Audit Committee Meeting, 19 March 2015

Near Miss Reporting process and reports to date summary

Executive summary and recommendations

Introduction

Errors or failures of process can damage HCPC's reputation.

ISO9001:2008 requires Corrective and Preventive actions to be undertaken to react to errors or deficiencies in processes where they have been seen to occur; and attempt to remove possible future causes of error when they are located.

At HCPC this is known as the Near Miss Report process.

This report outlines the process and methodology behind near miss reporting, its use in other environments, and analysis of Near-Misses occurring at HCPC from the initiation of the process, up until December 2014. Near Miss events are examples of non-conformance under ISO9001:2008.

Decision

Audit Committee is asked to discuss the report.

Resource implications

None.

Financial implications

None.

Date of paper

12 March 2015

Introduction

Industries where failure can be catastrophic, have developed mechanisms to learn from mistakes, in an attempt to prevent their recurrence. Today most major transport industries, NASA, energy companies, and major plc's have mechanisms to react to problems and prevent recurrence. In some industries these analyses of events are known as Near Miss Reports.

Initially an aviation term, typified by a 747 aircraft landing at Heathrow 21st November 1989 in thick fog with a "faulty/problematic" Sperry autopilot, and aircrew suffering from food poisoning.

> "*Breaking through heavy cloud just seconds before touch down, they had the gut wrenching realisation that they had drifted way off the runway centre line, out over the perimeter fence. Punching the engines to full go-around power to abort the landing, the aircraft lumbered away, clearing the luxury Penta Hotel with little more than 12 feet to spare, sending staff and guests screaming into the street."*

(Risk & Regulation magazine of the ESRC Centre for Analysis of Risk and Regulation (July 2010))

Note: Pilots have a no blame reporting system to enable them to highlight potential issues impacting the whole aviation industry. Both pilots falling asleep has recently been reported under this anonymous system and been reported in the media.

HCPC are unlikely to be responsible for potential mass casualties on the scale indicated by the example above, however if HCPC's processes "go wrong" there can be a severe impact on HCPC's reputation. Failure to protect the public is probably the most serious risk to our reputation.

Other regulators within the health sector have been subjected to major reputational impacts by events that could have been prevented, if existing processes were adhered to or enhanced when problems were first noted.

The Care Quality Commission is the latest organisation to suffer major reputational damage following the apparent decision to suppress a self-critical report (June 2013). The subsequent release of the names of those allegedly involved in the suppression suggest that the decisions went to the highest levels of the organisation.

HCPC's Near Miss Reporting process aims to minimise the risk of such reputational damage occurring, and limit our unplanned presence in the media.

HCPC Near Miss Report policy

Introduction

With effect from 1st December 2009 the Executive of the Health Professions Council (HCPC) will introduce a "Near Miss" investigation policy. It will build on our existing corrective and preventive action processes which we run under ISO 9001.

What is a near miss (NM)?

An event that has the potential to damage the reputation of HCPC.

Purpose

The purpose of the Near Miss Policy is to ensure that a system is in place that will enable all events to be reported, investigated and collectively resolved. This will allow HCPC to:

i. Improve our culture
ii. Determine the cause(s) of the "Near Miss"
iii. Rectify any faults
iv. Improve practice and process
v. Prevent or reduce possibility of future occurrences
vi. Provide support to colleagues including training
vii. Reduce risk

Deciding if an incident is a near miss

- An Executive Management Team (EMT) member can declare an event a "Near Miss"
- EMT member then notifies the Chief Executive in writing
- Formally reported at the next EMT meeting

Who Investigates

- A member of EMT from a department not directly affected by the "Near Miss"
- Assisted by Roy Dunn, Head of Business Process Improvement

Reporting

- Written report to be addresses to the Chief Executive
- Report to be prepared within a target of 28 days of the incident
- Report to include: Description of event, lessons learned, changes to practise, implementation timetable
- Report to be reviewed by EMT not more than two weeks after report completed
- Consider an annual review of all NMs

Review

- Review by the EMT every 6 months
- Review to cover all points above
- Review who reports go to, possibly after a set "cooling off" time period

- Reports available on HCPC's Intranet

The Near Miss process is not designed to assign blame for errors, but is designed to help the organisation prevent recurrence. The output of the NMR process is a report, delivered to EMT, which includes possible changes to QMS processes, possible changes to departmental guidelines or work-orders (standing instructions for small parts of processes), or other structural changes to how we do things. This is an essential part of the corrective & preventive action elements of ISO 9001:2008.

Standard NMR questions

i. What should happen?

ii. What did happen?

iii. How was the error discovered?

iv. What was the impact?

v. What could have been the maximum impact?

vi. Is the existing system or process on the QMS?

vii. (Is there enough detail in the system on this process / group of processes?)

viii. Will the revised process be placed on the QMS?

ix. What other suggestions do you have to prevent this incident / event happening again?

x. Was the level of documentation on the particular requirement adequate / fit for purpose?

xi. Was internal communication a factor in this incident?

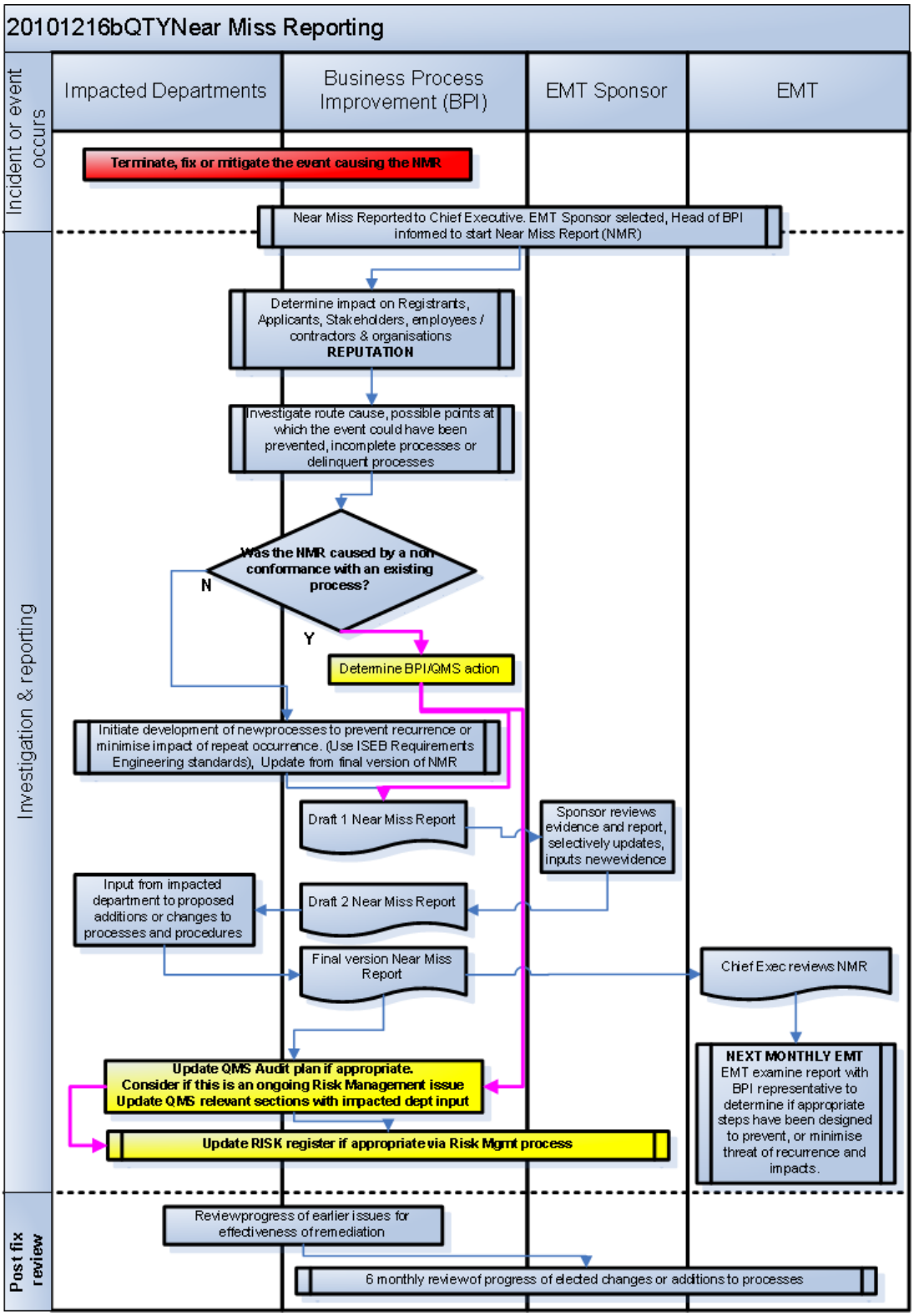
xii. Was external communication a factor in this incident?

xiii. Was a lack of common understanding a factor in this incident?

xiv. If technology is required to fix the issue / prevent the issue or incident occurring again, do you have budget and time?

xv. Are safe “work-rounds” available if a technology fix is not possible?

The HCPC Near Miss Reporting process is illustrated below.



Structure of Near-Miss Reports (NMR).

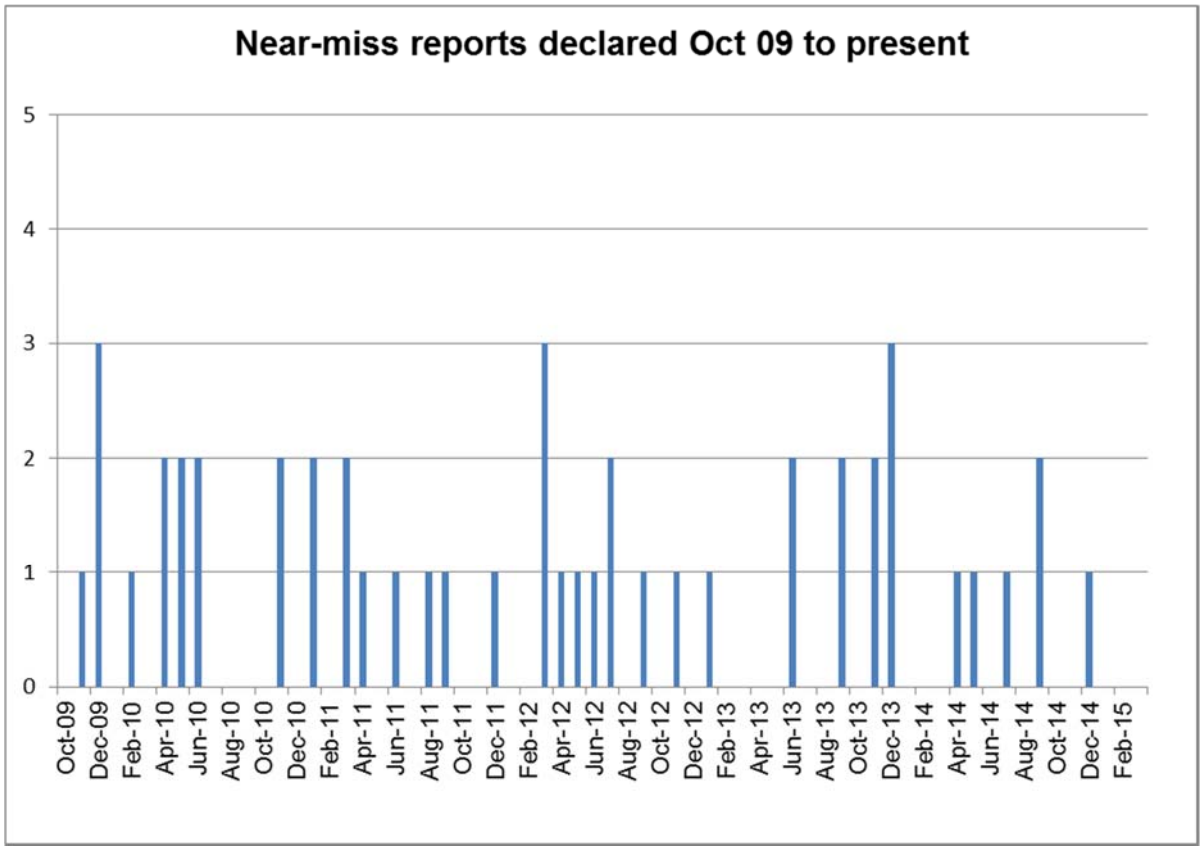
HCPC's Near-Miss Reports have a particular structure. These reports are designed to give the complete picture from issue to proposed solution.

Each NMR includes the following;

1. Description of event
2. HCPC Impact
3. Ancillary issues determined during this investigation
4. Items already implemented
5. Lessons to be learned
6. Changes required or implemented (HCPC or Suppliers practise)
7. Route cause analysis
8. Implementation timetable

Reports to date

The occurrence and timing of all past Near-Miss Reports are summarized here, to provide an overview of issues and solutions faced by HCPC since the end of 2009 up to Jan 2015.



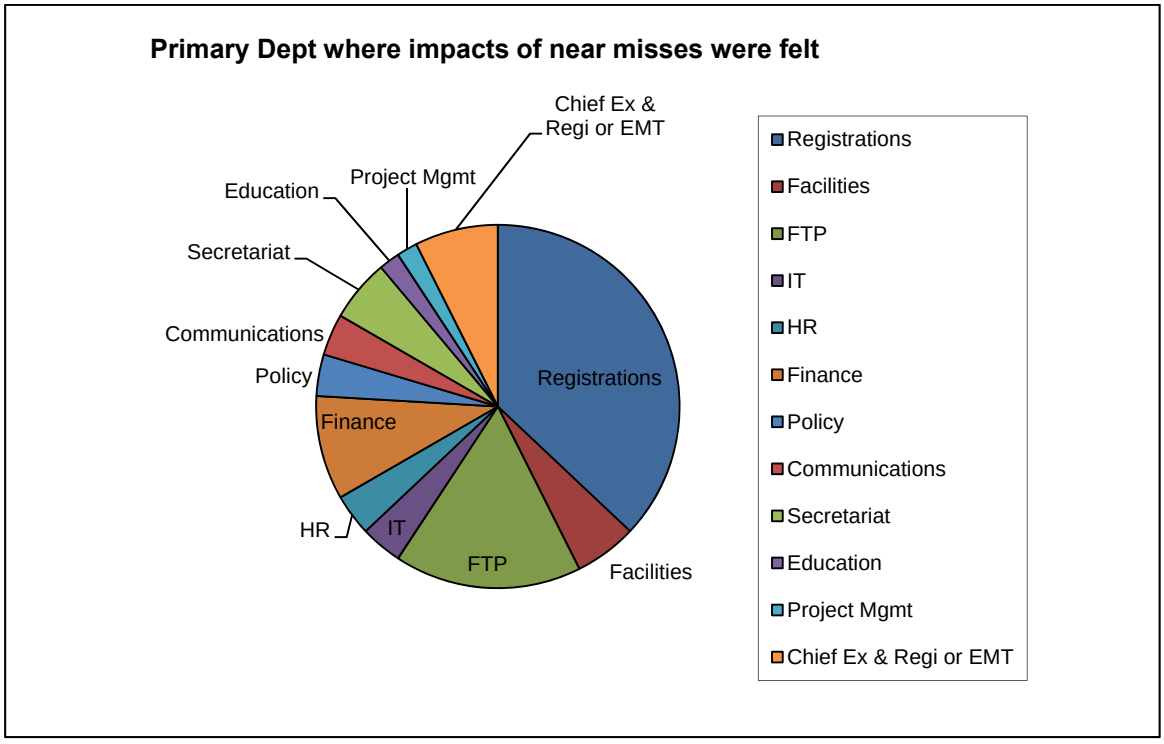
Individual reports contain the relevant background detail, impact and proposed methods of resolution.

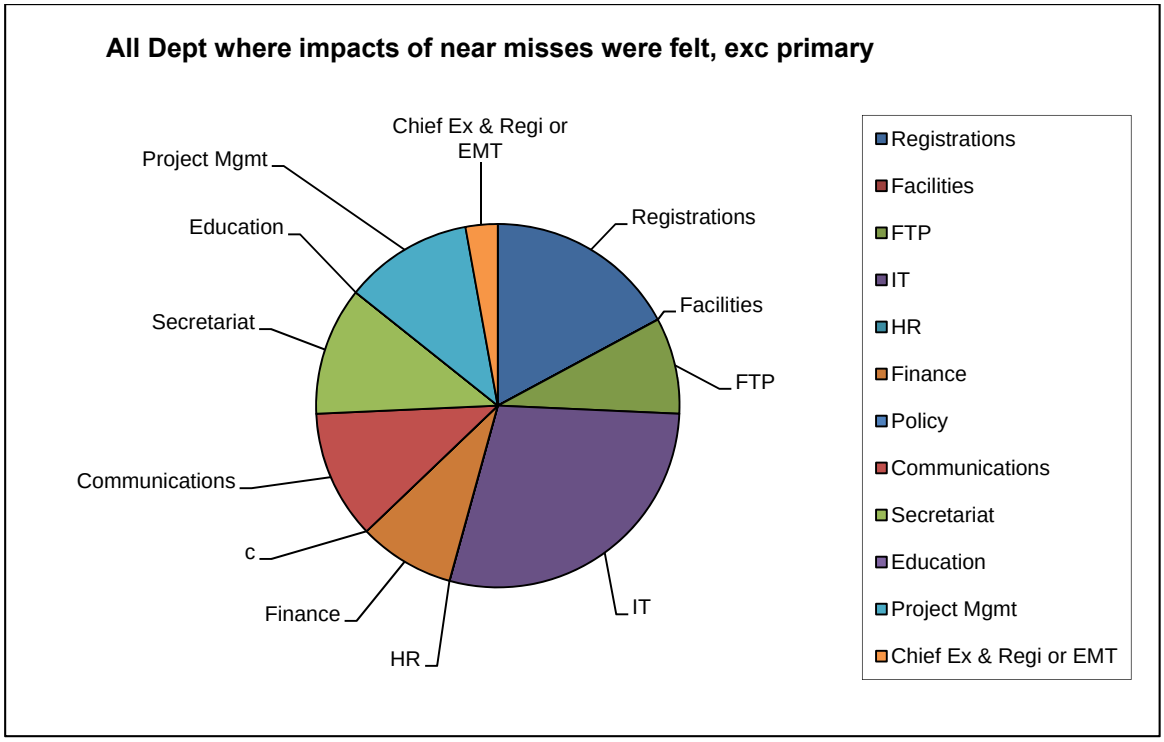
This report attempts to summarize the types of issue HCPC faces, and possible causes of those issues. Analysis of how Near Miss events develop can be used to avoid future occurrence of similar issues. This analysis is part of our preventive action under ISO9001:2008

Appendix 1 provides a summary of individual NMR's resolved to date.

The impact of Near Miss Events

The impact of these events is often felt across several departments, sometimes not those directly involved in the error. The graph below illustrates where the impact was felt. It is somewhat subjective as for instance the Communications department often assist in writing responses to events, whilst not being directly involved in the correction of the issue.





Generic comments on Near Misses to date.

Most Near Misses involving the Registrations Department have a communications impact, whether it is applicants or registrants making additional contacts with us via the Registrations Department, or as contacts from professional bodies or other stakeholders contacting other members of HCPC.

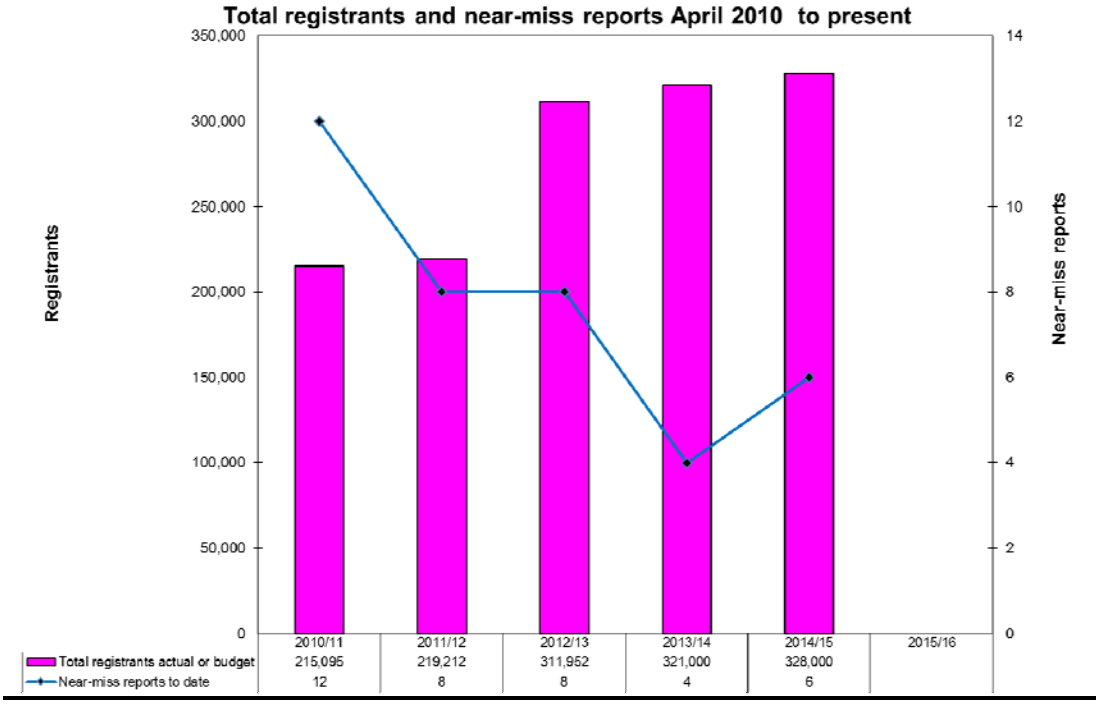
The Registrations team are particularly susceptible to one off supplier errors that potentially impact hundreds or thousands of registrants at a time, as many of the outputs are managed in bulk. A single error in a data file can impact every record in the file. Personalisation of our output, such as renewal notices or registration certificates or registration cards and the associated on line access codes makes these data files slightly more sensitive to the slightest error.

Some of our suppliers have built systems to remove where possible room for error on their part, but have in fact been the cause of NMR events due to subsequent human error outside the limits of the constructed tools and controls.

As Near Misses are analysed and measures are put in place to prevent recurrence, the opportunity for future error, from similar events should decrease. However, as the complexity of our activities grow, adding CPD, adding Personal Indemnity Insurance data collection, adjusting fees and changing suppliers, the opportunity for error via new scenarios is at least temporarily raised.

The numbers of transaction types and numbers of transactions will also have a theoretical impact on where NMR events are most likely to occur. Registrations have the greatest transaction numbers in the organisation, and have a range of processes reliant on the accurate recording of information, for later reuse. These processes are overlaid with various

timing constraints, from either internally generated Service Level Agreements, (SLA) or legislatively controlled processing requirements. These timing constraints add an additional pressure, which may trigger events resulting in a Near Miss. The graph of registrant, and by implication transaction volumes, suggest a flattening of NMR events (we are currently half way through the 2013 financial year, the projected year end registrant numbers are illustrated), after the numbers of registrants has dramatically increased.

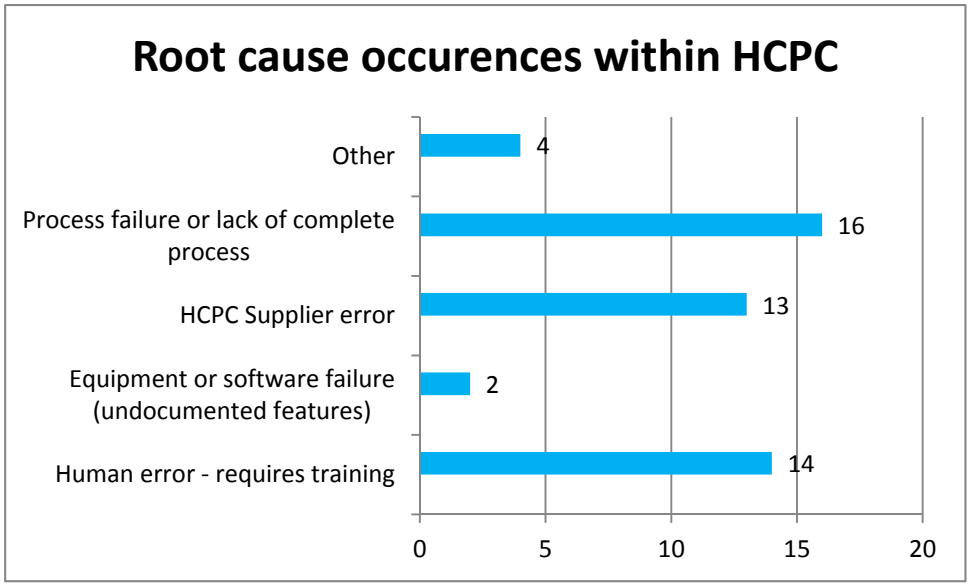


The numbers of registrants grew in August 2012, and the number of NMR's has decreased, the numbers of NMR's per registrant decreasing over time.

An absolute ratio of NMR's per registrant is not an exact measure, as the declaration of an NMR is somewhat subjective ("Events likely to impact our reputation"), however the current trend is broadly favourable.

The numbers of employees and contractors, including Partners has increased over time, and again there is no apparent correlation with NMR events. (Not illustrated graphically).

Generic root cause analysis

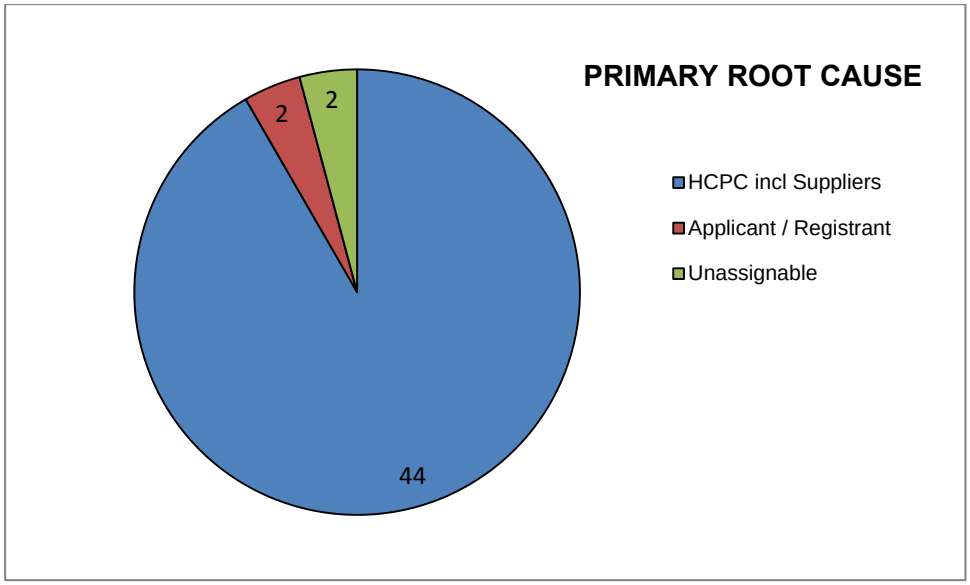


Where possible the root cause of error has been located for each Near Miss event. These causes and their occurrence are indicated in the diagram above. Many NM's can be traced back to two coinciding events. This is somewhat encouraging as it suggests that we have failures when multiple events occur, rather than failing at the first hurdle. Where one of these second events can be traced to a failure to validate information, this source of failure can be addressed if resources allow.

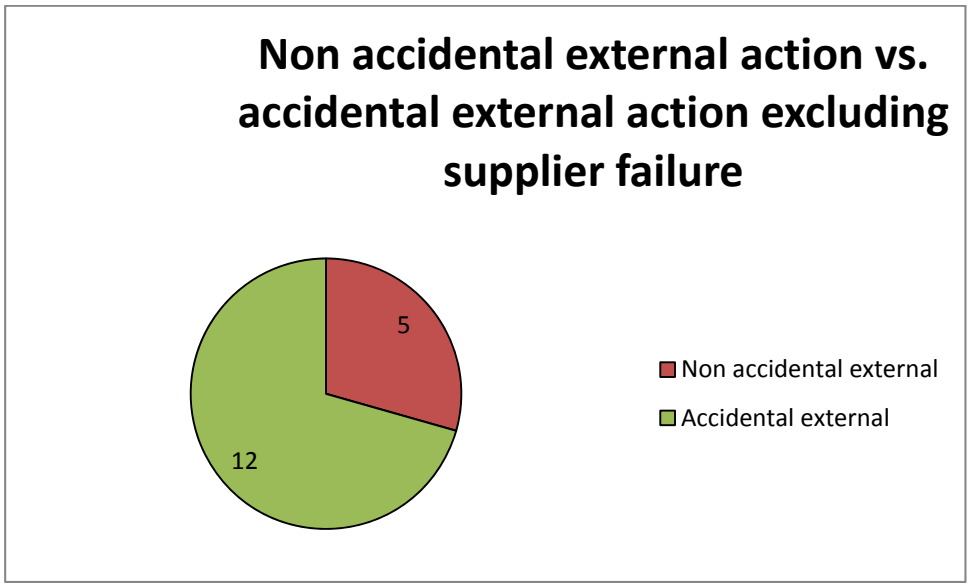
Like most organisations, HCPC are dependent on the use of suppliers, although the supplier companies themselves are replaceable, and are subject to ongoing quality checks, and periodic evaluation of cost effectiveness at the point of tendering.

- The same information or process being interpreted differently by multiple parties. (Practitioner Psychologist removal error; Consultation paper not pre-approved by Legal Counsel) *[always a possibility without point by point guide]*
- External error by supplier (printing online log in information, PLY removals)
- Insufficient rigour in existing internal process (international applicant with serious undeclared criminal history) *[one off fix to process applied]*
- Lack of low level planning systems (office moves) *[need to try and determine where this type of issue could occur again]*
- Internal human error *[very difficult to remove without full automation]*
- Internal communication (delay to OT removals process not implemented) *[often occurs in growing organisations, or those with a high turnover of employees or contractors]*
-

The graph below indicates the breakdown of internal cause including suppliers vs. external cause and those that are un-assignable.

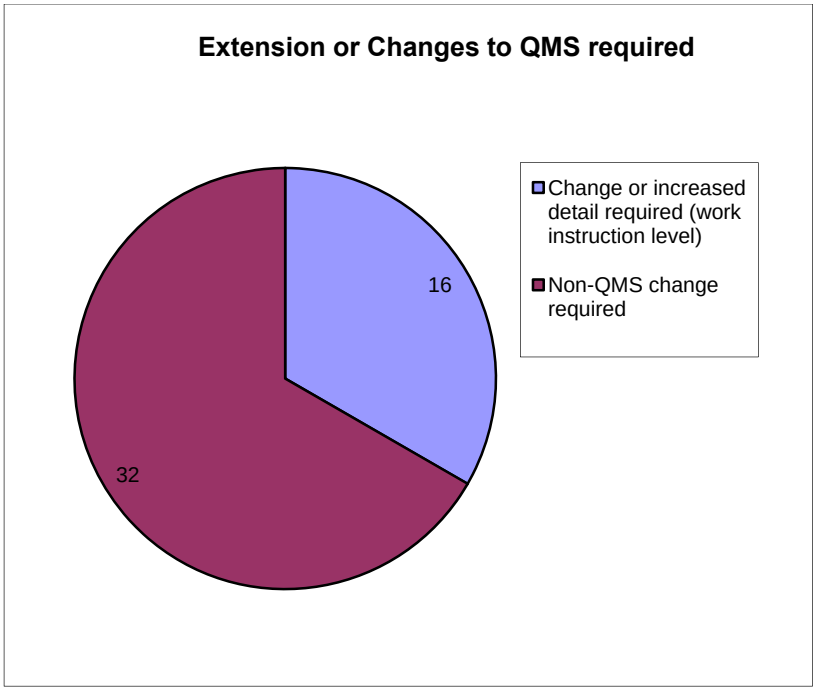


Occasionally the cause of the Near Miss is Non accidental, where the cause is external.



Quality Management System level of detail enhancement

During each NMR investigation the Quality Management System documentation is examined to determine if the processes currently documented were followed, or were in error. Generally, the level of detail in processes has been enhanced, where changes have been required. There is a concern that we should not go down to Work Order level for all of our processes as this would be much harder to maintain, would require revision after every enhancement of IT systems or even office software, and make it more difficult to maintain our ISO9001 registration.



The Quality Management System is updated after the process owners flag up changes to the processes they use, or as a result of planned system changes or of a non-conformity located during an internal or external audit.

As a continually growing organisation, we are taking on more complex tasks over time, and our processes must evolve to become more robust, to avoid the requirement for experienced employees to act as back-stops to potential errors.

These experienced employees that have often worked in several parts of the organisation may be aware of something not appearing to work correctly or appropriately. However, as they become a smaller percentage of the headcount, the opportunities for them to act or respond decreases.

Human Error as a cause of NMR events

Human error can be assigned as a primary cause of NMR's in 23 out of 48 cases or about 47.9% of cases. Three of these human error events were caused by external supplier error.

Issues related to Systems functionality or bugs

Pure IT related issues are relatively small in number. Unknown functionality for systems maintained by suppliers is of concern, and documentation and testing prior to any nonstandard activity has been recommended where appropriate.

As with any organisation working today, the dependence on supplier quality of service is a weakness of our systems. However from a practical viewpoint, HCPC does not want to become a software development company, or a "lawyers' chambers". There is certainly a requirement to monitor all suppliers regularly, reporting service failures by exception. Where supplier errors have been highlighted, we have ultimately changed supplier due to unacceptable service levels, and subsequent potential for reputational damage.

Whilst as an organisation we move toward more prescriptive contracting and tendering arrangements, our ability to move suppliers following high impact failure, should not be diminished.

Complexity as a cause of Near-Misses

Although what HCPC does is gradually increasing in complexity, the overall aim of the organisation stays the same. Our published aim is reproduced here.

We are a regulator, and we were set up to protect the public. To do this, we keep a Register of health and care professionals who meet our standards for their training, professional skills, behaviour and health.

Whilst our legislation has been updated to include new professions, and methods of working, the core functions have grown in scale, but the deliverables “protecting the public” in a cost effective and collaborative way have not changed.

As the organisation operates for longer, we are statistically more likely to encounter the lower likelihood events that will occur due to increasingly convoluted combinations of events. An example of this is where a batch process has a defined range of operation, and this potentially overlaps with another legitimate activity that causes the batch process to be missed by the registrant. It may not be immediately apparent that the registrant will miss the batch process, unless the operator has sufficient experience to predict the system functionality.

One finding relating to internally triggered NMR’s is that attempts to avoid work, is not an apparent cause of error resulting in the NMR process. NMR35 and NMR36, both required additional work to carry out the wrong process, rather than using established methods (simple precise search criteria ~ NMR36) or resources (already developed spread sheet models ~ NMR35). However, by avoiding the established, approved processes or methods, error was created.

It is now proposed that any change to core processes or organisation critical reports (including spread sheets or financial models) are tested with the same data to prove consistency of outcome, prior to the new version being signed off and going live. This will cause increased work up front to test the new models or processes, but should prove the validity of the new model, and decrease the possibility of error in the new model.

Learning points

- Registrations have the highest number of transactions, both automatic and manually initiated, which have the potential to cause either Customer Service issues, or NMR’s (supplier & system dependencies) However there is no direct relation between transaction numbers and NMR’s at present. There is a correlation between transactions and customer service contacts. (See Customer Service Reports – not included here) This is encouraging, as it suggests we are not directly subject to errors caused purely by pressures of volume of work.
- NMR’s around missing processes in Registrations should become even less frequent
- Registrations moved a key contract to a new supplier following operational errors, this was relatively high risk but had to be undertaken to prevent recurrence of the operational issues.

- IT are dependent on a few crucial suppliers, which are difficult, risky and expensive to move away from. Parallel running of systems is occasionally possible. However, IT supplier switches are often “all or nothing”.
- FTP have trialled new suppliers at an early stage, when there are no operational issues to address, but IT do not have this type of opportunity.
- Where an IT supplier of a new system or functionality is involved, it is very difficult to determine, cause and options for fixes. If the expertise is no longer available at the supplier, but the supplier owns the intellectual property of those systems, we may be required to absorb or work around errors, or inject funds to allow the required expertise to be involved in the solution.

There is no direct correlation between numbers of customer service / feedback items and Near-Miss Reports.

Challenges for the NMR process

Some of the issues that fall under the NMR remit are of a technically complex nature, and require technical input to understand and resolve issues. Where the supplier does not cause the failure directly, it can be difficult to obtain a rapid resolution or a fully developed understanding of the issue. Two suppliers working on the same overall project or system tend initially to blame each other.

Thus behind the scenes failure of IT systems, with difficult to validate explanations, where the intellectual property belongs to the suppliers are notoriously difficult to solve. Where more than one supplier is potentially at fault, historically the appropriate fix is filtered through a lens of we are fixing “their” problem, and this is something to be avoided if at all possible.

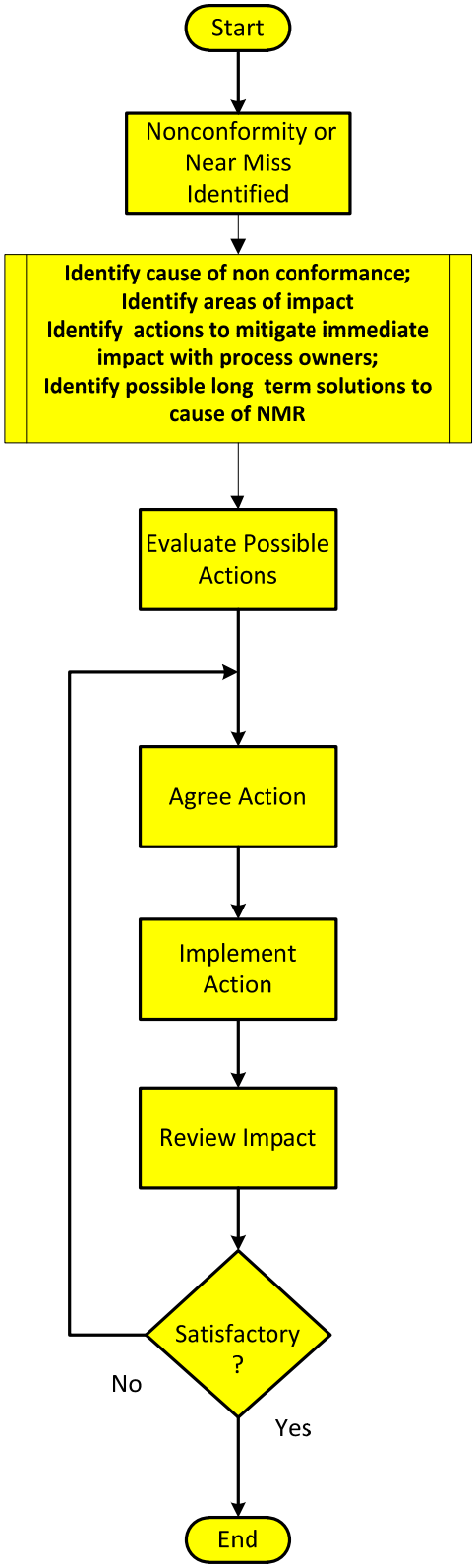
This can make adhering to the timescale proposed in the Near Miss design very challenging.

Occasionally, the capacity of the technology applied to an issue is incapable of delivering the required solution. The cause can be insufficient knowledge of the required operation of the process, in relation to HCPC’s business activity.

Suppliers may also lack the memory of how earlier versions of their systems were developed and the business reasons for those developments, and accidentally override infrequently used but required functionality.

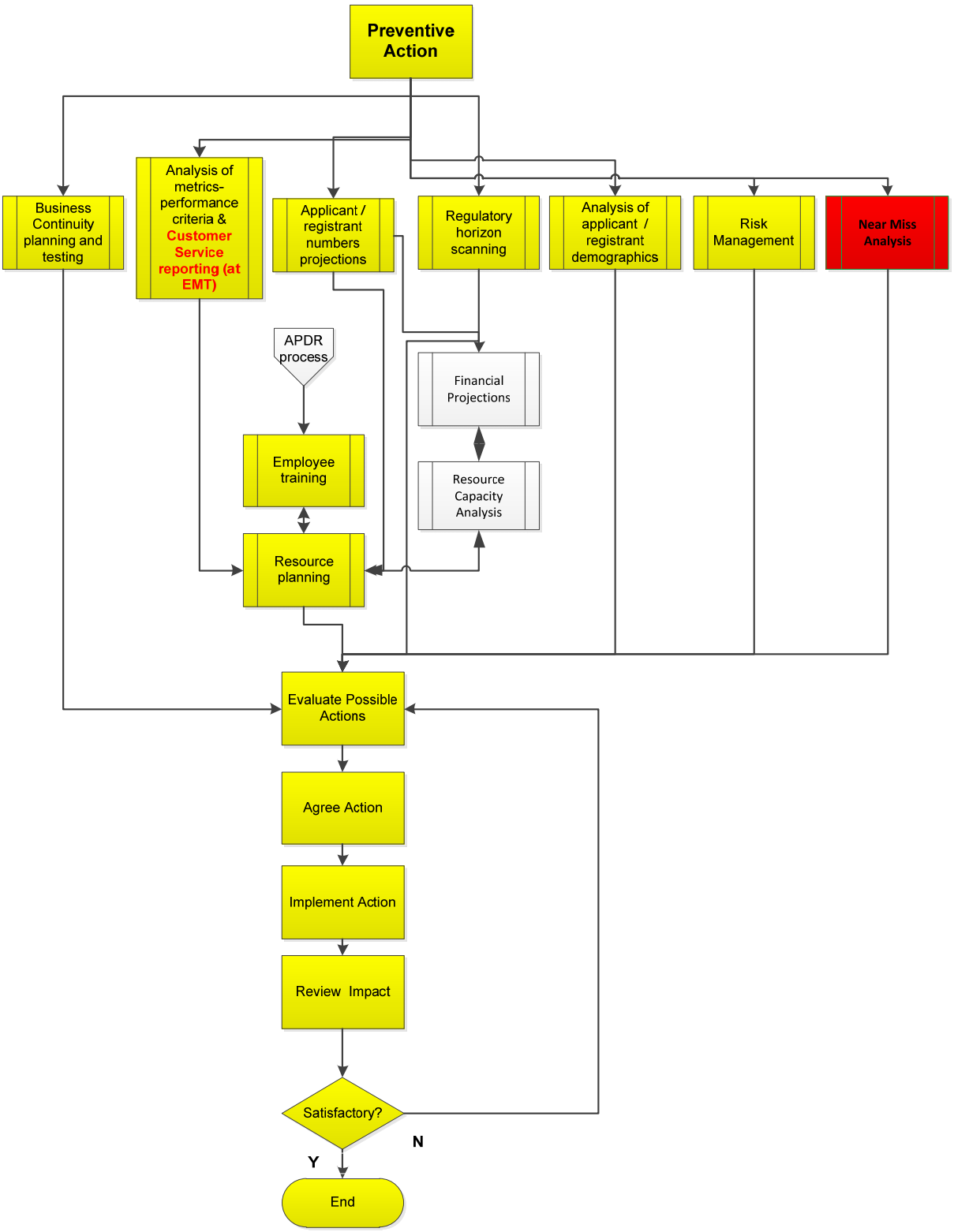
Near Miss Reports will continue to be monitored as an essential part of our ISO9001 processes for capturing non-conformities. How the organisation copes with increasing transactions, complexity, and changing requirements over future years will depend on our reaction to error, “Corrective Action” and how we prevent repetition of similar or comparable events “Preventive Action”. Both processes are illustrated below.

HCPC's Corrective Action process, including input form Near Miss Reports.



HCPC's Preventive Action process, including input form Near Miss Reports.

20131011 8.5.3 Preventive Action



Appendix 1 Summary of individual NMR's resolved to date, by year of declaration.

NMR declared	NMR number	Overview of incident	Very high level route cause	Primary area involved or Root cause owner	Primary depart impacted	Secondary depart impacted
Dec-09	NMR1	PYL registrants removed in error following last direct debit run. Batch process sequence error. Roll back and rerun in correct order	External	Registrations	Registrations	Comms
Oct/Nov 2009	NMR2	Planned delay to OT record removals due to postal dispute not implemented	Internal	Registrations	Registrations	Comms
Dec-09	NMR3	Intl applicant failed to declare serious criminal convictions (resulting in FTP case)	Internal	Registrations	FTP	Registrations
Dec-09	NMR4	CPD appeals documentation issues at panel	Internal	Registrations	FTP	Registrations

NMR declared	NMR number	Overview of incident	Very high level route cause	Primary area involved or Root cause owner	Primary depart impacted	Secondary depart impacted
Apr-10	NMR5	Online activation & authentication codes sent in same letter by printer (security of online records issue)	External	Registrations	Registrations	Comms
Apr-10	NMR6	Online activation & authentication codes swapped by printer on one letter, in error	External	Registrations	Registrations	
Feb-10	NMR7	CPD letters despatched with wrong deadline dates	Internal	Registrations	Registrations	
May-10	NMR8	Supplier date data error on mailing	External	Registrations	Registrations	
May-10	NMR9	Unclear plan for internal office move of several areas of the business	Internal	Facilities	Facilities	FTP
Jun-10	NMR10	Unallocated cases in FTP dept potentially damaging the organisations reputation	Internal	FTP	FTP	
Jun-10	NMR11	Consultation process not signed off by JB pre-council submission	Internal	Policy	Policy	Secretariat
Nov-10	NMR12	Planned expenditure did not result in purchase orders and invoice sign off in an appropriate time frame	Internal	FTP, Projects,	Finance	
Nov-10	NMR13	A FTP employee was scratched whilst calming a registrant and her mother at a hearing	External party undergoing FTP Hearings process	FTP - process	FTP	

NMR declared	NMR number	Overview of incident	Very high level route cause	Primary area involved or Root cause owner	Primary depart impacted	Secondary depart impacted
Jan-11	NMR14	FTP Bundle theft from KN solicitor in transit on train	External	FTP	Secretariat	
Jan-11	NMR15	Scanning company did not forward documents to archive in timely manner	External	Registrations		
Mar-11	NMR16	Incorrect FTP statuses recorded on Register	Internal	FTP	Registrations	
Mar-11	NMR17	PYL renewal fees were incorrect for some online renewing registrants following a failed NetRegulate deployment and roll back	External	Registrations	Registrations	IT
Apr-11	NMR18	Server room aircon power shut down impacting register availability	External	Facilities	IT	Registrations
Jun-11	NMR19	NetRegulate / Sage reconciliation - deferred income	Internal	Finance	Registrations	
Aug-11	NMR20	Denial of Service by sequential, incremental queries and attempted SQL hack on register	External	IT (web infrastructure)	Registrations	IT
	NMR21	Withdrawn – not a subject of a NMR	Withdrawn			
Sep-11	NMR22	Potential unplanned expiry of Interim Order prior to completion of case;	Internal	FTP	FTP	Registrations
Dec-11	NMR23	Intermediate Removals processes could not be evidenced when questioned. Direct Debit file not collected from bank accounts £4k approx	Internal	Finance/Transactions	Registrations	Finance

NMR's declared 2012	NMR number	Overview of incident	Very high level route cause	Primary area involved or Root cause owner	Primary depart impacted	Secondary depart impacted
Mar-12	NMR24	System testing for NetRegulate changes resulted in test messages being sent to Social Workers	Internal	Registrations	Registrations	Projects
Mar-12	NMR25	Theft of partner possessions from meeting room at HPC	External/Internal	Facilities	FTP	
Mar-12	NMR26	Auto response email sent to all FTP contacts as old emails deleted from FTP system	Internal	FTP/Proj/IT	FTP	Partners
Apr-12	NMR27	Renewal notices despatched with non matching details front and back, due to an error at the printing contractor.	External	Registrations	Comms	
May-12	NMR28	Offsite key theft from employee	External/ Internal	Facilities / Building security	Facilities	All key holders
Jun-12	NMR29	A rapid move from an existing supplier to a new supplier was carried out without an OJEU compatible tendering process, in order to protect the operational activities of the business. Printer selection & tendering compliance (NAO).	Internal	Registrations	Registrations	Finance
Jul-12	NMR30	FTP CMS Document tracking failure	External	FTP	FTP	Registrations
Jul-12	NMR31	NetRegulate deployment failure	Internal	Registrations	Registrations	IT
Aug-12	NMR32	Non-response to FTP complainant escalated to CHRE	Internal	EMT	CER	FTP

NMR's declared 2013	NMR number	Overview of incident	Very high level route cause	Primary area involved or Root cause owner	Primary depart impacted	Secondary depart impacted
Jan-13	NMR33	Incomplete direct debit mandates were returned to the wrong registrants for completion	Internal	Registrations	Registrations	Finance
Jun-13	NMR34	Records in the Social worker student suitability scheme not maintained	Internal	FTP	FTP	
Jun-13	NMR35	Council Fee change paper contained incorrectly calculated income data	Internal	Finance	BPI/Operations	CER
Jul-13	NMR36	Incorrect registrant record updated with an FTP status	Internal	FTP	FTP	
Aug-13	NMR37	Incorrect Professional title spelling on certificates	Internal	Registrations	Registrations	Customer Service
Sep-13	NMR38	UAT for NetRegulate updated three live records in error	Internal	Registrations	Registrations	Finance & IT
Nov-13	NMR39	Letters sent from Supplier with line of address missing even after proof checking (sampling error)	Internal	Finance	Finance	Registrations
Nov-13	NMR40	Use of external template letter from CDR, Verification Statement referring to Reciprocity agreement	Internal	Registrations	Registrations	
Dec-13	NMR41	Error in Renewal invitation letter for first mention of DD date	Internal	Registrations	Registrations	
Dec-13	NMR42	Gas leak during contractor drilling	External	Facilities	186 KPR users	
Dec-13	NMR43	Registration Advisor errors	Internal	Registrations	Applicants / Registrants	

NMR's declared 2014	NMR number	Overview of incident	Very high level route cause	Primary area involved or Root cause owner	Primary depart impacted	Secondary depart impacted
Apr-14	NMR44	PH-New Registrants at Fee change error	Internal	Registrations	Finance	Projects
May-14	NMR45	Supplier provided another organisations confidential information to HCPC Finance Dept in error, using HCPC specific passwords.	External	Finance (Supplier)		
Jul-14	NMR46	Restraint of suspected thief	External/ Internal			
Sep-14	NMR47	Employee qualification details released in error	Internal	Secretariat	HR	FTP
Sep-14	NMR48	Apparent Council Member iPad loss / misplacement	Internal	Council	Secretariat	IT
Dec-14	NMR49	Confidential package arrived from supplier apparently having been opened, suggesting theft or access to PII of Council Members and or Employees	external	Finance (Supplier)		