

Preventing procurement fraud in the NHS

Comparative findings

July 2022

Version 1.0

**NHS fraud.
Spot it. Report it.
Together we stop it.**



Version control

Version	Name	Date	Comment
1.0	Fraud Prevention Unit	19.07.22	

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Executive summary

1. Fraud prevention is an essential strategy for the NHS Counter Fraud Authority (NHSCFA). Put simply, it is the prevention of opportunities or steps, that would allow a fraud to occur in the first instance. It also involves process improvement to reduce fraud risk and financial vulnerability within NHS systems.
2. In 2019/20, NHSCFA estimated the financial loss to fraud, wastage and error from procurement and commissioning budgets to be approximately £300.4 million¹. In the same year, a national proactive exercise (NPE) was undertaken, directed at building a more accurate understanding of financial vulnerability exposure (FVE) in procurement and commissioning, and tackling fraud risk vulnerabilities within NHS procurement systems. By asking NHS organisations to undertake local proactive activity, NHSCFA was able to establish an understanding of procurement fraud risk and identified financial vulnerabilities within the NHS purchase-to-pay system (P2P) / purchase order (PO) systems. The 2019 exercise provided NHSCFA with a baseline and in 2021 a comparable exercise was undertaken to identify the impact of NHSCFA's fraud prevention activity at national and local level.
3. Ideally all purchases made within NHS organisations should be raised by PO using an electronic P2P accounts payable system with key controls around separation of duties. This provides budget holders with a means of oversight ensuring non-pay expenditure is controlled. Non-PO spend is not fraud, but it exposes organisations to a far greater risk within finance and procurement systems. Our aim for this exercise was to influence behaviours for change.

Key Findings

4. NHSCFA achieved its aim to have a positive impact by influencing behavioural change and thereby reducing the most vulnerable instances of non-PO spend across the NHS provider sector.
5. NHSCFA-led fraud prevention activity at a national level and implementation at a local level, has influenced reductions in FVE within PO expenditure. **Fraud prevention activity has influenced a reduction of £156.8 million in FVE across 79 organisations** that provided data across both data collection exercises (baseline and comparable).

¹ NHS Counter Fraud Authority (2021) *Strategic Intelligence Assessment 2021*

Areas for improvement

6. Instances of non-PO spend in some NHS organisations have reduced; however, the non-PO monetary value and average spend has increased demonstrating an overall cultural behaviour which amounts to vulnerable spend, and a greater reliance of spending outside of the established PO mechanisms. Some NHS organisations also demonstrated consistent behaviour in non-PO spend, often for high values.
7. NHS organisations must disrupt these practices by reinforcing existing organisational Standing Financial Instructions (SFIs), policies and procedures through embedding a culture of PO spend. This should be supported by the implementation of regular audits on departments' performances with staff being held to account if procedures are not followed.
8. Approximately half the sample demonstrated a significant improvement in the reduction of non-PO spend whilst the other half presented a significant increase in non-PO spend. This demonstrates there are still lessons to be learnt, and ongoing prevention interventions are required.

Conclusion

9. NHS organisations should continue working to actively reduce their FVE by ensuring robust controls are embedded and maintained within finance and procurement systems and engender a low reliance on non-PO spend.
10. NHSCFA will provide participating NHS organisations with organisation-specific feedback on their performance within this exercise in 2022 – 2023. It is recommended NHS organisations review the findings and hold discussions with key stakeholders within their organisation to discuss and assess fraud risk vulnerability within the procurement process. Appropriate fraud prevention initiatives should be designed as an outcome of those discussions. Where applicable, discussions should take place on how these risks score on organisational risk registers.
11. To assist NHS organisations several recommendations have been identified within this report. NHSCFA will review and update its existing procurement fraud prevention guidance (available on the NHSCFA website), taking into consideration the outcomes from this exercise.
12. It would not have been possible for NHSCFA to undertake this work without the assistance and participation of NHS provider organisations and their Local Counter Fraud Specialists (LCFSs). NHSCFA would also like to extend our gratitude to our counterparts in NHS Counter Fraud Scotland for provision of statistical resources

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that have been invaluable. NHSCFA is grateful to all those organisations and their staff for their work and participation in this exercise.

1. Introduction

13. As previously reported in *Preventing procurement fraud in the NHS: Findings from a national proactive exercise*² procurement fraud has been and remains an issue of concern across the whole of the NHS. Despite it being a huge area of spend and activity and crossing all sectors of the NHS, there is still a low level of fraud reporting. This has been the driver for NHSCFA making procurement fraud prevention a priority. NHSCFA estimated the financial loss to fraud, wastage and error from procurement and commissioning budgets to be approximately £300.4 million for the 2019/20 financial year³.
14. In May 2019, NHSCFA launched a three-part NPE directed at building a more accurate understanding of procurement fraud FVE, and tackling fraud risk vulnerabilities within NHS procurement systems, informed by an earlier sample pilot exercise. By asking NHS organisations to undertake local proactive activity we sought to improve NHSCFA's understanding of procurement fraud risk vulnerabilities. The NPE measured three procurement fraud risk areas (disaggregate spend, contract management, and PO vs non-PO spend) and identified approximately £6.06 billion of potentially vulnerable spend.
15. Phases 1 and 2 of the NPE were successfully completed, and baseline figures for the three areas of fraud risk vulnerabilities were obtained. Due to the advent of Covid-19 and the impact to the NHS, phase 3 was delayed from 2020 and resumed in 2021. The findings of phases 1 and 2 were reported in *Preventing procurement fraud in the NHS* and issued to the sector in 2021.
16. Phase 3 obtained comparable information solely focused on PO spend activity. The other two areas of disaggregate spend and contract management areas were excluded due to the unforeseen impact of Covid-19 on NHS procurement activities.
17. This report presents the analysis of the completed exercise to examine fraud risk vulnerability within NHS PO spend and identifies savings for NHS provider organisations (referred to as NHS organisations throughout this report).

Background

18. The baseline dataset was designed to improve NHSCFA's intelligence and understanding of fraud risk vulnerabilities within NHS procurement systems.

² NHS Counter Fraud Authority (2021) *Preventing procurement fraud in the NHS: Findings from a national proactive exercise*.

³ NHS Counter Fraud Authority (2021) *Strategic Intelligence Assessment 2021*

What is the PO fraud risk?

19. The risk of fraud in the procurement process is significantly heightened when purchasing activity does not follow the organisation's pre-established procurement protocols and policies. Risk of fraud is mitigated when organisations use established control mechanisms such as their P2P / PO system.
20. Where non-PO spend occurs, an organisation is exposed to a far greater risk of fraud in the procurement process. Spend via the organisation's pre-established procurement route (i.e., the P2P / PO system) acts as a deterrent and mechanism to preventing fraud.

What data did NHSCFA collect?

21. For the 2019 data collection during phase 1 of the national exercise, each NHS organisation was asked to identify, by quarter, the following information sets, broken down by different spend types (the NHS-eClass⁴ system was used to classify spend):
 - All spend by spend type
 - Spend that did not link to a purchase order, by spend type.
22. The data collection for the 2018-19 financial year acts as the baseline dataset, and the data collection for 2019-20 acts as the comparable dataset. These two datasets were collected to analyse the level of non-PO spend present in each NHS organisation and the impact of NHSCFA-led fraud prevention activity. We requested data to be broken down by the NHS-eClass system so that comparisons could be drawn between different spend types.
23. Phase 1 of the NPE demonstrated positive participation, achieving an 81% return rate from NHS organisations⁵ which in turn provided substantial basis for analysis work undertaken to establish the baseline indicator.
24. The success of phase 1 and positive engagement encouraged a 10% increase in response rate (91%) of participating NHS organisation in the comparison dataset exercise (2019 – 2020) for phase 3 of the project.

⁴ NHS-eClass is a bespoke classification system for products and services, owned by the English NHS. The purpose of NHS-eClass is to facilitate the accurate analysis of expenditure.

⁵ 231 NHS organisations in England and 9 NHS (Welsh Health Board) organisations in Wales were invited to participate in the NPE, of those an 81% response rate was obtained covering all three areas of fraud risk vulnerability; Disaggregated spend, Contract management and PO vs non-PO spend.

2. Financial vulnerability exposure

25. Financial vulnerability exposure or FVE is designed to give an indication of the exposure of the NHS to potential fraud. It should not be used as a financial instrument or to categorically define losses to fraud. FVE has been introduced to NHSCFA's Strategic Intelligence Assessments⁶ and more accurately reflects the nature of intelligence and the confidence the NHSCFA can attribute. For example, we may not be able to say that something is exposed to fraud exclusively, but we can have more confidence in stating that something is exposed to fraud or wastage or error. This provides stakeholders more clarity and context around fraud risks.
26. To assess whether fraud prevention activity influenced a reduction in FVE, NHSCFA could only achieve this by looking at those organisations that participated in both data collection exercises. Whilst the sample sizes are larger, the FVE was assessed across 79 organisations.
27. Our analysis outlined below, identifies that NHSCFA-led fraud prevention activity at a national level and implementation at a local level, has influenced a behavioural change at NHS organisation-level and effected reductions in FVE in procurement fraud.

Analysis

28. The datasets were collected to analyse the level of non-PO spend present in each NHS organisation. We requested data to be broken down by the NHS-eClass system so that comparison could be drawn between different spend types.
29. In our analysis we considered instances of non-PO spend of 90% or above and in categories of 30% or above and attributed monetary value. This helped to identify the most pertinent categories of non-PO spend. This methodology is discussed in more detail in the Methodology section of the report.
30. This methodology identified seven main vulnerable (eClass) categories of spend across the two data collections:
 - D: Pharmaceuticals Blood Products & Medical Gases
 - L: Fuel, Light, Power, Water

⁶ The Strategic Intelligence Assessment provides an annual assessment of the threats faced from fraud and an overarching estimate on the losses from fraud to the NHS. It is neither a risk assessment nor an audit document. The losses presented are an estimate based on available information at the time of writing.

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- M: Hotel Services Equipment Materials & Services
- P: Building & Engineering Products & Services
- R: Purchased Healthcare
- X: Transportation
- Z: Staff & Patient Consulting Services & Expenses.

31. Two of the seven categories (Category L: Fuel, Light, Power, Water and Category R: Purchased Healthcare) were excluded from the FVE calculation. Engagement with the sector has confirmed that spend in these two areas are never fixed costs in comparison to other types of spend and are usually processed without a PO number. Therefore, they could never have realistically been impacted by any prevention measures the NHSCFA or local NHS organisation put in place.
32. To pinpoint the most vulnerable areas of non-PO spend within the five categories, a recalculation was undertaken to ensure spend that did not meet the 30% threshold in some quarters was also included. This would ensure a more accurate picture of FVE.
33. When applying our methodology to identify FVE, there is a discernible change between 2018 – 2019 compared with 2019 – 2020. The graph in Figure 1 illustrates these changes.
34. NHSCFA fraud prevention initiatives were effective from quarter one of the 2019 – 2020 financial year, with the fraud prevention campaign coming into effect in quarter two of the same year. Targeted fraud prevention activity undertaken during this period is explored in more detail in the 'Influencing behavioural change' section of this report. The decreases shown in the most vulnerable non-PO spend of 90% or above during this period are likely to be a result of this initiative. The graph in Figure 1 illustrates the interventions and decreases in non-PO spend of 90% or above between quarters.

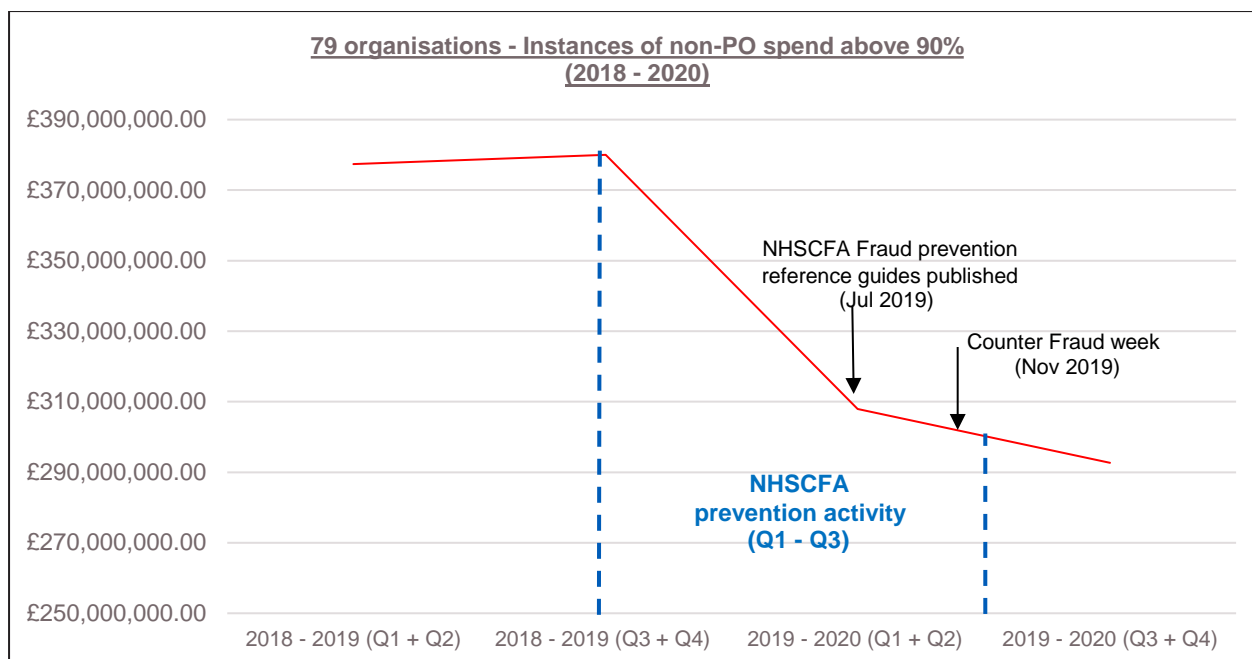


Figure 1: Instances of non-PO spend above 90% in categories above 30% 2018-2020 (79 organisations)

35. When undertaking comparative analysis, it is significant that behaviour between quarters one and two versus three and four in 2018 – 2019 is fairly aligned. After quarter three and four, however, behaviour significantly changes in the first half of 2019 – 2020 with a decrease in non-PO spend, and this decline continues in the second half of the year. Table 1 and Table 2 demonstrates this decrease by detailing the value and number of instances vulnerable non-PO spend.

Category	Q1 + Q2 Total (2018 – 2019)	Q3 + Q4 Total (2018 – 2019)	Q1 + Q2 Total (2019 – 2020)	Q3 + Q4 Total (2019 – 2020)	Difference between FY
D: Pharmaceuticals Blood Products & Medical Gases	£60,256,297.16	£63,331,608.74	£6,974,719.20	£8,016,861.43	-£108,596,325.27
M: Hotel Services Equipment Materials & Services	£92,143,905.15	£79,181,581.87	£17,099,022.90	£16,683,144.87	-£137,543,319.25
P: Building & Engineering Products & Services	£36,850,262.27	£31,838,465.99	£139,006,398.31	£94,570,078.26	£164,887,748.31
X: Transportation	£10,899,626.63	£13,404,106.53	£9,900,235.59	£10,646,273.40	-£3,757,224.17
Z: Staff & Patient Consulting Services & Expenses	£177,227,295.96	£192,259,338.47	£134,963,318.93	£162,753,658.29	-£71,769,657.21
Total	£377,377,387.17	£380,015,101.60	£307,943,694.93	£292,670,016.25	-£156,778,777.59
Increase/Decrease	£757.4 million		£600.6 million		-20.7%

Table 1: Comparison (financial) of vulnerable non-PO spend between financial years: 2018 – 2019 and 2019 – 2020.

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Category	Q1 + Q2 Total (2018 – 2019)	Q3 + Q4 Total (2018 – 2019)	Q1 + Q2 Total (2019 – 2020)	Q3 + Q4 Total (2019 – 2020)	Difference between FY
D: Pharmaceuticals Blood Products & Medical Gases	37	41	23	25	-30
M: Hotel Services Equipment Materials & Services	18	21	17	13	-9
P: Building & Engineering Products & Services	14	12	25	12	11
X: Transportation	41	41	35	34	-13
Z: Staff & Patient Consulting Services & Expenses	26	31	18	21	-18
Total	136	146	118	105	-59
Increase/Decrease	282		223		-20.9%

Table 2: Comparison (number of instances) of vulnerable non-PO spend between financial years: 2018 – 2019 and 2019 – 2020.

36. In 2018 – 2019 we see a 7.4% increase in the second half of the year in the number of instances (136 increasing to 146), equating to a 0.7% increase in monetary value of approximately £2.6 million (£377.4 million increasing to £380 million). However, in the first half of 2019 – 2020, we see a significant 19.2% decrease in instances from the second half of 2018 – 2019 (146 to 118), equating to a 19% decrease in monetary value of approximately £72.1 million (£380 million decreasing to £307.9 million). We then see a further 11% decrease of instances (118 decreasing to 105) in the second half of 2019 – 2020, equating to a 5% decrease in monetary value of approximately £15.2 million (£307.9 million decreasing to £292.7 million).
37. Having established a tangible change of behaviour, a comparison of the potential reduced FVE in procurement fraud, is assessed by comparing the differences between 2018 – 2019 and 2019 – 2020 for the 79 organisations that provided data across both data collection exercises (baseline and comparable). This equates to a reduction of 59 instances (282 instances reducing to 223) and a reduced FVE of approximately £156.8 million (£757.4 million reducing to £600.6 million). This reduction takes place in four of the five categories, most notably the categories of Pharmaceuticals Blood Products & Medical Gases, and Hotel Services Equipment Materials & Services, with reductions of approximately £108.6 million and £137.5 million respectively. The only increase is seen in the category of Building & Engineering Products & Services equating to £164.9 million.
38. As depicted in Tables 1 and 2, the decreased FVE of approximately £156.8 million between years is attributable to a decrease of 59 instances in non-PO of 90% or

above. This decrease is also proportionate to the decrease in attached monetary value, 20.9% and 20.7% respectively.

39. At this point, the analysis suggests that there has been a tangible change of behaviour in most vulnerable instances of non-PO spend from quarter one in 2019 – 2020.
40. By this point in the timeline (Quarter 1, 2019 – 2020, see Figure 1), NHSCFA had launched its campaign of fraud prevention activity. The release of the NHSCFA fraud prevention quick guides, alongside a wide range of engagement and promotional activity throughout the year, are indicating factors in influencing change in the most vulnerable instances of non-PO, if not overall non-PO spending. It is therefore conceivable that NHSCFA output, and activity at NHS organisational level has had a positive impact on behaviour, and as such, organisations made tangible efforts to curb the top end and most vulnerable non-PO spend.
41. Fraud prevention activity has influenced a reduction of **£156.8 million** in FVE across 79 organisations that provided data across both collection exercises (baseline and comparable).

3. Influencing behavioural change

42. In July 2019, NHSCFA launched a fraud prevention campaign as part of the NPE. The campaign was a programme of prevention activity to influence behavioural change across the NHS procurement landscape, thereby effecting change in staff and organisational behaviours and a subsequent reduction on the reported PO vs non-PO spend baseline dataset (2018 – 2019). The campaign purposely targeted NHS staff in procurement and finance teams to educate and increase awareness of fraud risk vulnerability within finance and procurement processes. The range of activities and products NHSCFA provided to support behavioural change are as follows:
- Targeted workshops and focus groups
 - Webinars for the counter fraud community
 - Speaker engagements at NHS procurement & finance conferences
 - Key stakeholder engagement with government and national bodies
 - Series of engagement visits with NHS procurement and finance personnel
 - A range of newly developed procurement fraud prevention guidance documents
 - A toolkit designed to assist LCFSs with implementation and engagement activities on procurement fraud prevention.
43. NHSCFA collaborated closely with NHS procurement and finance staff to ensure the tone and content of the prevention material would be relevant and applicable to NHS processes and procedures. We listened to our NHS colleagues in terms of the final guidance design and layout of the NHSCFA series of eight fraud prevention quick guides focusing on specific areas of fraud risk vulnerability in NHS finance and procurement:
- Contract splitting (disaggregate spend)
 - Contract reviews
 - Buying goods and services
 - Due diligence
 - Suppliers' code of practice: preventing fraud, bribery and corruption
 - Mandate fraud
 - Petty cash

- Credit card.
44. The purpose of the guides is to reduce the NHS's vulnerability to procurement fraud by helping organisations to embed control measures and implement preventative action. Each quick guide covers:
- Brief summary of the fraud risk
 - How to spot fraud
 - How to stop fraud from happening
 - How to report suspicions of fraud.
45. To further raise the profile of the campaign, NHSCFA staff presented at various conferences such as P4H, HCSA, CIPFA and the Australian 11th National Public Sector Fraud and Corruption Congress. There were also articles, webinars and locally held events. Exposure from the campaign project led to the NHSCFA playing a significant role in a cross-public sector working group on fraud and corruption in procurement, initially led by Ministry of Housing, Communities & Local Government and later, the Joint Anti-Corruption Unit at the Home Office.
46. Following completion of the baseline collection, the NHSCFA undertook site visits at 25 NHS organisations of varying sizes and types, meeting with Directors of Finance, Heads of Procurement, and LCFs to identify the impact of the campaign, promote good practice and further promote implementation of NHSCFA's fraud prevention materials.
47. Feedback obtained from the visits established that the campaign had supported internal policy and procedural change in many NHS organisations. Several key themes emerged from these engagement meetings, particularly around the difficulties associated with managing contracts and contract oversight within NHS organisations. The visits also revealed NHS organisations were undertaking reviews of local policies, procedures, and Standard Operating Procedures (SOPs) against the fraud prevention quick guides and developing action plans to raise awareness.

Assessing the impact

48. During the 2019 – 2020 period NHSCFA undertook an assessment of the impact of fraud prevention campaign which identified a total of 138 incidents⁷ recording the use of the quick guides to deter fraud following the release of them in the campaign.

⁷ The 138 incidents refer to an incident of fraud, either successful or unsuccessful with regards to the fraudster making financial gains.

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In addition, NHS organisations initiated 5,753 proactive measures as a result of the campaign. This included measures such as fraud awareness training, alerts sent to staff, local proactive exercises, and changes/reviews of organisational policy, procedures, or practice⁸.

49. Fraud prevention activity was effective as early as April 2019 which saw NHSCFA reaching out to NHS organisation LCFs, Directors of Finance and Audit Committee Chairs, updating them with the upcoming NPE and fraud prevention campaign.
50. Our analysis shows a positive correlation between NHSCFA-led fraud prevention activity, the behavioural change at NHS organisation level, and the reduction in FVE in procurement fraud.

⁸ NHS Counter Fraud Authority (2021) *Fraud Prevention Guidance Impact Assessment*.

Appendix 1: Recommendations and Action Plan

Recommendation(s)	High/Medium/Low	Owner
1. Health Sector CFB to advocate for FVE reduction measurement to be included in the Cabinet Office Consolidated Data Return to incentivise fraud prevention work / local proactive exercises across health sector.	Medium	Health Sector CFB
2. NHS organisations to reinforce existing Standard Operating Procedure / financial processes / organisational policy over the processing of payments through the P2P system and hold staff to account when the prescribed procedures are not followed.	High	NHS organisations / Director of Finance / LCFS
3. NHS organisations to continue to promote the procurement fraud prevention campaign amongst staff and continue to reinforce mitigating controls.	Medium	NHS organisations / Director of Finance / LCFS
4. NHS organisations to review and update policies and procedures in accordance with NHSCFA procurement fraud prevention guidance.	Medium	NHS organisations / Director of Finance / LCFS
5. NHS organisations to undertake regular audits to ensure procedures are being followed.	Medium	NHS organisations / Director of Finance / LCFS
6. NHSCFA to review and update its existing procurement fraud prevention guidance (available on the NHSCFA website), taking into consideration the outcomes from this exercise.	Medium	NHSCFA

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Priority level		Definition
High		These recommendations involve matters of significance which may have adverse impact on an organisation's ability to meet its strategic aims and objectives and which require immediate consideration and action.
Medium		These recommendations involve matters of significance which whilst not posing an immediate threat to the organisations ability to meet its strategic aim and objectives may have the potential to do so in future, and / or concerns a matter of significant importance which requires consideration and action on the stand-alone basis.
Low		These recommendations involve matters of less significance but which if addressed may lead to service improvements.

Appendix 2: Methodology

51. Phase 1 of the NPE demonstrated positive participation, achieving an 81% return rate from NHS organisations which in turn provided substantial basis for analysis work undertaken to establish the baseline indicator.
52. The success of phase 1 and positive engagement encouraged a 10% increase in new NHS organisations participating in the comparison dataset exercise (2019 – 2020) for phase 3 of the project.
53. NHSCFA obtained statistical support from NHS Counter Fraud Scotland. A peer review was undertaken of the methodology and analysis used to determine the most vulnerable instances of non-PO spending and the identified FVE decrease between the first and second exercises for the 79 organisations to submit data for both.
54. The methodology required the collection of two datasets of all spend and spend that did not link to a PO. The NHS-eClass system was used to classify spend.
55. The baseline dataset (2018 – 2019) contained submissions from 94 organisations. The comparable dataset (2019 – 2020) contained submissions from 211 organisations. Due to an identified anomaly in the comparable dataset, one NHS organisation's data was removed from analysis. There were 14 of the original 94 organisations that did not take part in this new exercise to provide comparable data. Therefore, conclusions (with regard to the fraud prevention campaign's impact on FVE) are drawn from data provided by the remaining 79 organisations that participated in both the baseline and comparable data collections.
56. Organisation-specific feedback will however be provided to all 211 organisations, including those that did not participate in both data collection exercises (baseline and comparable). To enable this, we assessed the overarching total spend vs non-PO spend figures for 2019 – 2020 to showcase each organisation's performance in relation to the complete dataset. It should be noted that these calculations were deemed too vague to be utilised as part of our analysis for identifying impact on FVE. However, this overarching data can be used as a benchmark by which each of the 211 organisations can see how they have performed in relation to the overall average.
57. The below table shows total spend, non-PO spend and non-PO average for the 210⁹ organisations across all 23 spend categories in all four quarters of 2019 - 2020.

⁹ This is excluding data from the trust that was classed as an anomaly.

Organisational breakdown (2019 – 2020)	Total spend	Total non-PO total spending	Non-PO average
79 organisations	£9,372,012,323.65	£4,342,284,777.24	46.33%
131 organisations	£40,326,665,928.01	£10,718,786,927.69	26.58%
210 organisations	£49,698,678,251.66	£15,061,071,704.93	30.30%

Table 3: Comparison (value of total spend vs non-PO spend non-PO spend as a percentage of total spend (2019 – 2020)).

58. The 79 organisations to submit data had 7,268 ‘opportunities’ (23 categories in each of four quarters) to conduct non-PO spend. Due to the high volume of raw data, a decision was taken to focus on instances where organisations exceeded non-PO spend by 90% or more on at least one occasion and in (eClass) categories of spend with an overall average of 30% or more across each quarter. By using this methodology, our analysis has identified pertinent trends, the most vulnerable areas of spend, and those organisations most responsible for non-PO spend.
59. This methodology was originally used to undertake analysis on the original baseline dataset from 2018 – 2019 and also applied to analysis undertaken on data collected from the 2019 – 2020 financial year. By using the same methodology across both datasets, comparative conclusions can be drawn on the most vulnerable areas of spend.
60. As only 79 organisations took part in both data collection exercises, it was therefore necessary to reconfigure analysis on the baseline data, using the same methodology, to reflect activity for those organisations.
61. This methodology identified seven main vulnerable (eClass) categories of spend across the two data collections:
- D: Pharmaceuticals Blood Products & Medical Gases
 - L: Fuel, Light, Power, Water
 - M: Hotel Services Equipment Materials & Services
 - P: Building & Engineering Products & Services
 - R: Purchased Healthcare
 - X: Transportation
 - Z: Staff & Patient Consulting Services & Expenses

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62. To avoid under or over emphasising figures, the statistician recommended that from this point on, to also count spend where certain occasions did not meet the 30% threshold per quarter (as set out in paragraph. 58). This would ensure that spend that fell under the 30% threshold would be accounted for and therefore build an accurate picture of FVE.
63. Two of the seven categories (Category L: Fuel, Light, Power, Water and Category R: Purchased Healthcare) were excluded from FVE calculation. Engagement with the sector has confirmed that spend in these two areas are never fixed costs in comparison to other types of spend and are usually processed without a PO number. Therefore, they could never have realistically been impacted by any prevention measures the NHSCFA or local NHS organisation put in place.
64. Analysis has been undertaken to assess the differences in FVE between the baseline and comparable datasets to assess the impact of fraud prevention activity undertaken during the NPE.
65. Statistical advice undertaken by the NHSCFA has concluded that the calculation of confidence intervals based on the FVE estimate would be technically complex to extrapolate findings of the sample of 79 organisations to the remaining 131 organisations that did not participate in both data collection exercises (baseline and comparable). There is not an obvious standard methodology that could be applied to an extrapolation calculation. However, the statistician has provided assurance of statistical significance on the reporting sample and on the analysis and findings on FVE calculations.