an episode of need (95% CI 2.7%, 7.8%), relative to no inspection, holding deprivation constant. To contextualise these findings, and based on mean national child welfare intervention rates over the study period, an inspection across all local authorities, which would generally take place over the course of three years, would be expected to yield an additional: 650 children entering care (95% CI 141, 1158); 1,745 children being placed on a Child Protection Plan (95% CI 465, 3083); and 19,794 children beginning an episode of need (95% CI 10278, 29691).

In Models 2, using the categorical inspection judgement variable as the exposure, worse judgements were associated with higher rates across the spectrum of interventions, relative to no inspection. Figure 3 illustrates the consistent dose response relationship. Local authorities judged to be good or outstanding did not significantly differ from those that received no inspection. Each step decrease in inspection judgement was associated with higher rates. Between 2010 and 2020, local authorities judged to require improvement saw, on average, a 3.2% increase in the rate of children entering care (95% CI 0.8%, 5.7%); a 4.2% increase in the rate of children becoming subject to a Child Protection Plan (95% CI 1.2%, 7.3%); and a 5.2% increase in the rate of children beginning an episode of need (95% CI 2.7%, 7.8%), compared to local authorities that received no inspection, controlling for deprivation. For local

TABLE 1. Descriptive statistics over the time period 2010-20, by local authority multiple deprivation quintile, covering: number of local authorities; mean annual rate of children entering care; number of local authorities experiencing at least one inspection; median number of inspections per local authority; number of local authorities receiving each of the judgements (outstanding; good; requires improvement to be good; inadequate).

	Multiple Deprivation Quintile					Total
	1= least deprived	2	3	4	5 = most deprived	
LAs; N (%)	30 (20.4%)	29 (19.7%)	29 (19.7%)	29 (19.7%)	30 (20.4%)	147 (100%)
Mean annual CLA rate per 10,000, 2010-20	18.9	24.0	29.5	34.0	36.7	28.6
At least one inspection; N (%)	30 (100%)	29 (100%)	29 (100%)	29 (100%)	30 (100%)	147 (100%)
Inspections per LA; median [IQR]	3 [2, 3-75]	3 [3, 4]	3 [2, 4]	3 [2, 4]	3 [3, 3]	3 [2, 4]
Judgement: Outstanding; N (%)	2 (2.3%)	5 (5.3%)	2 (2.4%)	3 (3.4%)	0 (0.0%)	12 (2.7%)
Judgement: Good; N (%)	22 (25.3%)	27 (28.4%)	24 (28.9%)	24 (27.3%)	22 (24.2%)	119 (26.8%)
Judgement: RI; N (%)	46 (52.9%)	46 (48.4%)	41 (49.4%)	47 (53.4%)	44 (48.4%)	224 (50.5%)
Judgement: Inadequate; N (%)	17 (19.5%)	17 (17.9%)	16 (19.3%)	14 (15.9%)	25 (27.5%)	89 (20.0%)

LA, Local Authority; IQR, interquartile range; RI, requires improvement to be good.

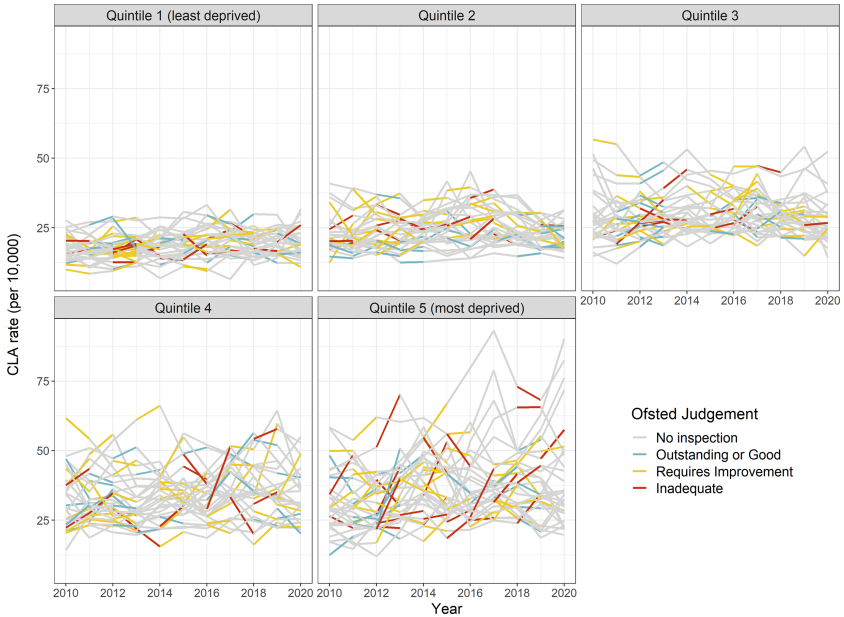


FIGURE 2. Trellis plots, faceted by local authority multiple deprivation quintile. Each line represents a local authority’s rates of children entering care over time. Lines are coloured by the local authority’s inspection status that year. These trellis plots show that there is heterogeneity in care entry rates between and within local authorities over time, across inspection judgements. There are notable examples of transient rate increases in an inspection year.

authorities judged inadequate, this rose to 4.6% for children becoming looked after (95% CI 0.9%, 8.5%); 9.9% for children becoming subject to a Child Protection Plan (95% CI 5.1%, 15.0%); and 11.6% for children beginning an episode of need (95% CI 6.0%, 17.4%).

Models 3 incorporate the interaction between the categorical inspection judgement and deprivation variable. Using likelihood ratio tests, inclusion of the interaction term conclusively improved model fit only for the CIN model, not the CLA and CPP models. We therefore present and interpret only the results for the CIN model (for full model output, see appendix 6 tables 1–3). In the least deprived areas, the dose response relationship identified in Model 2 is broadly upheld, with higher mean CIN rates as judgements worsen, reaching significance among local authorities judged inadequate. The mean rise in CIN rates for an inadequate judgement relative to no inspection is particularly marked, at 28.7% (95% CI 15.5%, 43.3%). By contrast, in the most deprived areas, the dose response relationship appears to be disrupted at the level of inadequate judgements. The worst judgement was not associated with a significant change in the CIN rate, relative to no inspection, showing an average change of

TABLE 2. Estimated percentage rise in child welfare intervention rates associated with inspection based on regression models. See appendix 6 tables 1–3 for full model output.

	Percentage change in the child welfare intervention rate, relative to no inspection, with 95% confidence intervals		
	Child welfare intervention		
	Children starting to be looked after	Children placed on a Child Protection Plan	Children recorded as ‘in need’
Model 1: Binary exposure			
Reference category: no inspection			
Inspection	2.3% [0.5%, 4.1%]	3.0% [0.8%, 5.3%]	5.2% [2.7%, 7.8%]
Model 2: Categorical exposure			
Reference category: no inspection			
Good or outstanding	-0.4% [-3.4%, 2.6%]	-2.6% [-6.1%, 1.1%]	1.5% [-2.6%, 5.8%]
Requires improvement	3.2% [0.8%, 5.7%]	4.2% [1.2%, 7.3%]	5.3% [2.0%, 8.8%]
Inadequate	4.6% [0.9%, 8.5%]	9.9% [5.1%, 15.0%]	11.6% [6.0%, 17.4%]

TABLE 3. Estimated percentage rise in the rate of children being recorded as in need, associated with inspection, for least and most deprived local authorities, based on regression models. See appendix 6 table 3 for full model output.

	Percentage change in the child welfare intervention rate, relative to no inspection, with 95% confidence intervals	
	Children recorded as 'in need'	
	Least deprived local authority (Deprivation = 0)	Most deprived local authority (Deprivation = 1)
Model 3: Interaction categorical exposure*deprivation		
Reference category: no inspection	–	–
Good or outstanding	1.7% [–7.0%, 11.3%]	1.4% [–6.5%, 9.9%]
Requires improvement	3.3% [–3.5%, 10.7%]	7.0% [0.8%, 13.6%]
Inadequate	28.7% [15.5%, 43.3%]	0.3% [–8.2%, 9.5%]

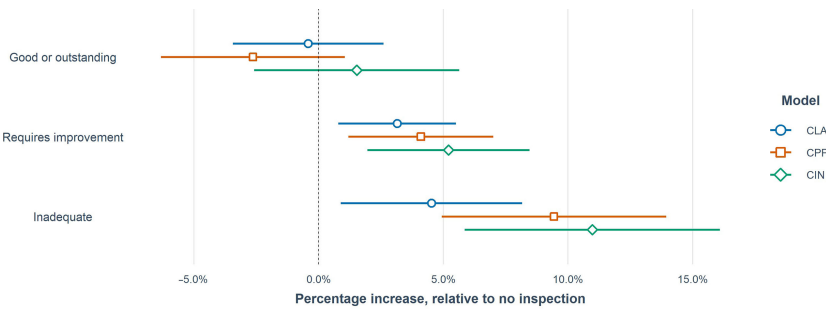


FIGURE 3. Estimated percentage rise in child welfare intervention rates associated with inspection judgement, controlling for deprivation. This figure illustrates the output of Table 2 Model 2. It highlights the clear dose response relationship between severity of judgement and change in intervention rates: the worse the judgement, the greater the rise in CLA, CPP and CIN rates. (CLA – Children starting to be Looked After; CPP – Children placed on a Child Protection Plan; CIN – Children recorded as In Need)

0.3% (95% CI -8.2%, 9.5%). Appendix 7 figure 1 illustrates these Model 3 interactions for CIN.

Discussion

There are higher child welfare intervention rates in the year of an inspection in England, suggesting a systematic drop in intervention thresholds following a negative inspection outcome – or in correct anticipation of such an outcome. Higher rates appear to be driven by inspection judgement: there is a clear, consistent, graded association between inspection judgement and intervention rates, distinct from pre-existing local authority time trends. The worse the judgement, the higher the rates. Findings did not change according to the level of local area deprivation for our main outcome of children looked after, nor for our more acute secondary outcome, children starting on a Child Protection Plan. However, for children recorded by the local authority as beginning an episode of need – our least intrusive statutory child welfare outcome – the consequences of inspection varied by level of deprivation. The dose response relationship of higher CIN rates for worse judgements holds true in the least deprived areas. But in the most deprived areas, this pattern is interrupted: an inadequate judgement was not associated with any change in CIN rates, relative to no inspection.

This study corroborates and complements research by Hood and Goldacre, quantifying the impact of the inspectorate on child welfare intervention rates (Hood and Goldacre, 2021). Both offer evidence that inspection, and inadequate judgements in particular, herald greater use of new child-in-need interventions and Child Protection Plans. Both uncover strong associations within the same financial year – a previous study had indicated that the effects of inadequate

judgements on child protection intervention rates might play out in subsequent years (Hood *et al.*, 2016). Ethnographic work shows that, although fear and anxiety about inspection may be unrelenting, it is more ‘infectious’, more pervasive, when inspection is thought to be, or cast as, imminent (Murphy, 2021a). Collectively, the evidence points to a child protection system highly reactive to the monitoring system, rapidly ‘flexing’ in anticipation of, or in response to, a negative judgement.

Whereas Hood and Goldacre use an interrupted time series design centred on an appropriate inspection year to highlight the discontinuity in trends before and after the event (Hood and Goldacre, 2021), our analysis makes use of data across all inspections to assess annual effects over the decade, uncovering new insights. We expose the clear dose response relationship between inspection judgement and child welfare intervention rates, with higher rates for worse judgements. This is consistent with a literature emphasising the ‘bureaucratic burden’ accompanying negative judgements (Munro, 2011; Murphy, 2021a); our analysis demonstrates the clear impact beyond practice, on children and families. We show that the dose response relationship extends to the most acute outcome, care entry rates. If the flexibility of thresholds for the most acute interventions was still in doubt (All Party Parliamentary Group for Children, 2018), this study puts these doubts to rest. And we give evidence of socioeconomic inequalities in the Ofsted-associated rise in new child-in-need interventions.

There are several possible explanations of our findings. The changes may be inappropriate, the result of risk-averse decision-making or rushed child-removal practices that leave insufficient time for supportive interventions. There is clear evidence that the pressure of the inspectorate affects social workers’ decision-making (Gibson, 2016; Langston, 2021; Murphy, 2021a). Institutional ethnography in children’s services exposes the ways in which a local authority’s identity may be structured by inspection judgement. Social worker’s identities are constrained accordingly, with senior managers redefining the boundaries of pride and shame, and limiting discretionary space, to enforce compliance with an audit-driven culture intended to secure favourable judgements (Gibson, 2016; Murphy, 2021a). The altered decision-making environment may fuel the dark logic outlined in figure 1, distorting systems, skewing priorities and undermining morale, ultimately compromising the quality of frontline practice and support to children and families. Social workers’ ability to centre the child, to know the child and exercise discretion, particularly under conditions of scarce resources, may become subordinate to actions perceived to further the interests and protect the reputation of the organisation itself (Munro, 2011; Murphy, 2021a, 2021b). The reputational damage to local authorities of a negative judgement has historically been severe, heightened by a critical media, particularly in the context of high-profile child deaths (Parton, 2011, 2012; Warner, 2014). Changes to the inspection regime implemented in 2018, including the

introduction of non-judgement-focussed visits, a greater emphasis on social work practice over process indicators, and a mixed methods evaluation of the implementation, may already be helping to address some of the unintended consequences of organisational defensiveness – though the intensity of inspection remains at the forefront of local authority feedback (Ofsted, 2019).

Conversely, adjustments to child welfare intervention rates may be warranted where children are unsupported or at risk, and excessively high thresholds are lowered. In this case, the systematic lowering of thresholds in response to inspection, over the decade, is plausible only in the context of other unaddressed structural weaknesses in the child protection system, such as chronic underfunding in the face of high demand – more consequential in more deprived areas and disproportionately affecting early help and family support services (C. J. R. Webb and Bywaters, 2018). Our finding of a differential impact of inspection judgement on rates of children beginning an episode of need by deprivation highlights this weakness. Appendix 7 figure 1 illustrates the substantive differences in the impact of inspection judgement by area-level deprivation. Interventions at the level of children in need are the least intrusive, least investigation-oriented statutory intervention. In theory, if not always in practice (Featherstone *et al.*, 2018; Hood *et al.*, 2020c), they entitle the family to a range of support, from home help and access to day-care, to financial assistance, recreation, and respite, helping to forestall further escalation of children through the child protection system (Citizens Advice, 2021). Whereas advantaged areas respond to an inadequate judgement by increasing activity across the spectrum of interventions, but more so at the level of children in need, increased intervention in the most deprived areas skews fully towards the acute. By the dark logic of figure 1, and where child protection systems monitoring cannot address local authorities' strained socioeconomic circumstances, inspection may trigger unsustainable change, and unsustainably high spending on acute interventions. The opportunity cost of this response to the inspectorate may be preventative measures: investment in support at the level of children in need. In this way, inspection may expose and magnify inequities in resource allocation. These inequities may, in turn, precipitate further child welfare inequalities (Bennett *et al.*, 2021).

Taken together, the dissonant signals in the data raise concerns about a vicious circle of quality degeneration: higher rates of costly child welfare interventions in response to a poor judgement, contributing to ever-diminishing resources for investment in ordinary and early help for children and families when needs first emerge. Given the greater frequency of inspection for persistently 'inadequate' local authorities, the cycle may quickly spiral. This concern finds its clearest expression in quintile 5 of the horizontal line plot (appendix 4 figure 3): local authority improvement trajectories are the exception, not the rule. It raises questions about the inspectorate's ability to promote long-term, sustainable quality improvement: absent tangible intervention into local authorities' socioeconomic

and fiscal contexts, to address population needs and reverse disproportionately large budget cuts, interventions at the level of practice may simply be insufficient. Others have stressed the need for child protection systems monitoring that is both attentive and responsive to local circumstances. Hood *et al.* note the uniformity of Ofsted's recommendations to local authorities despite the different socioeconomic contexts (Hood *et al.*, 2019). Finding deprivation to be the greatest predictor of inspection judgements, Wilkins and Antonopoulou stress the need for a stronger welfare orientation in the child protection system, fundamentally questioning the value of a practice-focussed monitoring system (Wilkins and Antonopoulou, 2020a, 2020b). Others have drawn attention to the powerful role of socioeconomic determinants of inspection judgement, both at the level of demand, in the form of deprivation, and supply, at the level of local authority expenditure on preventative services, challenging Ofsted's previously held position on the absence of such a link (C. J. Webb *et al.*, 2022). Our study lends further weight to these arguments, indicating that the inspectorate may reflect and even exacerbate failure demand in the child protection system. More broadly, in political terms, obscuring the link between socioeconomic policies and their child welfare consequences can help legitimise prolonged austerity (Maron, 2021). Political sensitivities should not be permitted to interfere with robust action to improve the quality of child protection systems.

In acknowledging the unintended consequences of child protection systems monitoring in England, it is important to not lose sight of its essential purpose: ensuring the equity and quality of support to children and families. Evidence that exposes weaknesses in that system should not be turned to reductive arguments for dismantling and deregulation. Rather, our research highlights how limited approaches to monitoring may yield undesirable results, and how empowering the inspectorate to engage with the wider determinants of service quality, in domains conventionally considered to be outside of their purview, might lead to more effective intervention. Policies implemented in Scotland following their Independent Care Review may be instructive. Changes to the Scottish care inspectorate sought to prioritise children's voices, rights and long-term loving relationships, eschewing an over-reliance on process indicators in favour of collaborative approaches (Independent Care Review, 2020b). But crucially, these changes were nested within broader reforms addressing failure demand and the socioeconomic context of care (Independent Care Review, 2020a).

Limitations

Our study has a number of limitations. Our qualitative research and visual exploration of the data led us to hypothesise an immediate impact of inspection on child welfare intervention rates. Where inspection takes place at the end of a financial year, we cannot be certain that exposure precedes outcome. Off-site

monitoring of local authorities' data means that a sudden, concerning rise in child welfare intervention rates may trigger a sudden inspection. However, it is highly unlikely that reverse causality could have produced the consistent dose response relationship between inspection judgement and child welfare intervention rates observed. This alternative hypothesis also runs counter to existing evidence, which points to higher demand following inspection (Hood *et al.*, 2016; Local Government Association, 2019). Our models also assume a transient change in child welfare intervention rates in the year of an inspection; we therefore cannot establish whether changes are sustained. However, our descriptive analyses and investigation of model residuals show no indication that trends in children entering care stabilise at a higher rate following inspection, or that inspection year changes are sustained. Hood and Goldacre's study overcomes this limitation using different modelling approaches, identifying a post-inspection fall in new child-in-need and child protection intervention rates (Hood and Goldacre, 2021).

A further limitation, as noted, is that our study cannot establish whether inspection-associated changes in child welfare intervention rates are appropriate or not. Qualitative and documentary research may shed further light on the discussion of our findings presented here, while analyses of individual-level data would offer important insights into the interplay between systems and outcomes for children. Future research might also investigate the role of inspection frameworks, with their different notice periods, durations and processes (appendix 1 table 2). The move to unannounced inspections may have inadvertently cemented bureaucratic, indicator-focussed practice; Murphy theorises that the loss of preparation time paved the way for constant 'Ofsted-readiness' (Murphy, 2021a). Crucially, whatever mechanisms underlie changes in child welfare intervention rates in an inspection year, a child and family's experience of the child protection system may be very different depending on where a local authority finds itself in a cycle of inspection. This has consequences for children, their families, the children's services workforce, and the financial health of local authorities. The 'perceived burden' of inspection goes beyond the time and energy required to plan for and host inspections (Ofsted, 2019). For some local authorities, warranted or no, the burden is concrete, manifesting itself at the level of demand.

Conclusion

Our study investigates the English child protection system's responsiveness to the inspectorate, exposing dynamic thresholds for child welfare intervention in an inspection year: a greater child protection burden as inspection judgement worsens, and, for inadequate judgements, a differential impact on rates of children beginning an episode of need, by local authority deprivation. Children in

more deprived areas judged inadequate do not experience the rise in comparatively supportive interventions seen in less deprived areas. This affirms both the importance of the inspectorate, and important weaknesses in its ability to motivate a child protection system's sustainable improvement journey. Discouraging risk averse practice while ensuring that appropriate thresholds are sustained over the longer-term is an important goal. But a narrow focus on practice is unlikely to address signs of failure demand in the child protection system. Where socioeconomic context constrains a child protection system's ability to deliver quality services, monitoring systems must note the problem and direct financial support from central government. This has the potential to disrupt a vicious cycle of quality degeneration, allowing local authorities the breathing space to invest in quality improvement. Thus, child protection monitoring systems should be guided by a holistic conceptual model of systems improvement, drawing on both logic and dark logic, and encompassing the socioeconomic determinants of quality.

Acknowledgements

DB is lead author and guarantor. DT-R is senior author. DB conceived of the study and acquired the data. DB, DS, GM and DT-R planned the analysis. DB conducted the analysis, with input from all co-authors, and led the drafting and revision of the manuscript; all authors reviewed and revised drafts and approved the final version for submission. We confirm that authors have no conflicts of interest to disclose. DB, BB and DT-R are funded by the National Institute for Health Research (NIHR) School for Public Health Research (SPHR), Grant Reference Number PD-SPH-2015. DS and GM are funded by the NIHR Public Health Policy Research Unit (PR-PRU-1217-20901). DS is additionally funded by Forte – Swedish Research Council for Health, Working Life and Welfare (Grant No. 2020-00274). SW is funded by a Wellcome Trust Society and Ethics Research Fellowship (200335/Z/15/Z). DT-R is also funded by the Medical Research Council (MRC) on a Clinician Scientist Fellowship (MR/P008577/1). BB is also supported by the National Institute for Health Research Applied Research Collaboration North West Coast (ARC NWC). SR is employed by Liverpool City Council. The views expressed in this publication are those of the authors and not necessarily those of the National Institute for Health Research or the Department of Health and Social Care, MRC, Wellcome Trust or Liverpool City Council. The funders of the study had no role in study design, data collection, data analysis, data interpretation, or the writing of the report. We declare no competing interests.

Competing interests declaration

The authors declare none.

Supplementary material

To view supplementary material for this article, please visit <https://doi.org/10.1017/S0047279422000587>

References

- ADCS. (2009). *ADCS position paper on inspection*.
- All Party Parliamentary Group for Children. (2018). *Storing Up Trouble: a postcode lottery of children's social care*.
- Atkins, D. C., Baldwin, S. A., Zheng, C., Gallop, R. J. and Neighbors, C. (2012). A tutorial on count regression and zero-altered count models for longitudinal substance use data. *Psychology of Addictive Behaviors*, 27(1), 166. <https://doi.org/10.1037/A0029508>
- Atkins, D. C. and Gallop, R. J. (2007). Rethinking How Family Researchers Model Infrequent Outcomes: A Tutorial on Count Regression and Zero-Inflated Models. *Journal of Family Psychology*, 21(4), 726–735. <https://doi.org/10.1037/0893-3200.21.4.726>
- Bates, D., Mächler, M., Bolker, B. M. and Walker, S. C. (2015). Fitting linear mixed-effects models using lme4. *Journal of Statistical Software*, 67(1). <https://doi.org/10.18637/jss.v067.i01>
- Bennett, D. L., Mason, K. E., Schlüter, D. K., Wickham, S., Lai, E. T., Alexiou, A., Barr, B. and Taylor-Robinson, D. (2020). Trends in inequalities in Children Looked After in England between 2004 and 2019: a local area ecological analysis. *BMJ Open*, 10(11), e041774. <https://doi.org/10.1136/bmjopen-2020-041774>
- Bennett, D. L., Webb, C. J. R., Mason, K. E., Schlüter, D. K., Fahy, K., Alexiou, A., Wickham, S., Barr, B. and Taylor-Robinson, D. (2021). Funding for preventative Children's Services and rates of children becoming looked after: A natural experiment using longitudinal area-level data in England. *Children and Youth Services Review*, 131, 106289. <https://doi.org/10.1016/j.childyouth.2021.106289>
- Biehal, N. (2019). Balancing Prevention and Protection: Child Protection in England. In *Child Maltreatment* (Vol. 8, pp. 51–73). https://doi.org/10.1007/978-3-319-93348-1_4
- Bonell, C., Jamal, F., Melendez-Torres, G. J. and Cummins, S. (2015). "Dark logic": Theorising the harmful consequences of public health interventions. *Journal of Epidemiology and Community Health*, 69(1), 95–98. <https://doi.org/10.1136/jech-2014-204671>
- Citizens Advice. (2021). *Local authority services for children in need*. <https://www.citizensadvice.org.uk/family/looking-after-people/local-authority-services-for-children-in-need/>
- Department for Education. (2021a). *Statistics: children in need and child protection*. GOV.UK. <https://www.gov.uk/government/collections/statistics-children-in-need>
- Department for Education. (2021b). *Statistics: looked-after children (Collection)*. <https://www.gov.uk/government/collections/statistics-looked-after-children>
- Donald, H. and Robert, D. (2006). Mixed-effects Regression Models for Counts. In H. Donald and D. Robert (Eds.), *Longitudinal Data Analysis* (pp. 239–256). <https://doi.org/https://doi.org/10.1002/0470036486.ch12>
- Featherstone, B., Gupta, A., Morris, K. and Warner, J. (2018). Let's stop feeding the risk monster: Towards a social model of 'child protection.' *Families, Relationships and Societies*, 7(1), 7–22. <https://doi.org/10.1332/204674316X14552878034622>
- Gibson, M. (2016). Constructing pride, shame, and humiliation as a mechanism of control: A case study of an English local authority child protection service. *Children and Youth Services Review*, 70, 120–128. <https://doi.org/10.1016/j.childyouth.2016.09.016>
- Harrison, X. A. (2014). Using observation-level random effects to model overdispersion in count data in ecology and evolution. *PeerJ*, 2, e616. <https://doi.org/10.7717/peerj.616>
- Hillis, S., Mercy, J., Amobi, A. and Kress, H. (2016). Global prevalence of past-year violence against children: A systematic review and minimum estimates. *Pediatrics*, 137(3), e20154079. <https://doi.org/10.1542/peds.2015-4079>
- Hood, R. (2015). A socio-technical critique of tiered services: Implications for interprofessional care. *Journal of Interprofessional Care*, 29(1), 8–12. <https://doi.org/10.3109/13561820.2014.937482>
- Hood, R. and Goldacre, A. (2021). Exploring the impact of Ofsted inspections on performance in children's social care. *Children and Youth Services Review*, 129, 106188. <https://doi.org/10.1016/j.childyouth.2021.106188>

- Hood, R., Goldacre, A., Gorin, S. and Bywaters, P. (2020a). Screen, Ration and Churn: Demand Management and the Crisis in Children's Social Care. *The British Journal of Social Work*, 50(3), 868–889. <https://doi.org/10.1093/bjsw/bcz035>
- Hood, R., Goldacre, A., Gorin, S., Bywaters, P. and Webb, C. (2020b). *Identifying and understanding the link between system conditions and welfare inequalities in children's social care services*.
- Hood, R., Gorin, S., Goldacre, A., Muleya, W. and Bywaters, P. (2020c). Exploring drivers of demand for child protection services in an English local authority. *Child and Family Social Work*, 25(3), 657–664. <https://doi.org/10.1111/cfs.12740>
- Hood, R., Grant, R., Jones, R. and Goldacre, A. (2016). A study of performance indicators and Ofsted ratings in English child protection services. *Children and Youth Services Review*, 67, 50–56. <https://doi.org/10.1016/j.childyouth.2016.05.022>
- Hood, R., Nilsson, D. and Habibi, R. (2019). An analysis of Ofsted inspection reports for children's social care services in England. *Child and Family Social Work*, 24(2), 227–237. <https://doi.org/10.1111/cfs.12607>
- Independent Care Review. (2020a). *The Money*.
- Independent Care Review. (2020b). *The Promise*.
- The independent review of children's social care. (2021). *The Case for Change*. <https://childrensocialcare.independent-review.uk/wp-content/uploads/2021/06/case-for-change.pdf>
- Langston, J. (2021). *Why good social workers do bad things: An institutional ethnography of social work with children and families*.
- Local Government Association. (2015). *A Brave New World: Is Inspection Improving Children's Services?* <http://cep.lse.ac.uk/pubs/download/cp358.pdf>
- Local Government Association. (2019). *What happens if your children's services are judged inadequate by Ofsted? Key messages*. https://www.local.gov.uk/sites/default/files/documents/15_60_must_know_-_what_happens_if_your_childrens_services_are_judged_inadequate_by_ofsted_v02_WEB.pdf
- Local Government Association, Association for Directors of Children's Services, and Solace. (2015). *Multi-Agency Inspection of Child Protection: A Position Paper from ADCS, LGA and Solace*. 1–13. <https://www.local.gov.uk/sites/default/files/documents/multi-agency-inspection-c-9a8.pdf>
- Maron, A. S. A. (2021). Austerity beyond Crisis: Economists and the Institution of Austere Social Spending for At-Risk Children in Israel. *Journal of Social Policy*, 50(1), 168–187. <https://doi.org/10.1017/s004727942000001x>
- Ministry of Housing Communities and Local Government. (2019). *National Statistics: English Indices of Deprivation 2019*. GOV.UK. <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019>
- Munro, E. (2011). *The Munro Review of Child Protection: Final Report - A child-centred system*. TSO.
- Murphy, C. (2021a). If It's Not on the System, Then It Hasn't Been Done: 'Ofsted Anxiety Disorder' as a Barrier to Social Worker Discretion. *Child Abuse Review*. <https://doi.org/10.1002/car.2716>
- Murphy, C. (2021b). "Rising demand and decreasing resources": Theorising the "cost of austerity" as a barrier to social worker discretion. *Journal of Social Policy*, 1–18. <https://doi.org/10.1017/s0047279421000507>
- National Audit Office. (2016). *Children in need of help or protection*.
- NIHR School for Public Health Research. (2018). *Inequalities in Children Looked After in England: local area studies to inform policy*. <https://sphr.nihr.ac.uk/members/lilac/inequalities-in-children-looked-after-in-england-local-area-studies-to-inform-policy/>
- Office for National Statistics. (2020). *Population Estimates for UK, England and Wales, Scotland and Northern Ireland: Stat-Xplore*. <https://stat-xplore.dwp.gov.uk>
- Ofsted. (n.d.). *About us*. GOV.UK. Retrieved June 25, 2021, from <https://www.gov.uk/government/organisations/ofsted/about>

- Ofsted. (2016). *Re-inspection of inadequate local authorities: Consultation outcome report*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/498648/Consultation_on_re-inspection_of_inadequate_local_authorities.pdf
- Ofsted. (2017). *Future of social care inspection: consultation outcome and next steps*. www.gov.uk/government/collections/social-care-common-inspection-framework-sccif.
- Ofsted. (2019). *Inspection of Local Authority Children's Services Framework Implementation Review*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/926261/ILACS_framework_implementation_review.pdf
- Ofsted. (2020). *Local authority in England inspections and outcomes: provider level data inspections between 2009 and 2019*. GOV.UK. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/847901/Local_authority_in_England_inspections_and_outcomes__inspections_from_2009_to_2019.csv/preview
- Ofsted. (2021). *Inspecting local authority children's services*. GOV.UK. <https://www.gov.uk/government/publications/inspecting-local-authority-childrens-services-from-2018/inspecting-local-authority-childrens-services>
- Parton, N. (2011). Child Protection and Safeguarding in England: Changing and Competing Conceptions of Risk and their Implications for Social Work. *The British Journal of Social Work*, 41(5), 854–875. <https://doi.org/10.1093/bjsw/bcq119>
- Parton, N. (2012). The Munro Review of Child Protection: An Appraisal. In *Children and Society* (Vol. 26, Issue 2, pp. 150–162). <https://doi.org/10.1111/j.1099-0860.2011.00415.x>
- Purcell, C. (2020). *The Politics of Children's Services Reform* (1st ed.). Bristol University Press.
- Spratt, T., Nett, J., Bromfield, L., Hietamäki, J., Kindler, H. and Ponnert, L. (2015). Child Protection in Europe: Development of an International Cross-Comparison Model to Inform National Policies and Practices. *British Journal of Social Work*, 45(5), 1508–1525. <https://doi.org/10.1093/bjsw/bcu109>
- Straatmann, V. S., Lai, E., Lange, T., Campbell, M. C., Wickham, S., Andersen, A. M. N., Strandberg-Larsen, K. and Taylor-Robinson, D. (2019). How do early-life factors explain social inequalities in adolescent mental health? Findings from the UK Millennium Cohort Study. *Journal of Epidemiology and Community Health*, 73(11), 1049–1060. <https://doi.org/10.1136/jech-2019-212367>
- UNICEF, UNHCR, Save the Children, and World Vision. (2013). *A better way to protect all children: The theory and practice of Child Protection Systems*, Conference Report.
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. A/RES/70/1. <https://sdgs.un.org/>
- Warner, J. (2014). “Heads Must Roll”? Emotional Politics, the Press and the Death of Baby P. *British Journal of Social Work*, 44(6), 1637–1653. <https://doi.org/10.1093/bjsw/bcto39>
- Webb, C. (2021). In Defence of Ordinary Help: Estimating the effect of Early Help/Family Support Spending on Children in Need Rates in England using ALT-SR. *Journal of Social Policy*, 1–28. <https://doi.org/10.1017/s0047279421000696>
- Webb, C. J., Bennett, D. L. and Bywaters, P. (2022). Austerity, Poverty and Children's Services quality in England: Consequences for child welfare and public services. *Social Policy and Society*, 1–22. <https://doi.org/10.1017/s147474642200001x>
- Webb, C. J. R. and Bywaters, P. (2018). Austerity, rationing and inequity: trends in children's and young peoples' services expenditure in England between 2010 and 2015. *Local Government Studies*, 44(3), 391–415. <https://doi.org/10.1080/03003930.2018.1430028>
- WHO. (2016). *Inspire: Seven Strategies for Ending Violence Against Children*. https://www.who.int/violence_injury_prevention/violence/inspire/
- Wilkins, D. and Antonopoulou, V. (2020a). Do performance indicators predict Ofsted ratings? An exploratory study of children's services in England. *Journal of Children's Services*, 15(2), 45–59. <https://doi.org/10.1108/jcs-07-2019-0035>
- Wilkins, D. and Antonopoulou, V. (2020b). Ofsted and Children's Services: What Performance Indicators and Other Factors Are Associated with Better Inspection Results? *The British Journal of Social Work*, 50(3), 850–867. <https://doi.org/10.1093/bjsw/bcy100>