NHS Fraud Risk Measurement Exercises

Identifying the nature and scale of the problem

NHS Counter Fraud and Security Management Service

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Introduction

Understanding the nature and scale of fraud and corruption must always form the basis of any counter fraud strategy. Every organisation should strive for the robust measurement of fraud and error, as without this, organisations will never be sure that they are correctly prioritising their counter fraud action and targeting available resources at the areas most at risk of losses to fraud and error. Fraud measurement is an important tool for organisations tackling fraud, yet many fail to accurately quantify the prevalence and financial loss resulting from fraudulent activity.

The NHS Counter Fraud and Security Management Service, (NHS CFSMS), a division of the NHS Business Services Authority (NHSBSA), has taken a comprehensive approach to ensuring that fraud and corruption within the NHS is identified and reduced in order to free up resources for better patient care. Central to this process is a risk measurement methodology which provides a sound basis for estimating both losses to fraud and error and, as a consequence, provides a more robust and inclusive measure of the true level of fraud in the NHS. The Risk Measurement Unit, (RMU), of the NHS CFSMS underpins the business process for countering fraud and corruption by identifying the nature and scale of fraud in the NHS. By undertaking this process, strategies and action plans are formulated and introduced to effectively tackle fraud.

Purpose of Fraud Risk Measurement

The purpose of fraud measurement is to obtain a reliable measure of the nature and prevalence of fraud, including the financial impact on the NHS and ultimately the taxpayer. Fraud measurement also allows the NHS CFSMS to identify new trends in fraud and highlight policy or system weaknesses where further action is required. One of the most difficult problems to be overcome when measuring the cost of fraud is ensuring that unreported and undetected fraud is incorporated into the figures as best as it can. If the fraud is not known then, even with the most robust and consistent data collection process in place, any fraud measure will still underestimate the true cost of fraud. The Risk Measurement process used by the NHS CFSMS captures both known and previously unknown fraud losses and as such the NHS CFSMS is able to produce a more accurate measure of fraud in the NHS which can be monitored over time to assess the effectiveness of counter fraud action.
### Previous Fraud Risk Measurement Exercises

Between 1999 and 2002, baseline risk measurement exercises aimed at measuring the level of patient charge evasion fraud were carried out in pharmaceutical, dental and optical services. Patient charge evasion fraud occurs when patients falsely claim exemption from paying for NHS services. To date, repeat risk measurement exercises have been undertaken in these three areas in England and Wales and overall loses in the area of patient fraud in England have been cut by 54% from £171m to £78m.

The NHS CFSMS have also carried out exercises aimed at measuring losses in the areas of Procurement, Optical and Dental contractor fraud, NHS Bursaries and Hospital Prescriptions. In addition, NHS CFSMS is researching several new areas where risk exercises might be carried out. These include smoking cessation services, medicines use review services and hospital transport schemes.

### Risk Measurement Methodology

The RMU carries out a number of risk measurement exercises every year using a generic risk measurement methodology that is adapted according to the area of fraud being measured. In order to obtain a reliable measure of fraud, a statistically valid sample is drawn at random in a way that represents the population as a whole (the sample size depends on the degree of accuracy required from the results). All cases selected in the sample are then examined to establish whether fraud is present. Once all cases have been resolved, an analysis is undertaken to establish the fraud and accuracy rate of the sample. Assuming the sample has been drawn in a way that represents the general population to which the results are to be applied, the fraud rate can then be extrapolated and applied to the full population. By knowing the value of fraud losses within the sample examined, it is also possible to obtain an estimate as to the monetary loss of fraud without having to examine all cases. The process used when measuring fraud is shown below.
When considering a risk measurement exercise, the RMU first carries out research into areas of NHS spend that may benefit from such an exercise (usually in areas where fraud risks are significant or in areas of greatest NHS spend). This work may involve a small pilot exercise to determine possible fraud levels or to test the methodology in a new area. This initial stage also includes stakeholder consultation whereby key stakeholders who may be interested or involved in the risk measurement exercise are contacted to inform them of the proposed exercise and to ask for input in relation to the exercise taking place.

Once the research stage has been completed, a random sample of cases are selected and examined further to establish whether fraud is present. The number of claims/cases looked at for a risk measurement exercise depends on the level of accuracy required and the level of fraud identified through preliminary analysis. Generally speaking an accuracy of +/-1% is aimed for. The appropriate sample size and guidance on how to select the sample at
random are calculated and provided by independent statisticians (either using software to select a random sample from electronic data sets or by using a systematic sampling method).

If data is not available electronically, the RMU will input the data into a database and a number of data cleansing activities are carried out on the data. From this point the RMU carry out a number of checks on each case selected in the sample. Based on the information collated during the course of the exercise, a decision is made on a case by case basis as to whether fraud is present within the claim. Where necessary, more in depth checks are made and further information is obtained if anomalies have been identified in the claim/case being reviewed.

Once information has been collated and the checking process completed, a decision is made on the file as to whether fraud or error is present. The evidence is reviewed and the civil burden of proof applied, (i.e. on the balance of probabilities), when deciding the classification of each case. Broadly speaking there are four possible decision categories: ‘Fraud’, ‘Incorrect’, ‘Unresolved’ and ‘No Fraud’ (see box 1 for an overview of these four classifications).

Management reviews are carried out on all ‘Fraud’, ‘Incorrect’ and ‘Unresolved’ cases to ensure correctness, fairness and consistency in the decision making. Where appropriate, quality checks are also carried out on 20% of all cases categorised as ‘No Fraud’. Once a decision has been made and management checking has been completed, an analysis is carried out by independent statisticians who determine the fraud rate, accuracy and monetary loss of fraud in the area being reviewed. The results are then reported along with any system and process weaknesses identified during the course of the exercise.

In understanding the methodology used by the NHS CFSMS to measure fraud losses, it is perhaps best to illustrate the methodology by using the prescription charge evasion fraud risk measurement exercise as an example.
Box 1 – Decision Categories

*Fraud*

This category captures cases where a person has either provided false information, failed to disclose information when there is a legal duty to do so or has abused their position where their intention is to make a gain, or cause a loss or the risk of a loss to the NHS. When categorising cases as fraud, the conduct must be dishonest.

*Incorrect*

In some cases an incorrect claim has been made, (perhaps by a patient or NHS Contractor), which is the result of a genuine error. This category captures cases where there is a financial loss to the NHS but where there is no evidence to suggest any deception or wrong doing by the person.

*Unresolved*

In some cases a decision cannot be made as there is insufficient or contradictory evidence that prevents us being able to make a sound decision as to whether fraud is present or not. This may include cases where the relevant authority has failed to confirm someone’s underlying entitlement or where there is contradictory evidence (for example if a patient claims they paid for their prescription when the FP10 claim form states they claimed an exemption). Normally additional evidence will be gathered to support the decision making but in some cases we are still unable to confirm whether fraud is present or not. These cases are categorised as ‘unresolved’ and removed from the sample.

*No Fraud*

Cases where the evidence has been reviewed and there is no fraud, error or incorrectness present.

*Example of a Prescription Fraud Risk Measurement Exercise*

A sample of FP10 prescription claim forms (where an exemption has been claimed) is selected at random ensuring that the sample represents the population from which it is drawn. Checks are then carried out in order to verify that the patient was actually exempt from paying the NHS prescription charge at the time the prescription was dispensed.
The claims made on the prescription forms are then verified through a process of questionnaires, checks and in some cases home visits. Thanks to service level agreements with various agencies including the Department for Work and Pensions, the National Strategic Tracing Service and the Prescription Pricing Division of the NHSBSA, the RMU can check each patient’s exemption claim with the relevant body to verify that the patient held an underlying entitlement to free prescriptions. These checks take place at various times during the exercise as more information becomes available. For example, a person may have claimed an exemption from NHS charges because their partner is in receipt of Income Support – something that will come to light once the patient has returned their questionnaire. At this stage this additional information is entered onto the database and a new check carried out to confirm that the patient’s partner was in receipt of a valid benefit following on from the additional information gained from the patient questionnaire. Not only does the patient questionnaire allow the patient to provide extra information relating to their exemption, but the questionnaire also identifies any possible fraud on behalf of the pharmacist (for example double claiming or ghost patients).

Based on information collated during the course of the exercise, a decision is made on whether the patient was entitled to exemption from NHS charges. In those cases where the patient did not have an underlying entitlement, a decision is made on whether this is due to fraud or error either on behalf of the patient or the pharmacist. Decisions are made according to the civil law concept of fraud and the civil law burden of proof, which is based on the balance of probability.

Based on the number of fraud and error cases identified in the sample, an independent statistician will carry out an analysis to determine the fraud rate accuracy and associated monetary loss which allows the NHS CFSMS to identify how much money was lost as a result of patient fraud in pharmaceutical services. The methodology demands accuracy and the aim is to determine the level of fraud or error to within +/- 1% of the true fraud rate.

*Risk Measurement Process*

Following the conclusion of a risk measurement exercise the RMU will work closely with the Policy and Research Unit of the NHS CFSMS to identify system and process weaknesses highlighted during the course of the exercise. The NHS CFSMS will then take action (where
possible) to eliminate or minimise the identified fraud weaknesses. Over time, repeat fraud risk measurement exercises are carried out in order to measure the effectiveness of these counter fraud initiatives. By carrying out repeat measurement exercises, the RMU can accurately measure any reductions in fraud losses which allows the NHS CFSMS to measure the effectiveness of counter fraud policies put in place.

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