MANCHESTER 1824
The University of Manchester

# Q-step: Department for Education, Children's Services Analysis and Research

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## Key skills

### *Excel*

- Mathematic calculations: percentages, percentage changes, proportions, rates
- Using formulas to work out birth dates and time differences
- Data manipulation: countif, datedif
- V-look up
- Cross tabbing variables through use of pivot tables
- Making graphs/tables to present data

### *SPSS*

- Converting excel document to CSV file, accessing it on SPSS & worked out min, 25%, median, 75%, maximum and mean for a large amount of data in order to make a box & whisker plot in excel

### *PowerPoint/word*

- Documenting my findings in a concise, presentable manner using clear sentences & government specific language

### *Other skills*

- Presentation skills: I had the opportunity to present & discuss my findings to senior policy colleagues in a formal setting
- Gaining experience in a government department& learnt how data collection and policy proposals interlink

The purpose of my eight weeks with the DfE was not only to be involved in a quantitative research project, but also to gain a familiarisation with how government organisations work and how they use data and analytic tools to produce the kind of evidence that can drive policy considerations. This experience has allowed me to improve my analytical skills and my confidence in quantitative data management.

## Overview

My project required me to analyse a large dataset produced by the DfE for National Audit Office (NAO) in their current study on children in need with a focus on re-referrals. What was unique about my analysis in comparison to published data is that:

1. every child in the dataset had at least two referrals and
2. the focus was particularly on what was happening between these referrals.

The narrative I followed throughout my analysis was the time between referrals and referral closure dates for different types of cases and areas.

By the end of my seventh week I presented my findings to the Children's Services policy team and was able to explain and discuss my findings and sparked interesting conversation with some of my results. This presentation led to a further discussion with the policy team on what next steps could be taken in relation to how we can engage more with local authorities (LAs) that had a notable amount of children with high rates of re-referrals and if there can be anything done to prevent some children from going round and round the system.

***All of the data I collected is unpublished and internal to the DfE and therefore due to confidentiality I cannot name any regions/local authorities or key figures***

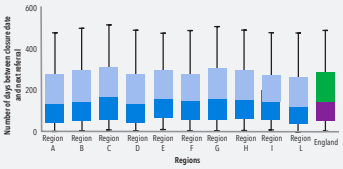


*Figure 1: No of days between referral & 2nd most recent referral closure dale*

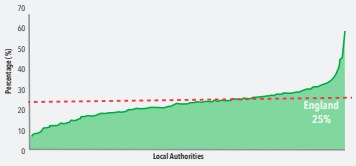


*Figure 2: % of cases where the most recent referral was within 3 months of previous referral closure date*

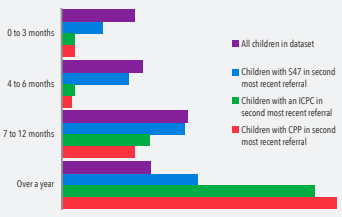


*Figure 3: Time between two most recent referrals when ...*

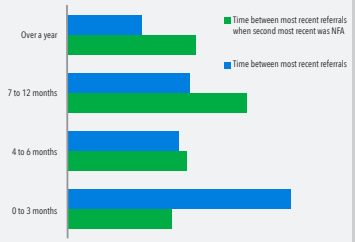


*Figure 4: Time between two most recent referrals when the 2nd most recent was no further action*

## Key findings

- There was a variation in the time between referrals both regionally and at a local level which showed that some areas are better at managing cases
- Throughout my analysis I found a correlation with particular local authorities (LAs) having both high rates of re-referrals and high proportions of children being referred within three months of each referral. One particular local authority stood out to have over 50 children with seven or more referrals with a few other LAs a considerably high amount of children with multiple referrals which indicates a sense of inefficacy and a problem for some children
- Figure 1: I looked regionally at the number of days between the most recent referral and the second most recent closure date. I excluded the top and bottom 5% number of days that accounted for outliers and kept the 25% percentile, median and 75% percentile the same. This showed me what regions had the shortest amount of days between referrals and gave an indication where the LAs that had considerably less amount of days between referrals
- Figure 2: shows a closer look at LA's that had a considerably shorter time between the most recent referral and second most recent referral closure date. The line showing the average time in England allows you to compare LAs and hence determine whether they stand out
- Figure 3: this graph shows us that for more serious cases there is a lower proportion of children being referred again within six months of their previous referral, especially in comparison to all children in the dataset. This result is reassuring as it suggests that on a whole more serious cases are being dealt with properly
- Figure 4: shows that there is a higher proportion of children being referred again within three months if they had no further action in their previous referral in comparison to all children in the dataset. The results of this graph suggests that perhaps if some of these cases were assessed rather than dismissed within 24 hours perhaps the chances of some of these children going 'round and round the system' may be lowered.

Produced at the Graphics Support Workshop, Media Services, The University of Manchester

Department for Education

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Q-Step

**A step-change in quantitative social science skills**

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