Use of routine national cancer waiting times dataset to evaluate cancer urgent referral in City and Hackney CCG following the implementation of C the Signs tool

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Background and Methodology

On the 28th May 2018 the North Central and East London Cancer Alliance (NCEL) commissioned the C the Signs tool in City and Hackney Clinical Commissioning Group (CCG) for 12 months. The tool is designed to help clinicians identify cancer symptoms and recommends next steps for a patients as well as links to the relevant section of NICE guidance.

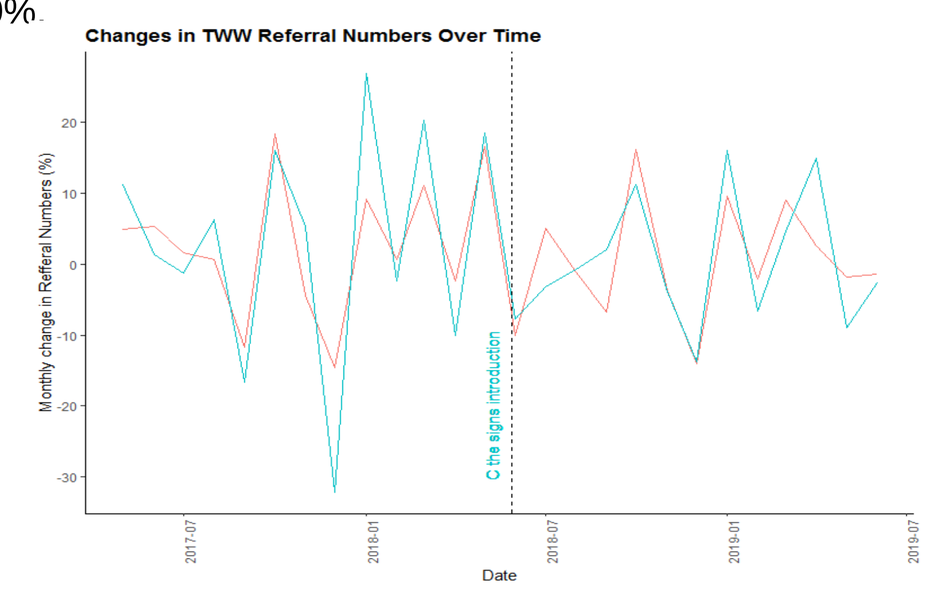
As part of the evaluation the Alliance sought to see how routinely collected data can be used to evaluate implementation of the tool. In this instance we wanted to review several assumptions about the effect such a tool would have: (i) number of suspected cancer referrals would increase due to better awareness of symptoms amongst GPs; (ii) performance of patients receiving prompt first seen appointment in 2 weeks (TWW) would improve as referral forms would be better filled out; (iii) conversion rate would gravitate toward 3% as per NICE guidance's intent; and (iv) the number of multiple 2WW referrals would decrease due to better symptom recognition.

Analysis was based on cancer wait times (CWT) data, particularly focusing on the two weeks waits (i.e. that all urgent referrals for suspected cancer and breast symptomatic patients should be seen within 14 days of a GP referral). Data sources include routinely published CWT data and patient level information for Cancer Alliance from NHS Digital.

Analysis

Number of TWW referrals

The graph below shows how patient numbers have changed in the months before and during the tools implementation and compared these changes to those seen in the STP. The graph shows that monthly variation seen in City and Hackney CCG after implementation (June18 to May-19) were in line with the STP. Growth in number of TWW referrals in CCG was at 7.5%, lower than in North East London (NEL) STP for the same period at 10%.



TWW Performance

Prior to the implementation of C the Sign TWW performance was on a downward trend; three month average performance ending May 2018 dropped to 95% from 97.7% in July 2017. Performance has stabilised in City and Hackney in the months following the implementation of the tool, 3 months earlier than the downward trend for STP (until October 2018).

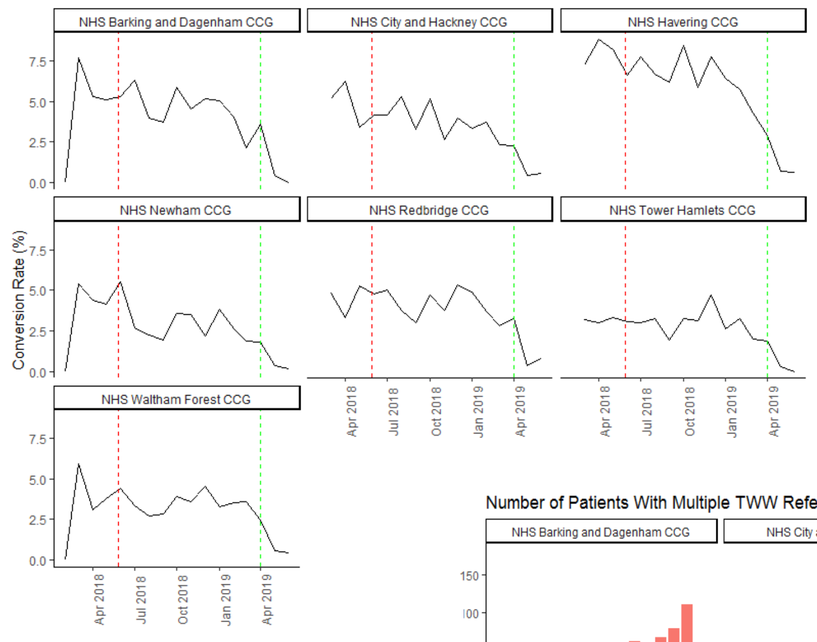
The drop in TWW performance in the 12 months for which C the Sign was implemented compared to the previous 12-month period was 0.8% for City and Hackney CCG; this figure was 2% in NEL STP. City and Hackney has seen the smallest drop in performance within the NEL STP.

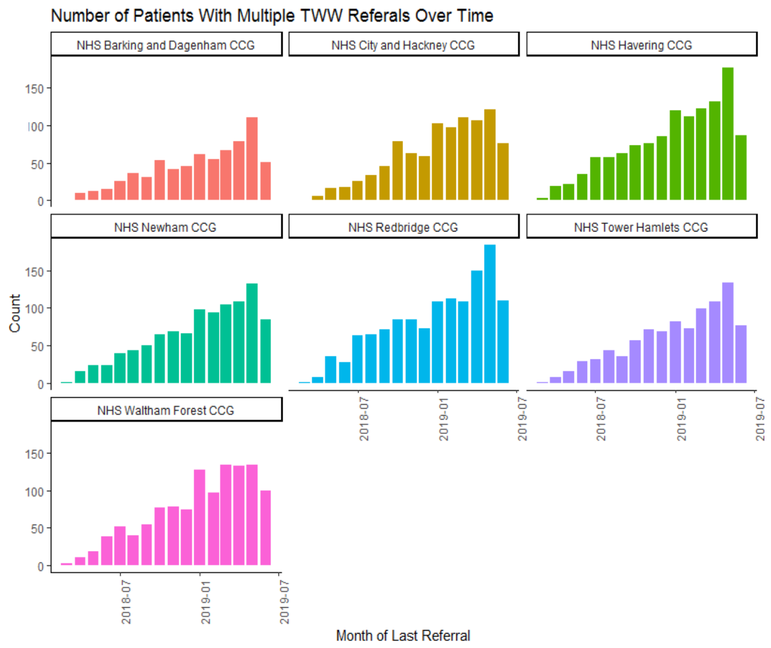
CCG	Performance before C the signs implementation	Performance during C the signs implementation
NEL	96.8	94.8
NHS BARKING AND DAGENHAM CCG	96.7	93.8
NHS CITY AND HACKNEY CCG	95.8	95.0
NHS HAVERING CCG	96.6	93.5
NHS NEWHAM CCG	97.3	95.8
NHS REDBRIDGE CCG	96.6	94.1
NHS TOWER HAMLETS CCG	96.5	95.1
NHS WALTHAM FOREST CCG	98.0	96.4

Conversion rate

Conversion rate analysis is based on the patient level data The latest 3 months was excluded to account for diagnosis data time lag (as shown by the green line in the graphs below). From the point of C the Signs implementation (the red line), majority of CCGs had stable conversion rates; downward trends were observed in Havering, Barking and Dagenham and City and Hackney CCGs.

Conversion rate in City and Hackney dropped from 3.4% in May 2018 to 2.3% in April 2019. In contrast, difference in conversion rates between financial year 2017/18 and 2 months prior to implementation was 0.16%.





Multiple TWW referrals

When looking at the number of patients who have had multiple two week wait referrals (seen in the graph above) we can see since our data only starts from April as time has gone on the number has gone up as we have more data. As can be seen in the graphs, although most show increasing number of patients with multiple TWW referrals as time goes on, there are two exceptions: City and Hackney, where the numbers plateau around January-19 and a similar pattern in Waltham Forest.

Conclusion

C the Signs appears to be having a positive effect on TWW performance and the number of TWW referrals.

In addition this analysis has shown how routinely collected data can be used in evaluations of primary care initiatives, as well as help to derive questions which could be used as part of a surrey given and the end of a more typical evaluation. Given this data is available in a yearly form on fingertips we believe it should be made available to GPs on a monthly basis to assist with future evaluations.

References:
NHS England Statistics Cancer Wai Times time series with revisions https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2019/09/Cancer-Waiting-Times-Commissioner-Time-Series-Oct-2009-Jul-2019-with-Revisions.xlsx
NHS Digital Cancer Wait Times Patient level information for those patients who live within the NCEL cancer alliance April-18 to June-19
This work uses data provided by patients and collected by the NHS as part of their care and support.