

SEN and EHCP– Forecasting 10 years in Bradford District

Report produced on behalf of the SEND Joint Commissioning workstream for Bradford District (April 2021).

SUMMARY

Aims:

- To use current observed SEN and EHCP data to forecast the emerging trend for both SEN and EHCP for the next 10 years.
- To provide Bradford District Local Authority, CCG and partner organisations with information to plan future service needs, including the planning of suitable education provision.

Main results:

The overall number of children and young people in Bradford District is set to decrease in the next two decades due to a decreasing trend in the number of births.

A decreasing trend is identified for the numbers and proportion of children with SEN in Bradford District, with an increasing trend for numbers and proportion of children with an EHCP.

The number of children with an EHCP increased from 1,740 in 2012 to 3,058 in 2020, with a forecasted trend estimating 5,036 (95%CI: 2817 to 7255) or 4.9% of school age children by 2030.

The forecast estimates a gradual fall in CYP with SEN for the White group with a more pronounced decrease for CYP from an Asian or Asian British backgrounds. All ethnic groups are projected to see an increasing trend in numbers of EHCPs.

The forecasted number of CYP with Autistic Spectrum Disorder (ASD) as a primary need is projected to increase over the next 10 years (although this is largely driven by model data reflecting a previous backlog of assessments). There is a forecasted pattern of increasing EHCPs for ASD but relatively level for SEMH and SLCN.

Data are also provided for Wards and Community Partnerships, although with smaller numbers the forecasts are subject to greater uncertainty.

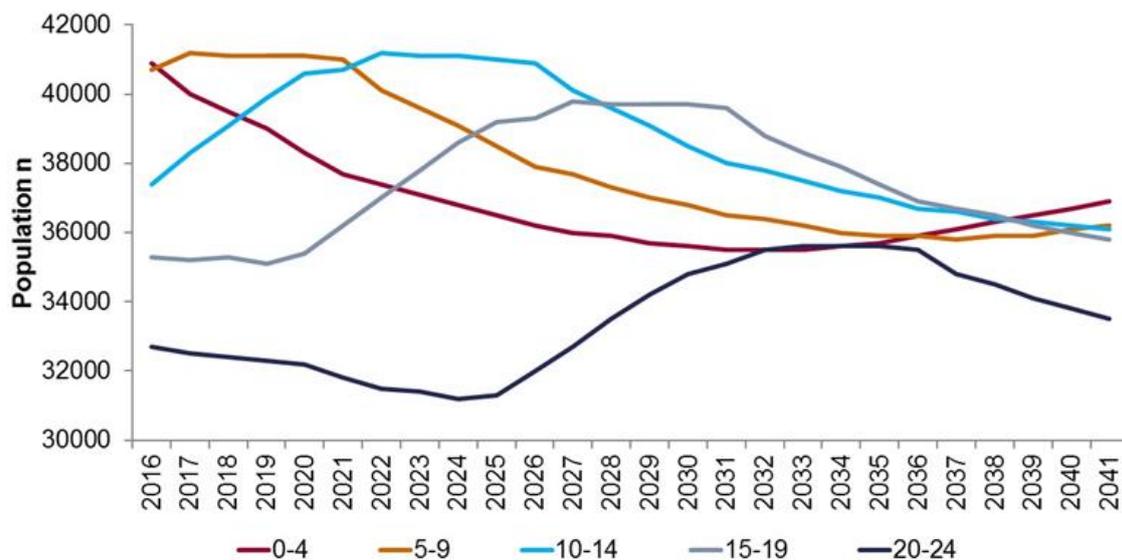
These results are presented to help support future commissioning of services that support young people with SEN, and to help guide resource allocation at a local level.

Background

Providing appropriate support for children with a special educational need (SEN) or an education, health and care plan (EHCP) is a joint commissioning priority involving social services, education and health. Bradford is the third youngest English city outside London, with almost a quarter of the population aged under 16 (23.7%) (1). This is above the average for England where 19.2% of the population are aged under 16. The percentage of pupils with SEN Support is higher in Yorkshire & Humber than the national average, with 40% of local authorities within the Yorkshire & Humber region having a SEN Support cohort higher than the national, rising to 60% in 2020. Bradford is one of four local authorities out of 15 whose SEN Support cohort is reducing as a proportion of total children on roll.

The Office of National Statistics have produced population projection estimates which have shown the overall number of children is set to decrease in the next two decades due to a decreasing trend in the number of births (**Figure 1**) (2). However, the high proportion of children currently in the 5-9-year age cohort will transition into the older age groups in the coming years. Although the change in population denominator is a factor for influencing the need for SEN and EHCP support it is not the only determinant for establishing a change in trend.

Figure 1: Overall population projections (2016 -2041) in Bradford District local authority by age group (2)



Aims:

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To provide Bradford District Local Authority, CCG and partner organisations, with information to plan future service needs, including the planning of suitable education provision.

Method

Data definitions

SEN figures and charts include the whole SEN cohort (those with an EHCP and those receiving SEN Support).

- The EHCP cohort are those children with a Plan (code E) at the time of the snapshot / January Census point
- The SEN Support cohort are those children receiving SEN Support (code K) as identified and allocated by schools at the time of the snapshot / January census point.

Data sources

The school census is a statutory data collection that takes place every term collecting information on all pupils in local authority maintained schools, academies, UTCs and free schools (3). School census data contains the most historic information to allow us to establish trends and was therefore most appropriate data source for this analysis. Aggregate data were provided from 2012 to 2020 – containing information on SEN/EHCP provision, primary need, ethnicity, school year and ward of residence of all school pupils. Data was extracted on the 2nd November 2021. Community partnership figures were estimated from the ward of residence data – there is no clear geographical boundary for community partnership so estimates are based on proportions belonging to each ward.

Statistical analysis

Forecasts were applied to the overall number and proportion of children with SEN and the number of children with an EHCP. Information was further broken down to establish a trend for different cohorts of the data, including; primary need, ethnicity, school year, school phase, community partnership and ward of residence of all school pupils.

Forecasting was undertaken using Holt's linear smoothing method. Holt's linear smoothing assumes that there is variation in the data and a trend. It separates out these factors and then exponentially smooths each one (4). Where it was possible a dampened trend was applied. The model does not take any projected changes in specialist practice or Government policy into account.

Due to the uncertainty in statistical models, the further into the future we forecast the wider the confidence intervals are around the estimates (**Table 1**).

Results

Overall SEN and EHCP

A decreasing trend was identified for the number of children with SEN in Bradford District and an increasing trend for the number of children with an EHCP (**Figure 2a**; **Figure 3a**). This trend was not influenced by a change in the population with the proportion of all children with SEN also decreasing and EHCP increasing (**Figure 2b**; **Figure 3b**).

According to the school census data the number of children recorded as having SEN in 2020 was 16,703 – this is a decrease from 19,842 in 2012, if this trend continues our best estimate states that there will be 14,738 (95%CI: 3413 to 26062) or 14% of school age children with SEN by 2030. The results seen for SEN are in contrast to that of EHCP with the number of children with an EHCP increasing from 1,740 in 2012 to 3,058 in 2020 – if this trend continues we would expect there to be 5,036 (95%CI: 2817 to 7255) or 4.9% of school age children with an EHCP by 2030.

Additional forecasts for SEN and EHCP are provided by ethnicity, ward, school phase and community partnership (see Appendices).

For a detailed breakdown of current numbers of CYP with SEN and with EHCPs please see Bradford JSNA - <https://jsna.bradford.gov.uk/Children%20and%20Young%20People.asp>

Figure 2: Number (a) and proportion (b) of children with SEN 2012 to 2020 and forecasted estimate to 2030

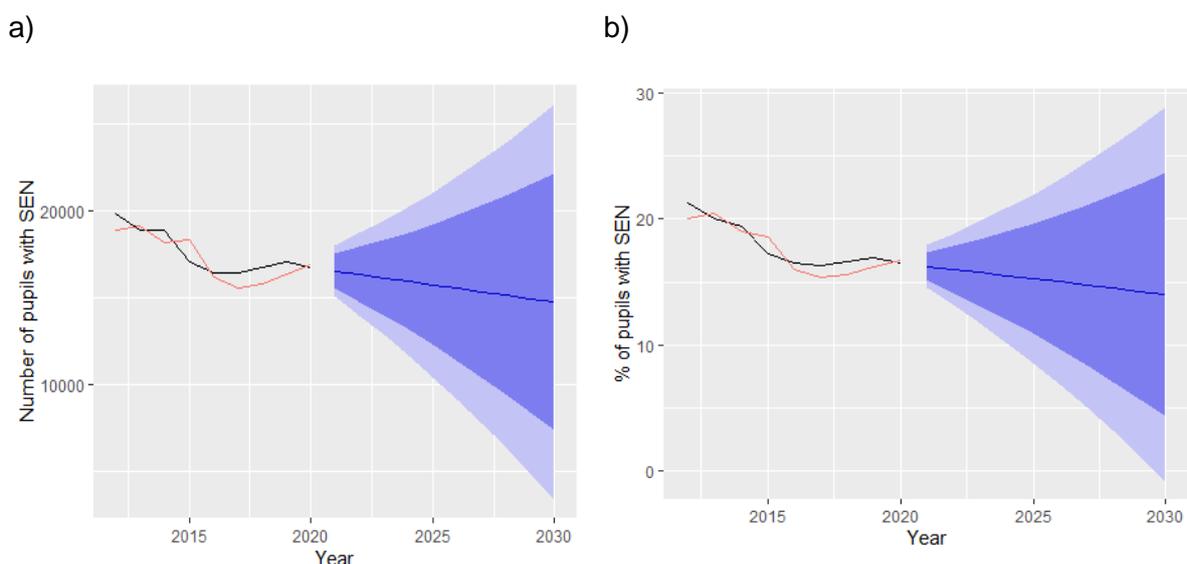


Figure 3: Number (a) and proportion (b) of children with EHCP 2012 to 2020 and forecasted estimate to 2030

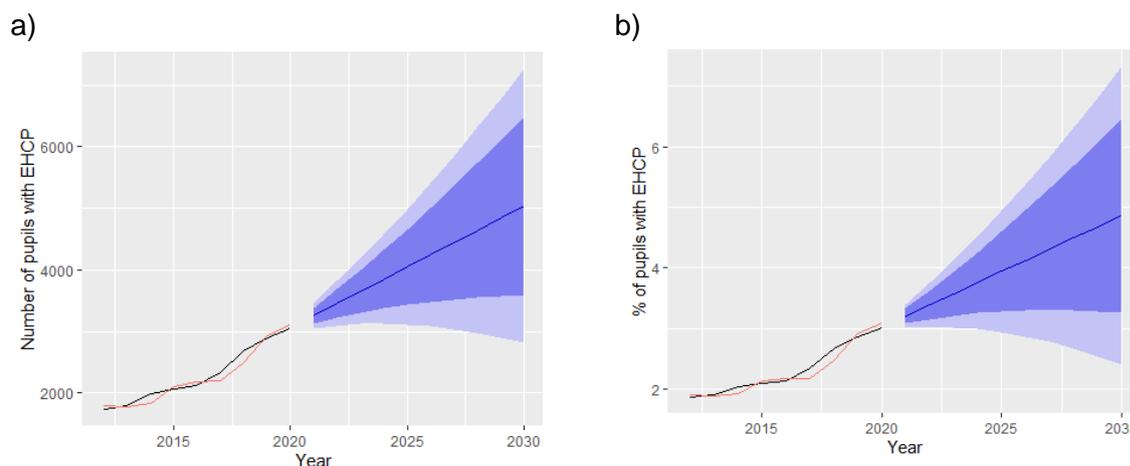


Table 1: Forecasted estimates of the number *n* and proportions % of school age children with SEN or an EHCP, 2021 to 2030

Year	SEN		EHCP	
	n(95%CI)	% of school age children % (95%CI)	n(95%CI)	% of school age children % (95%CI)
2021	16512(15025-17998)	16.2(14.6-17.9)	3256(3056-3455)	3.2(3.0-3.4)
2022	16314(13924-18705)	16.0(13.2-18.8)	3454(3095-3812)	3.4(3.0-3.8)
2023	16117(12802-19433)	15.8(11.7-19.8)	3652(3117-4186)	3.6(3.0-4.1)
2024	15920(11629-20211)	15.5(10.2-20.8)	3849(3121-4578)	3.8(3.0-4.5)
2025	15723(10400-21047)	15.3(8.6-21.9)	4047(3108-4986)	3.9(2.9-4.9)
2026	15526(9113-21939)	15.0(6.9-23.2)	4245(3079-5411)	4.1(2.9-5.4)
2027	15329(7769-22889)	14.8(5.1-24.5)	4443(3034-5851)	4.3(2.8-5.8)
2028	15132(6370-23894)	14.5(3.2-25.8)	4641(2975-6306)	4.5(2.7-6.3)
2029	14935(4917-24952)	14.3(1.2-27.3)	4839(2903-6774)	4.7(2.5-6.8)
2030	14738(3413-26062)	14.0(0.0-28.8)	5036(2817-7255)	4.9(2.4-7.3)

Sub district analysis and ethnicity

Those from an Asian / Asian British or a white background account for the majority of the school age children in the district and therefore have the biggest influence on the overall projected figures. The forecast in SEN for those from a white ethnic background appears to have flattened with a gradual fall. A decreasing forecasted trend can still be observed for those from an Asian or Asian British background. Interestingly a slightly increasing trend in the number of children with SEN was observed for those from a mixed ethnic background.

All ethnic groups experienced an increasing trend in relation to EHCP.

School stage

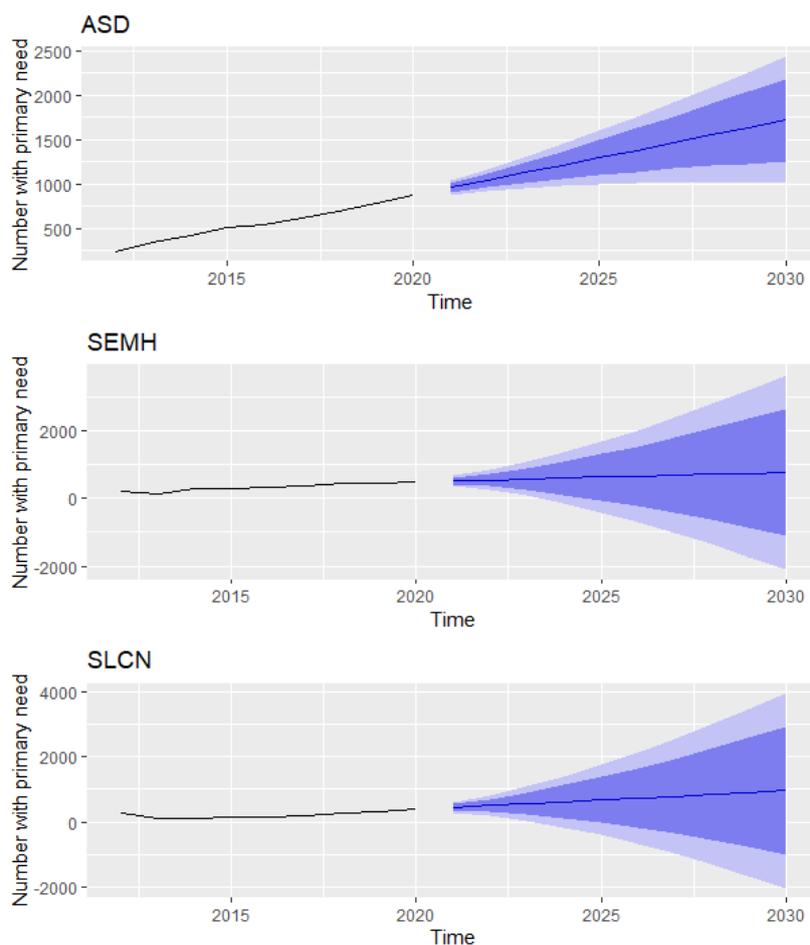
Primary school age children have seen the greatest fluctuation in trend for SEN in comparison to secondary and sixth form phases. All school phases are now projecting a downward trajectory for SEN.

Primary school age children appear to have experienced the greatest increase in the number of children with an EHCP – although an increase was observed for all school phases.

Type of need

The forecasted number of CYP with Autistic Spectrum Disorder (ASD) as a primary need is projected to increase over the next 10 years (although this is largely driven by previous data reflecting a backlog of assessments). Numbers of CYP with Social Emotional and Mental Health (SEMH), and Speech Language and Communication (SLCN) needs are projected to be more level. Similarly, there is a forecasted pattern of increasing EHCPs for ASD but relatively level for SEMH and SLCN.

Figure 4: Number of children with an **EHCP** by primary need – 10-year forecast



Information on all sub-district analysis (wards, community partnerships is presented in Appendix A – Appendix E).

Discussion

The allocation of SEN Support within schools in Bradford District is a largely decentralised process with schools deciding who needs SEN Support and on what primary need the support will be based. Children potentially can move between having a 'No SEN Support' status and a 'SEN Support' status several times over the duration of their schooling. The autonomy schools have in identifying children who need SEN Support, as well as the needs it is intended to meet, means that trying to use the current trend to plan forward is complex (4). However, earlier and increased use of EHCPs (with a forecasted increase in this analysis) potentially increases the amount of time and stability for a child in receipt of an EHCP.

The analysis presented in this report is an insight into what our potential SEN and EHCP numbers could look like in the next decade. The proportion of children accessing SEN support in Bradford District is still higher than the regional and national average, despite the current decreasing trend (5). Therefore, there is still room for the trend to decrease as predicted and remain in line with the national and regional rate. In previous years the proportion of children with an EHCP was below the regional average – however, this is now in line with the regional average but still below our statistical neighbours, giving further support to suggest the increase in EHCP will continue. Furthermore, Bradford have more children in care on SEN support and less on an EHCP in comparison to Yorkshire and Humber, which may indicate further identification of needs of children in care (with similar patterns for children in need and children on a child protection plan).

Local interpretation and knowledge is essential for understanding the observed trends and providing potential explanations (as our models are based on recorded needs rather than true community prevalence). The results presented are a tool to aid these conversations and help support future commissioning of services that support young people with SEN, and guide decision making and resource allocation at a local level. These results may be of particular use for a current focussed work around CYP with ASD in Bradford District. There has been a recent year on year increase in the number of children referred for ASD assessment and some increase in the number of assessments completed. Concerns remain however on unidentified needs particularly in girls with ASD (who are better at masking signs of ASD), and in communities where there may be cultural concerns around the identification of a perceived mental health condition.

Anecdotally, the reasons for the decrease observed in SEN may be due to changes in commissioner driven practice in schools to be more inclusive and reduce the number of individual statements (and children classed as having SEN). When EHCPs were introduced, more families may have wanted their children to be assessed as individuals which will have contributed to the increasing number of EHCPs and a reduction in SEN support classification.

Limitations

This analysis is subject to a number of limitations.

First, the school census was used as it gives us enough historic data to be able to project forwards. However, school census data does not include independent schools in Bradford. There are 23 independent schools in total, of which 4 are Special Schools. Therefore, we are likely to be under-reporting the current / past view of numbers.

Second, the school census data also only includes school age children, information on children post education will therefore not be included.

Third, there are wide confidence interval limits as you move forward in the forecast and where further grouping of the data was undertaken. The wide confidence interval limits suggest that we cannot be certain if rates of SEN or EHCP will increase or decrease by 2030.

Fourth, projections are based on historical trends with no local parameter included to reflect changes in assessment and diagnostic practices and service availability. Any changes in practice or data collection method may have influenced results.

References

1. Office for National Statistics. Population estimates for the UK, England and Wales, Scotland and Northern Ireland - Office for National Statistics [Internet]. Office for National Statistics. 2019 [cited 2021 Apr 8]. p. 1–21. Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2019estimates>
2. ONS. Population projections - Office for National Statistics [Internet]. Population Projections. 2015 [cited 2021 Apr 8]. Available from: <http://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections>
3. Dept. of Education. School census 2020 to 2021-Business and technical specification.
4. Hyndman RJ. Forecasting: Principles and Practice (2nd ed) [Internet]. [cited 2021 Apr 8]. Available from: <https://otexts.com/fpp2/>
5. Local Government Association. Local area SEND report Bradford| LG Inform [Internet]. 2020 [cited 2021 Apr 8]. Available from: <https://lginform.local.gov.uk/reports/view/send-research/local-area-send-report?mod->

area=E1000019&mod-group=AllCountiesInCountry_England&mod-type=namedComparisonGroup

Appendix A – Ethnicity

Figure a.1: Number of children with SEN by Ethnic group – 10-year forecast

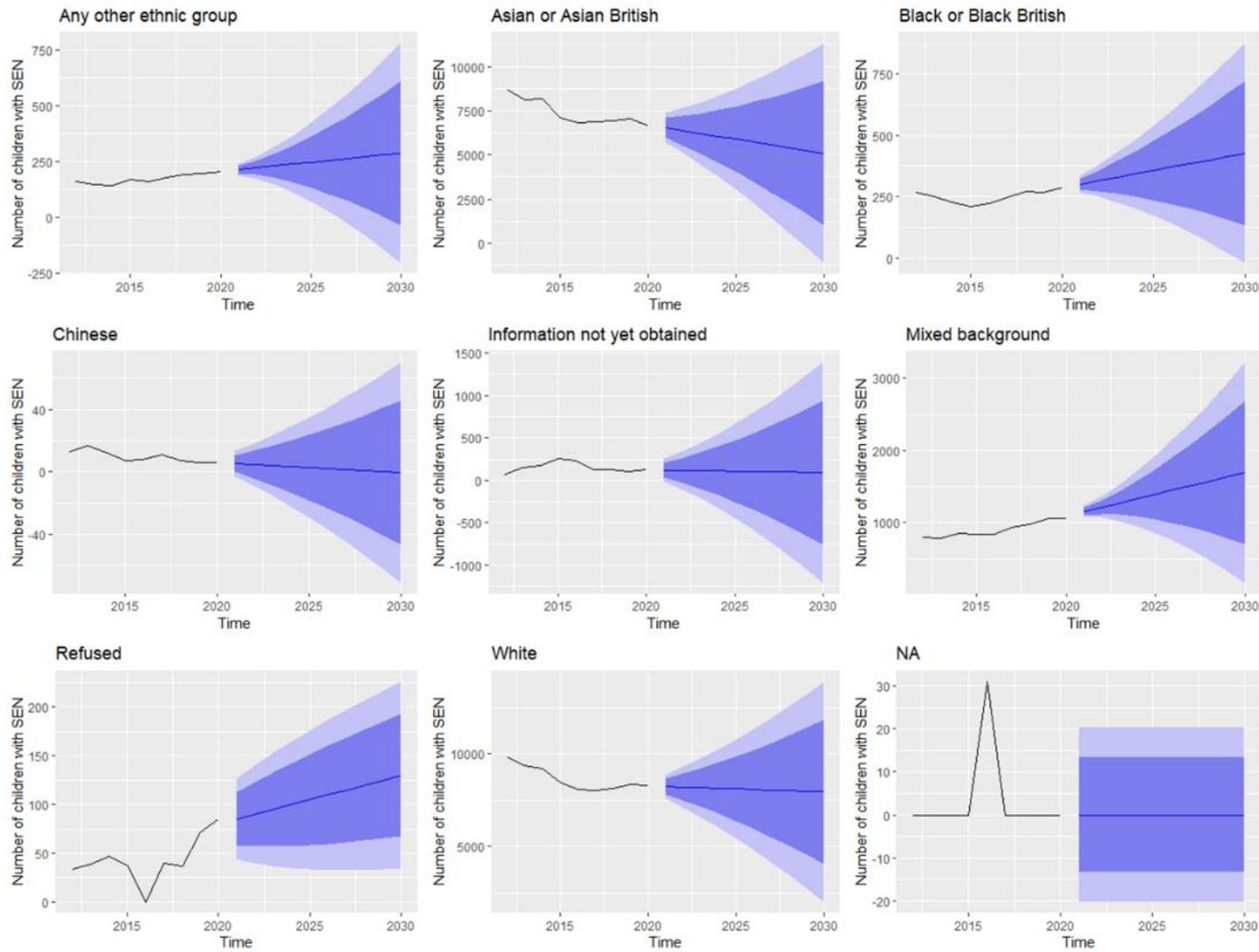
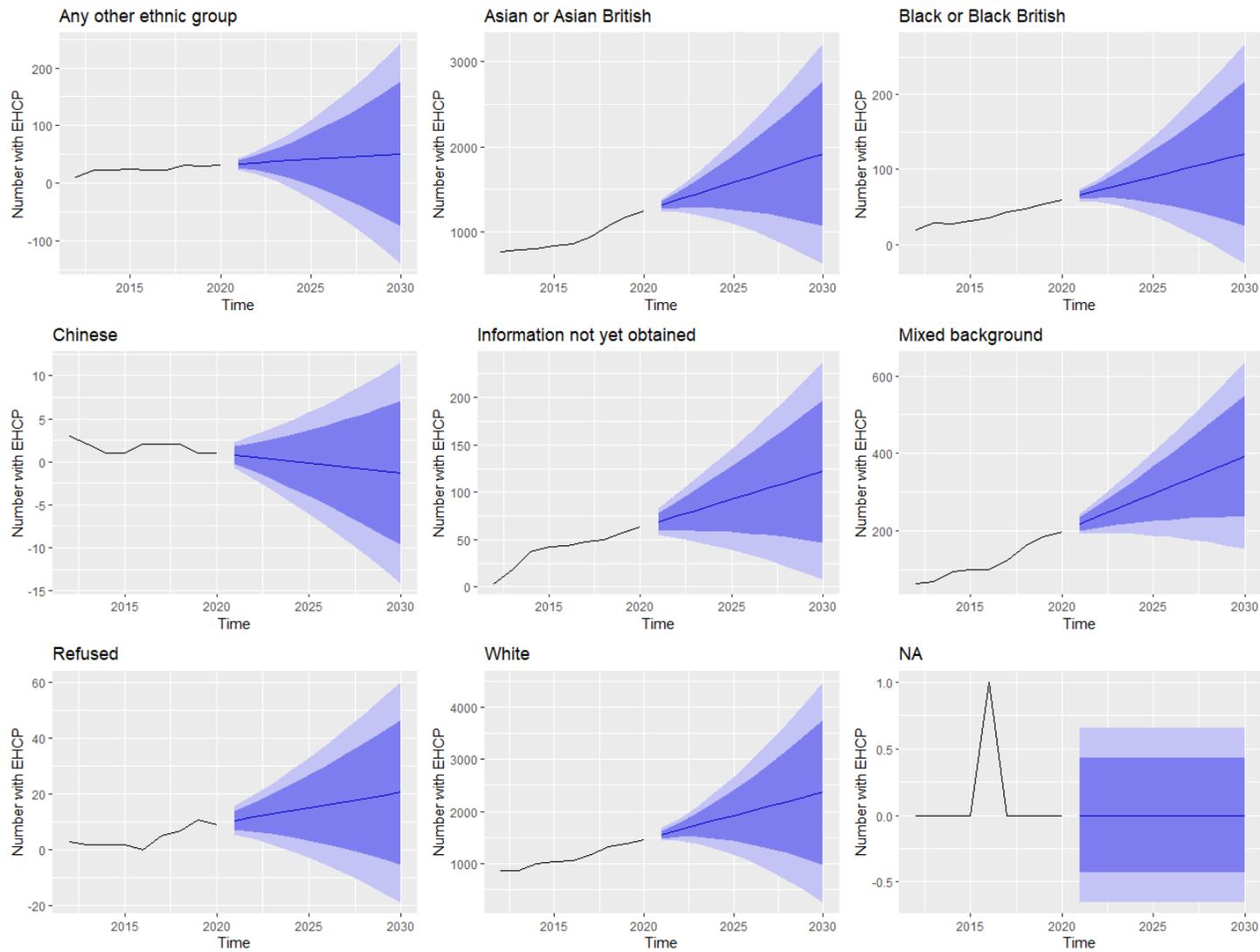
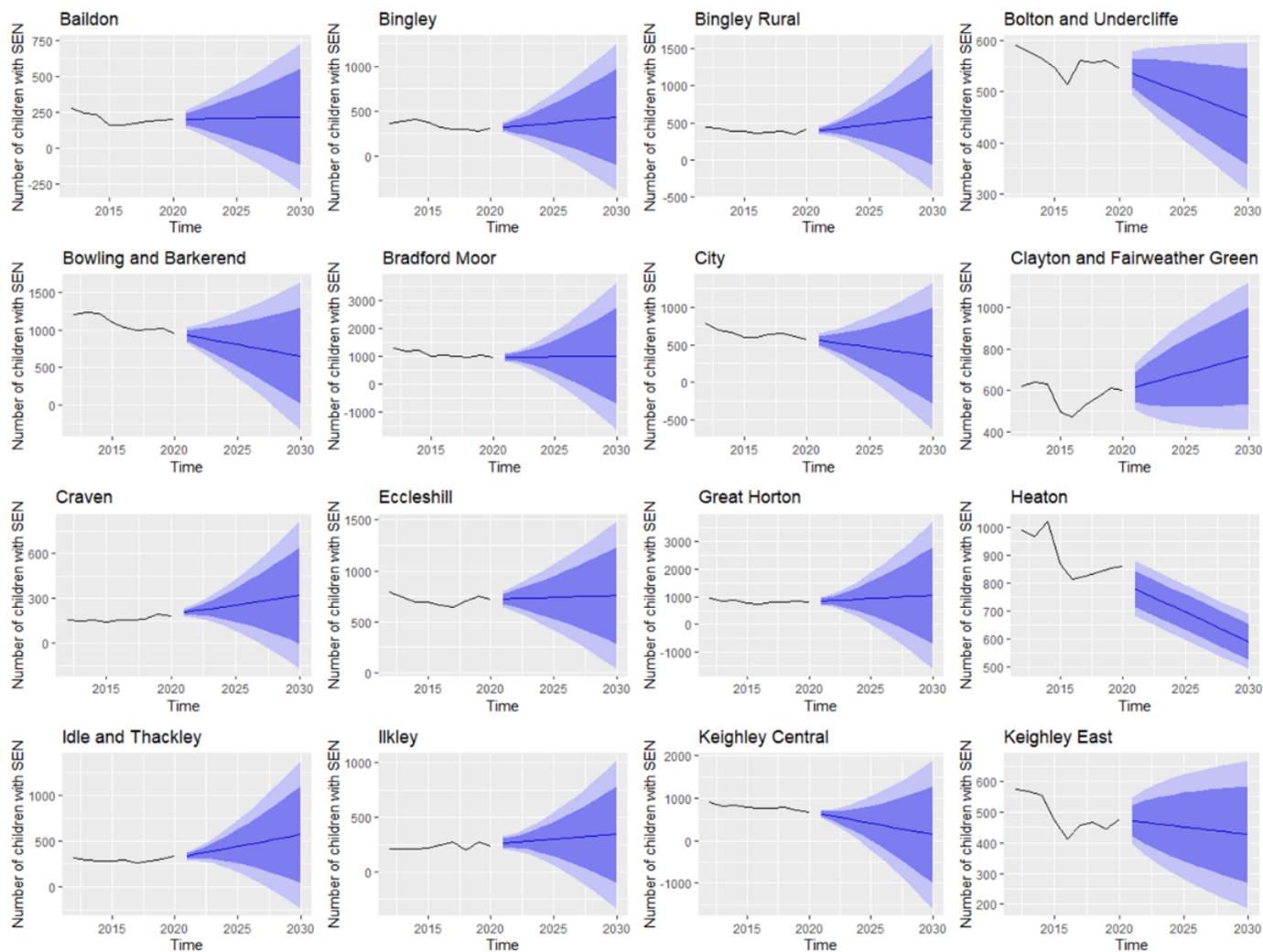


Figure a.2: Number of children with EHCP by Ethnic group – 10-year forecast



Appendix B – Ward of residence

Figure b.1: Number of children with SEN by ward of residence – 10-year forecast



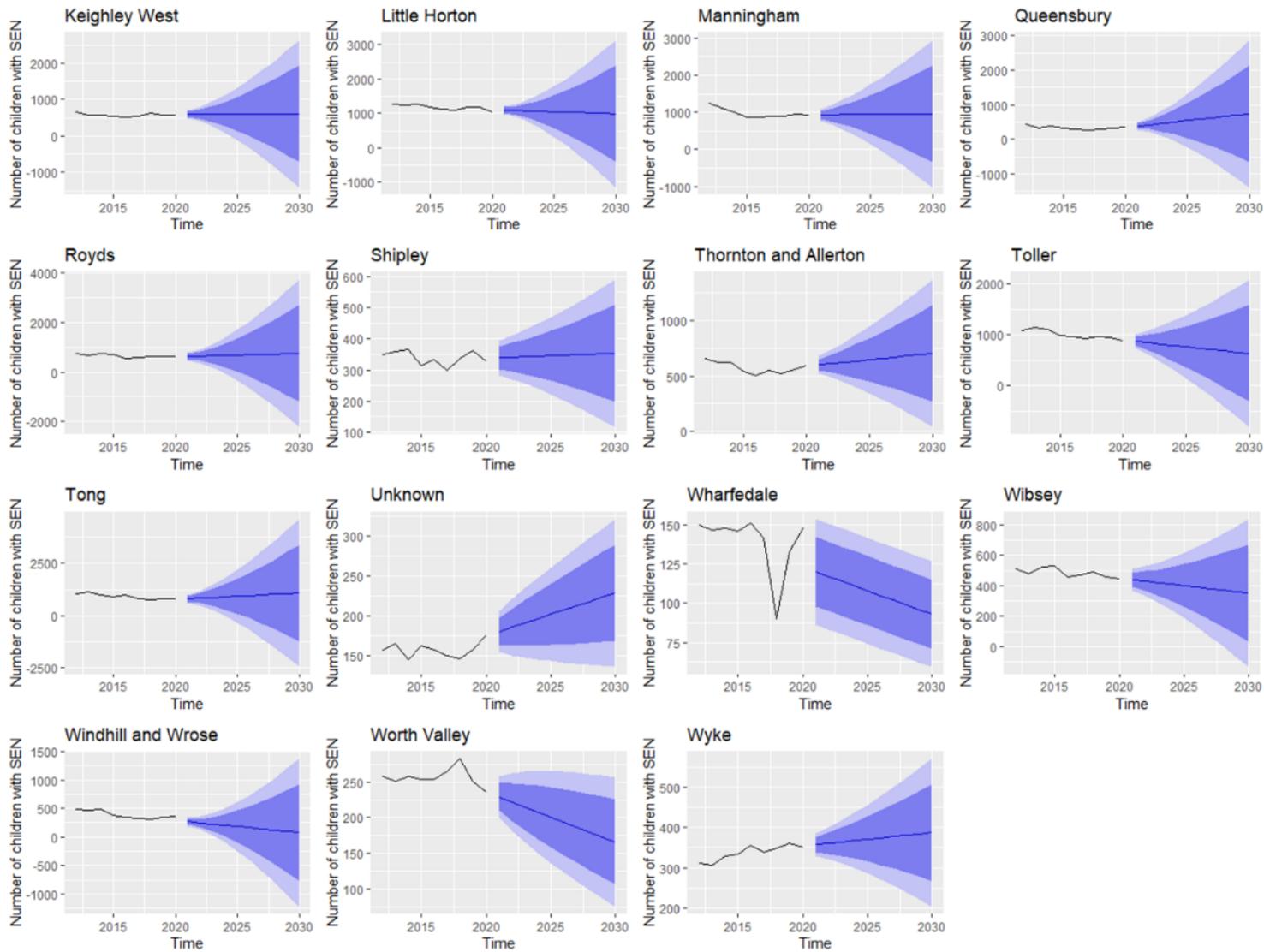
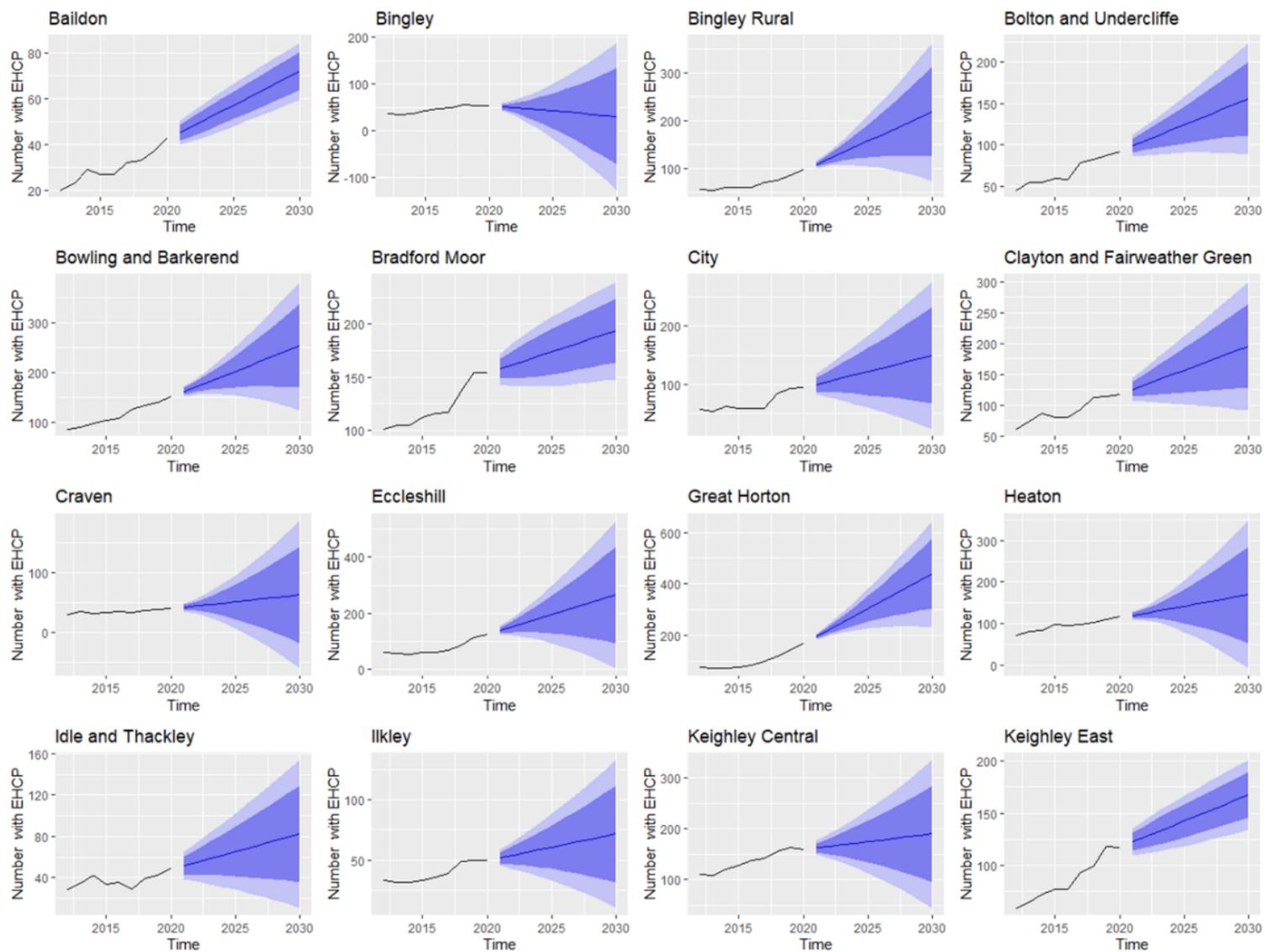
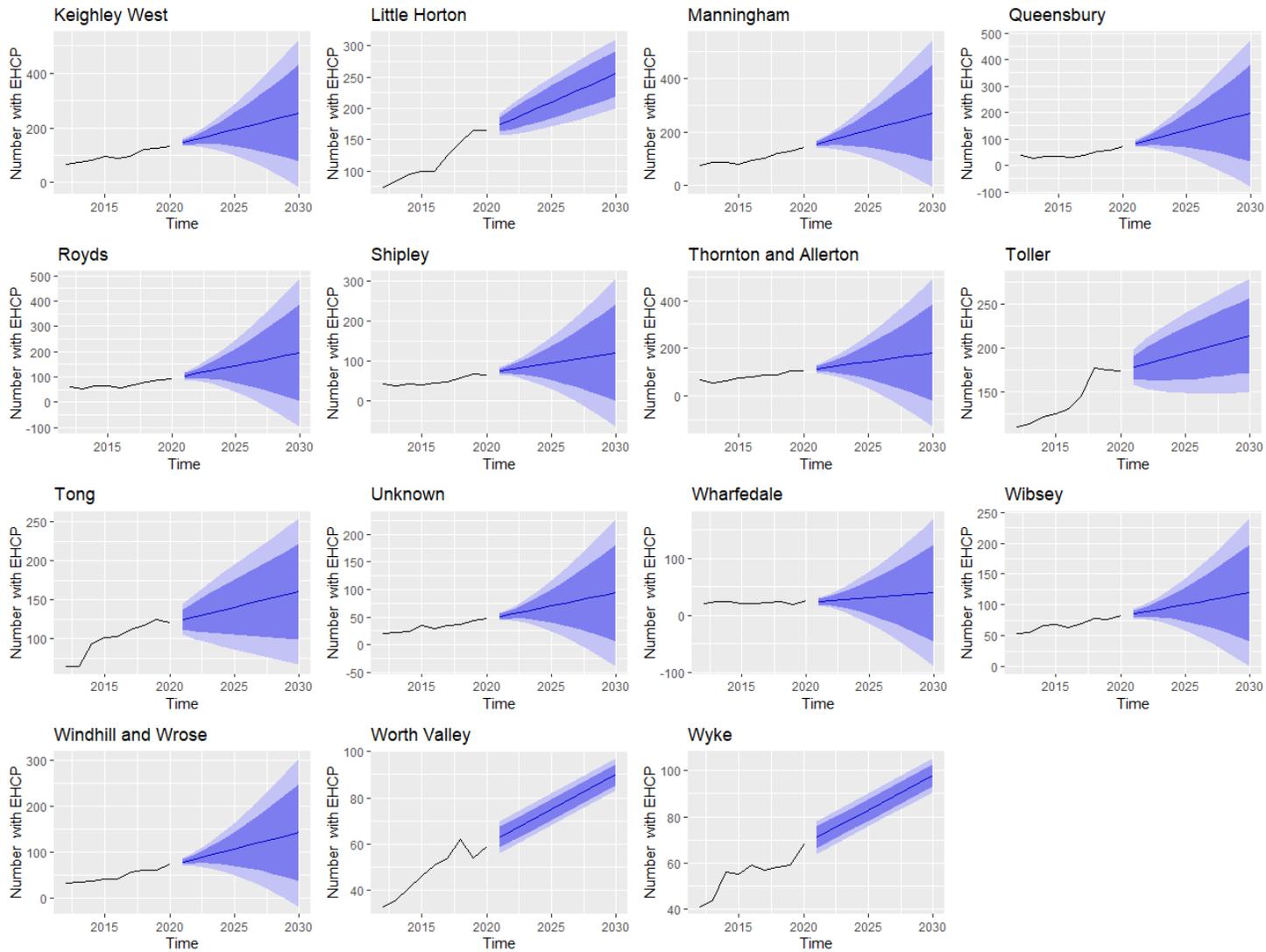


Figure b.2: Number of children with **EHCP** by ward of residence – 10-year forecast





Appendix C – School year

Figure c.1: Number of children with SEN by school year – 10-year forecast

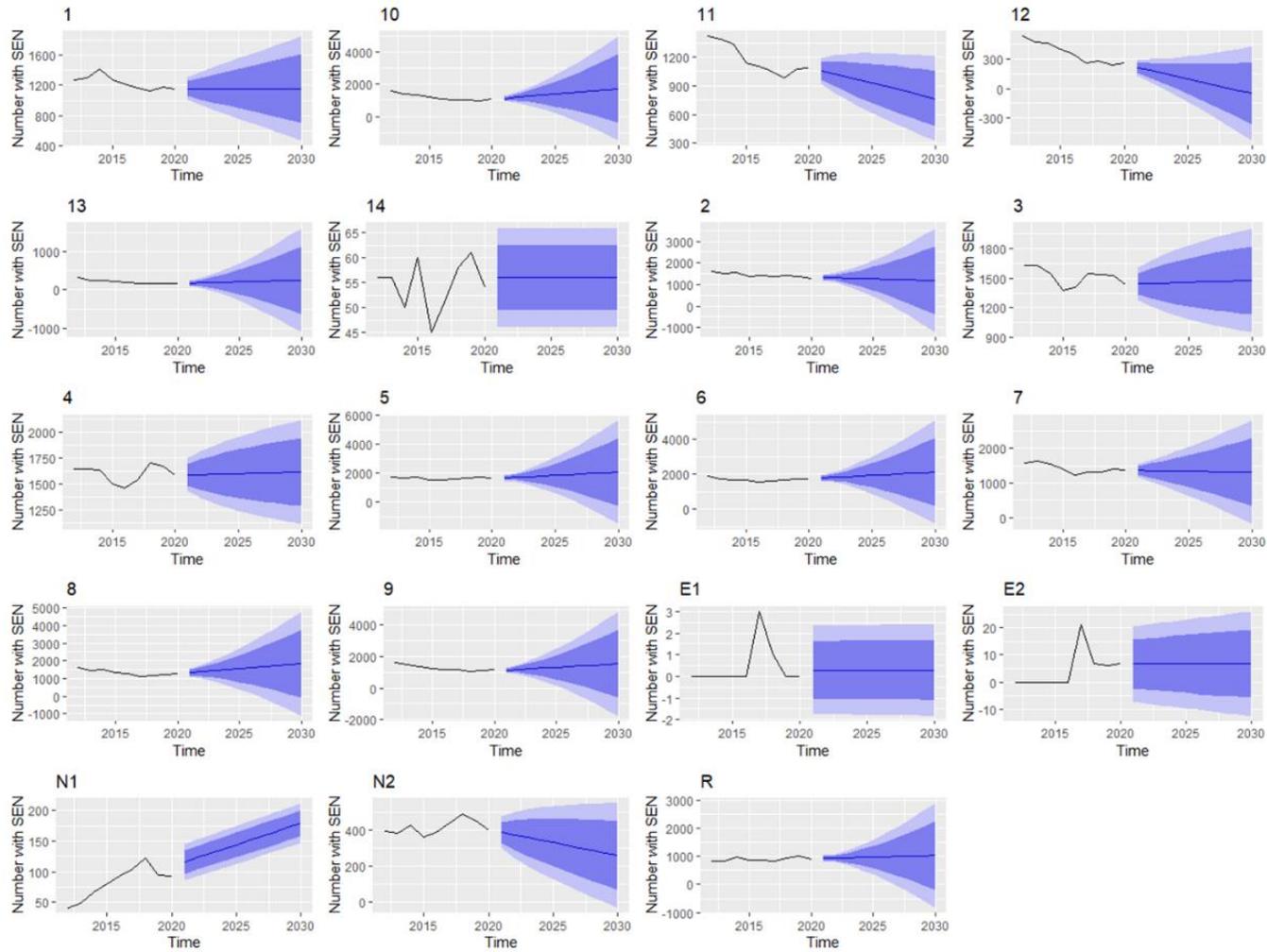
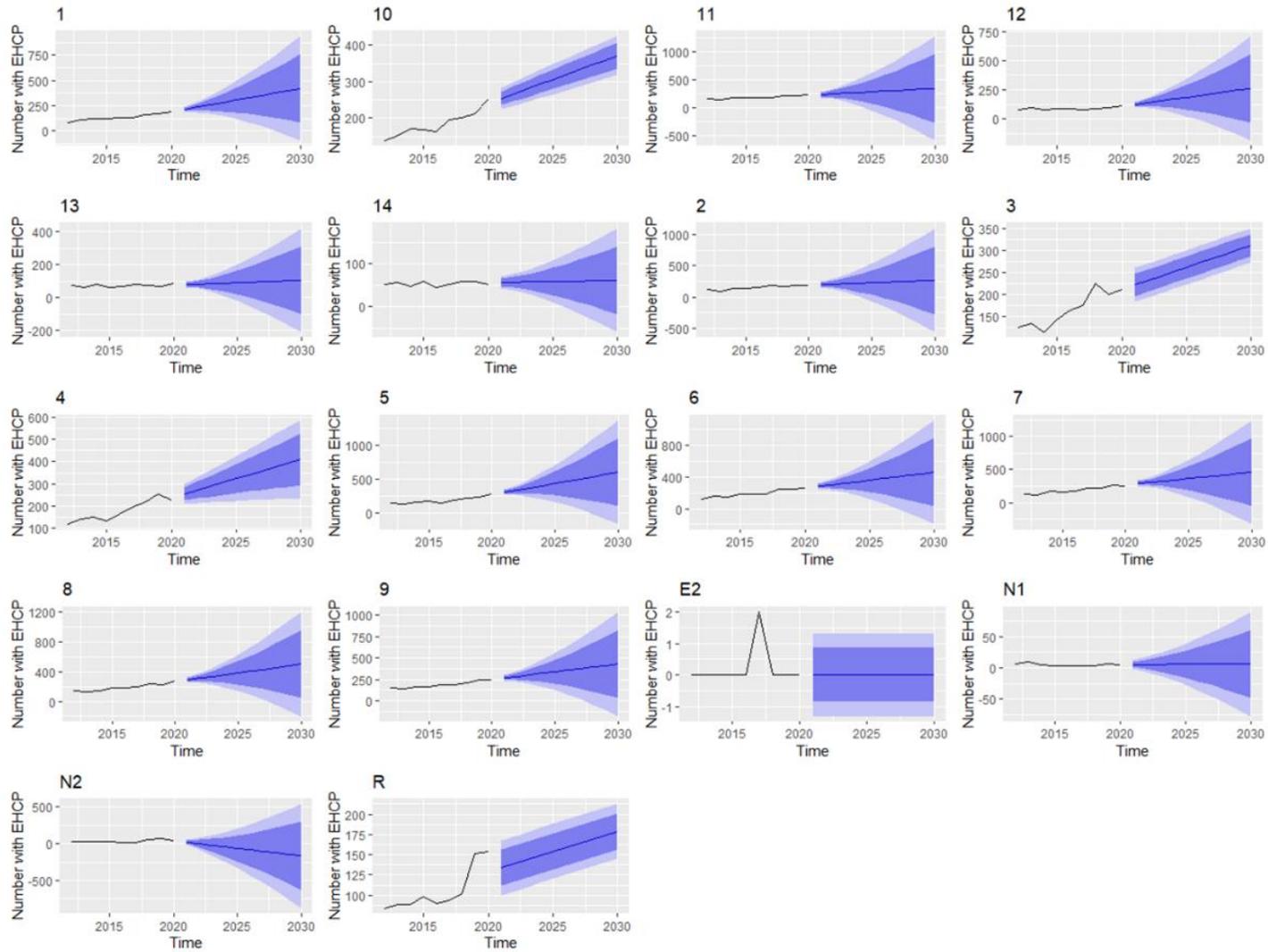


Figure c.2: Number of children with EHCP by school year – 10-year forecast



Appendix D – School phase

Figure d.1: Number of children with **SEN** by school phase– 10-year forecast

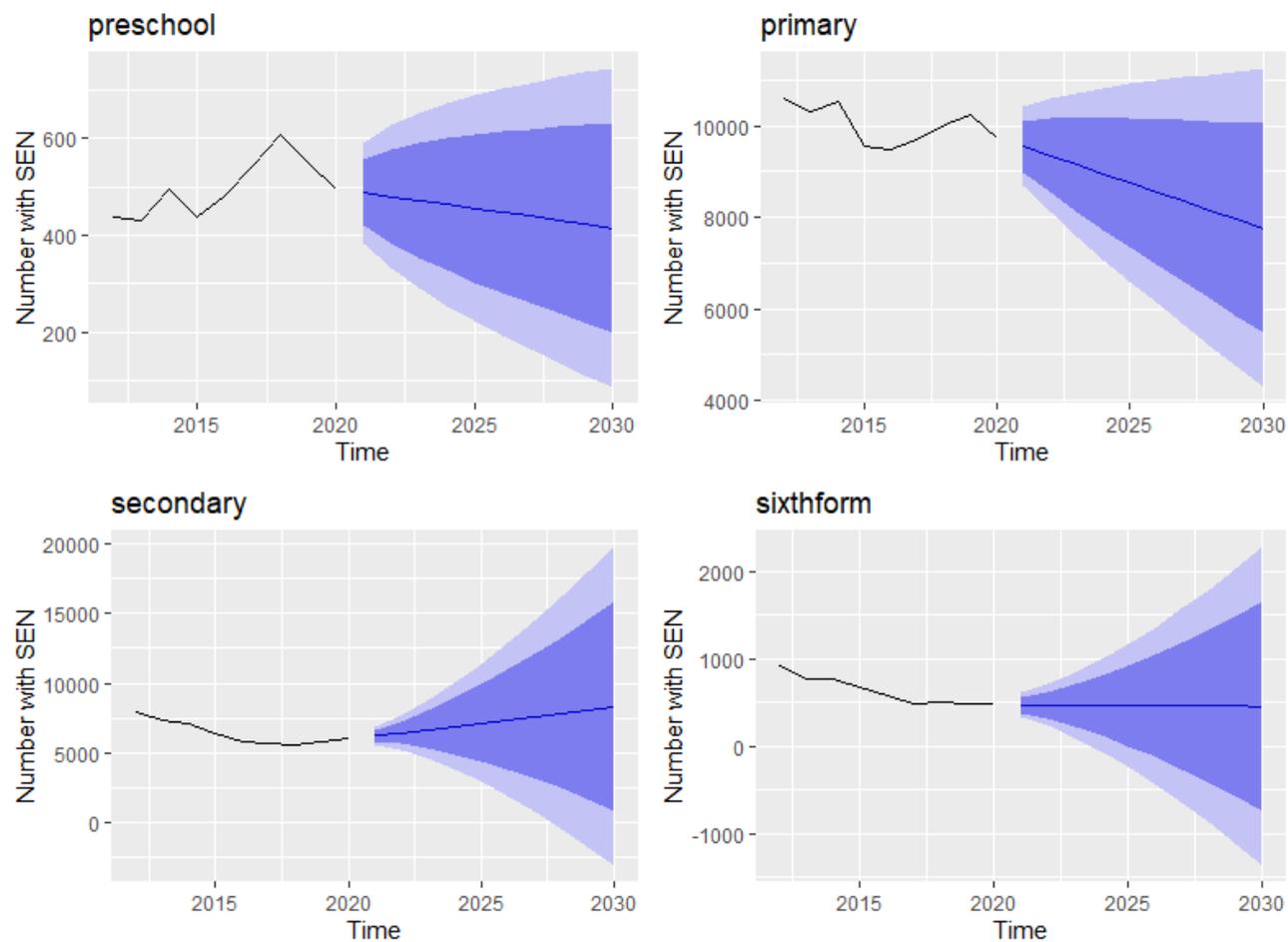
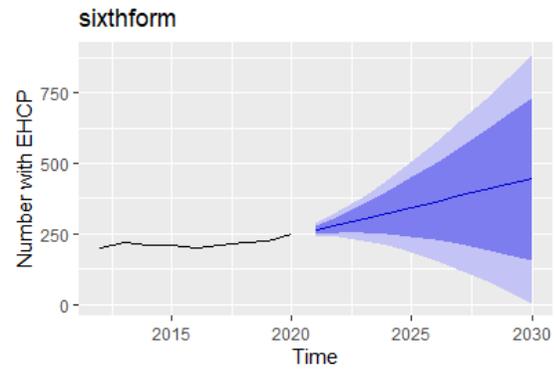
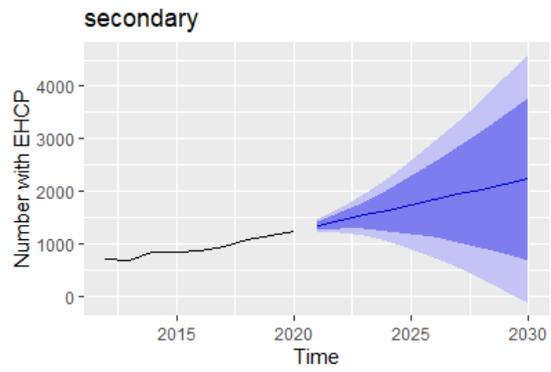
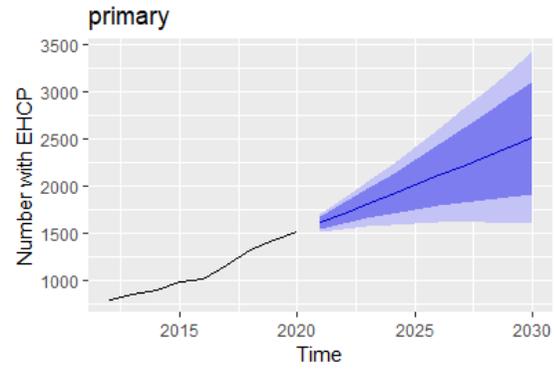
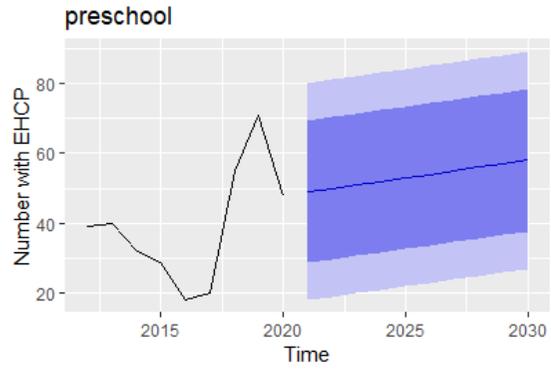


Figure d.2: Number of children with an **EHCP** by school phase– 10-year forecast



Appendix E – Community partnership

Figure e.1: Number of children with SEN by community partnership– 10-year forecast

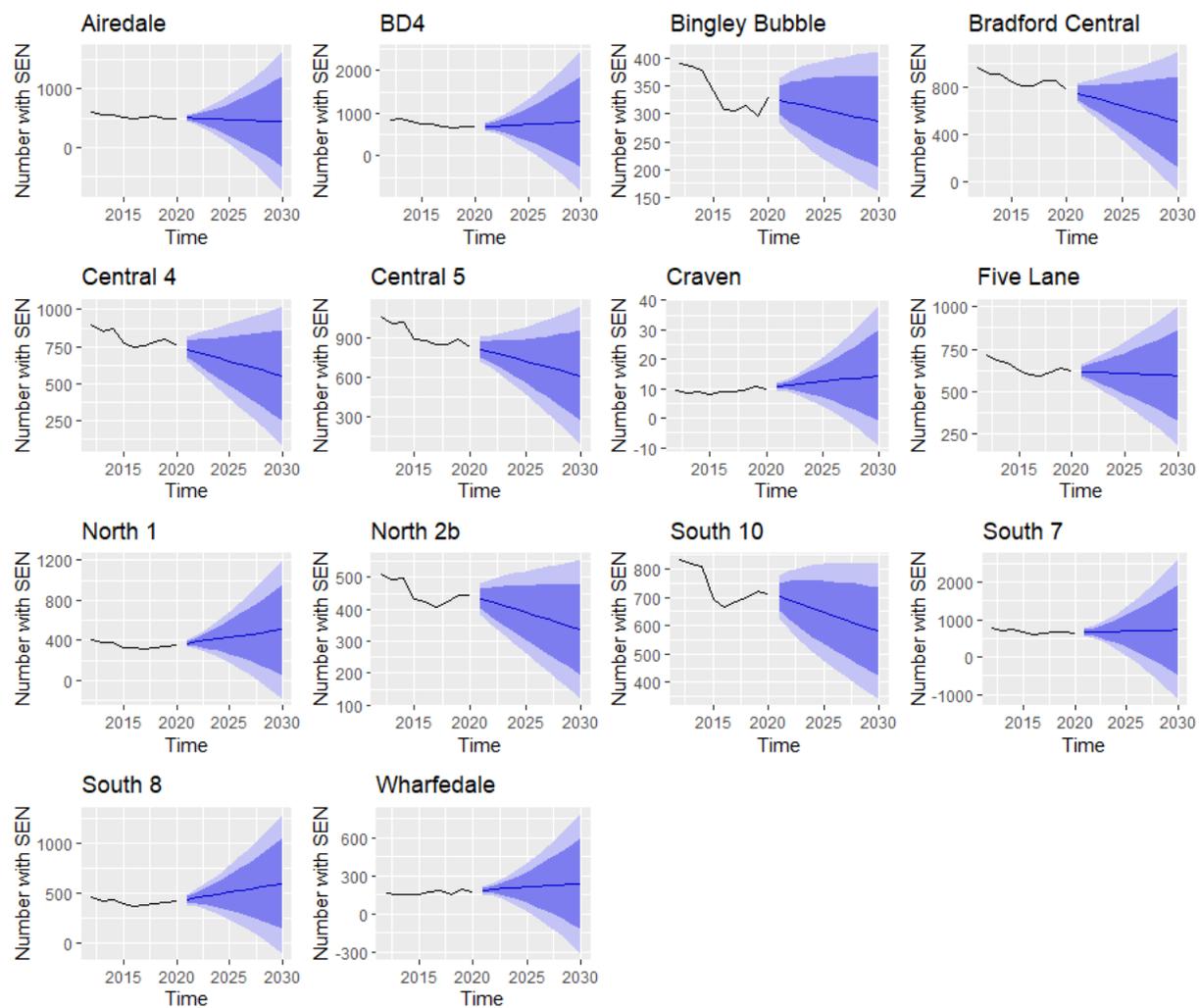
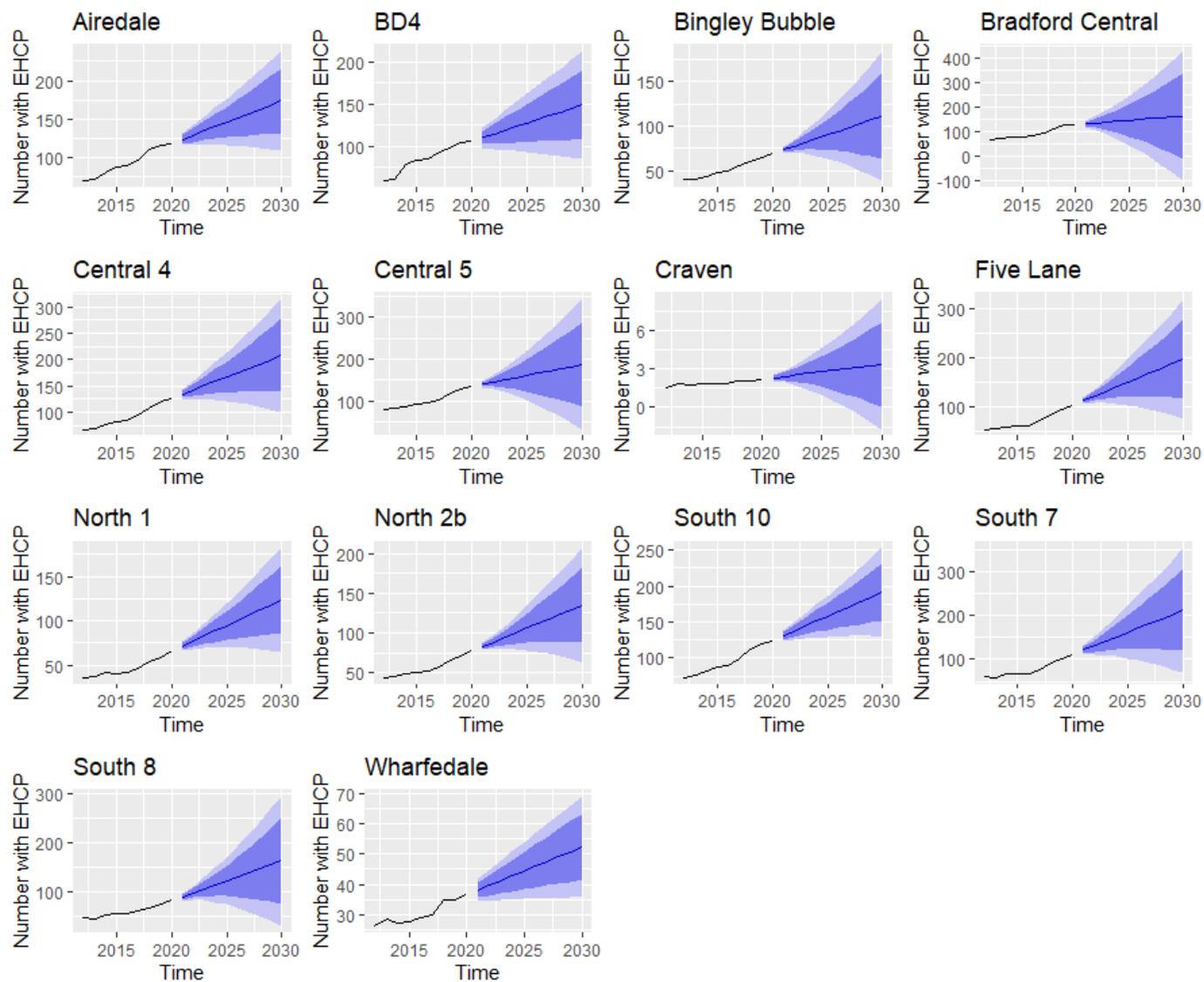


Figure e.2: Number of children with an **EHCP** by community partnership – 10-year forecast



Appendix E – Primary need

Figure e.1: Number of children with **SEN** by primary need– 10-year forecast

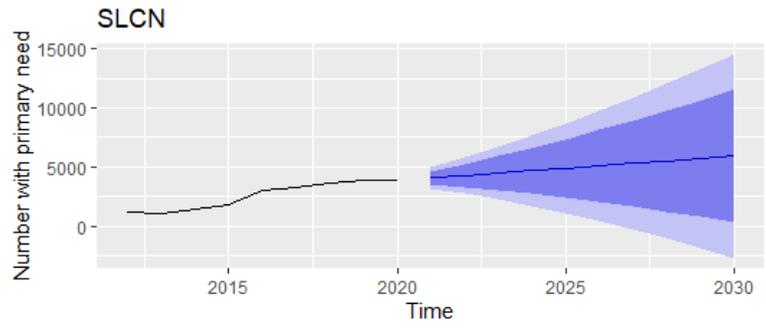
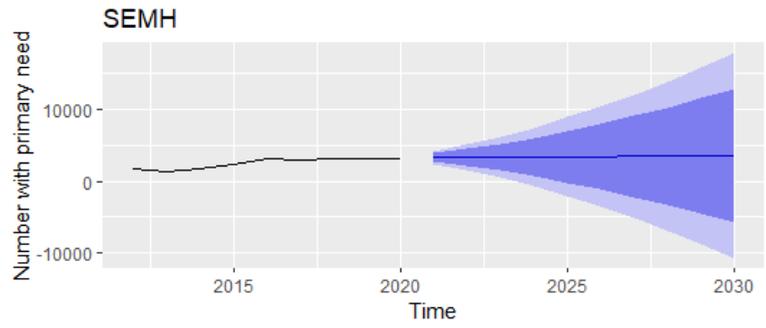
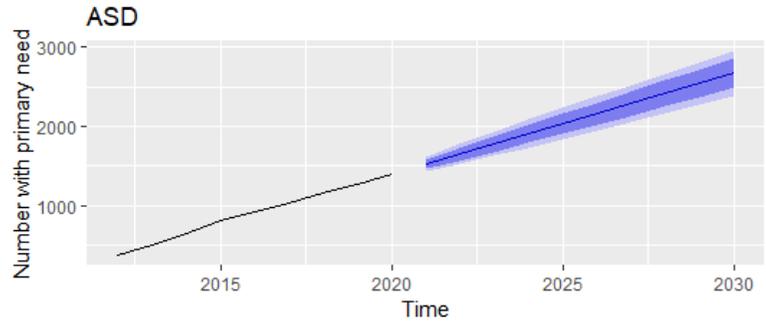
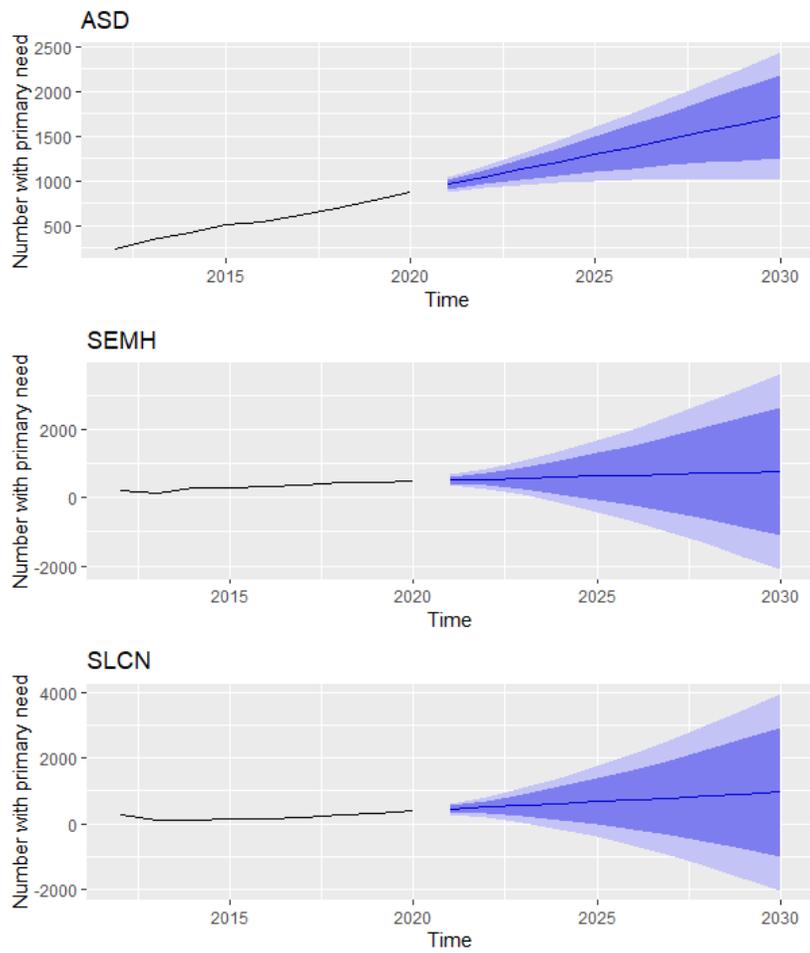


Figure e.2: Number of children with an **EHCP** by primary need – 10-year forecast



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JSNA: CYP SEND <https://jsna.bradford.gov.uk/Children%20and%20Young%20People.asp>