

Appendix 1. Full list of hazard categories

No	Detail of Hazard Category	System Dimension	n	%
1	Inadequate process for matching test requests and results received	Post	350	54.1%
2	Inadequate tracking process to check patients attend on request following abnormal results being received	CO	340	52.5%
3	Informing patients of some test results before all results are received	Post	195	30.1%
4	System reliance on patients contacting practice for test results	CO	166	25.7%
5	Test results not being forwarded to covering GPs in a timely manner (inadequate 'buddy system' i.e. a clinical colleague covers the work of a colleague on annual leave or sick leave etc)	Post	94	14.5%
6	Family members and 'Third Party' requests for test results	CO	91	14.1%
7	Communicating incorrect results	CO	80	12.3%
8	Ambiguous and/or unclear instructions given to frontline administrators by GPs to communicate to patients	Post	78	12.1%
9	Frontline administrators asked by patients for test results and to provide addition information/interpretation	CO	75	11.6%
10	Failing to 'action' clinically abnormal results received	Post	69	10.7%
11	Lack of system standardization – variation and inconsistency in how GPs review and action test results	Post	61	9.4%
12	Lack of a formal protocol describing the overall system	Pre	58	8.9%
13	No documented record of tests requested to ensure that all tests and results have been reported on.	Pre	56	8.7%
14	Test results not forwarded to the requesting GP/GPs reporting on test results ordered by a colleague	Post	54	8.3%
15	Desired action not carried out i.e. due to difficulty contacting the patient or task not being completed.	CO	49	7.6%
16	Test result misfiled or going missing.	Post	46	7.1%
17	Inadequate labelling of specimens; insufficient details on labels; samples left in reception with no information and no way of identifying which patient left it.	Pre	43	6.7%

18	Inadequate communication of urgent results from processing laboratory to practice.	SPS	41	6.3%
19	Failure to update patient contact details	Pre	38	5.8%
20	Tests requested are not Read coded and recorded as free text.	Pre	30	4.7%
21	Healthcare professional taking blood and uncertain which specific tests to order.	Pre	30	4.7%
22	Inadequate matching of patient identification and records with result.	CO	23	3.6%
23	Failing to generate appropriate action for normal test results	Post	23	3.6%
24	Failure to inform patients of test results.	CO	21	3.3%
25	Interface issues e.g. results received from secondary care - no indication of action taken/phoned by hospital.	SPS	19	2.9%
26	Inappropriate assumption with regard to patient responsibility for following up results.	CO	16	2.5%
27	Delay in responsible clinician checking test results to identify those that need an urgent action.	Post	14	2.2%
28	Patients failing to attend for recommended test.	Pre	13	2.0%
29	Missed diagnosis/test result - no follow up.	CO	13	2.0%
30	Failure of clinician to read all results i.e. only looking at results highlighted by laboratory as abnormal	Post	13	2.0%
31	Dual paper and electronic results system leading to incomplete analysis of test results.	Pre	13	2.0%
32	Failure to record appropriately any attempts to contact patient about abnormal results.	CO	13	2.0%
33	Inadequate Staff training in the results handling system.	Pre	8	1.3%
34	Miscellaneous.		8	1.3%
35	Giving INR results and medication changes inappropriately over the phone.	CO	8	1.3%
36	Inappropriate patient initiated test requests e.g. no counselling prior to a particular test such as PSA.	Pre	8	1.3%
37	Confidentiality - giving results at front desk.	CO	6	0.9%
38	No check to see if a patient has had tests done as instructed.	Post	5	0.7%
39	Leaving messages for patient - answer machine, place of work etc.	CO	3	0.4%
40	Inappropriate storage of tests e.g. specimens left overnight.	Pre	3	0.4%
41	Inadequate system for dealing with Faxed results e.g. not read or auctioned within necessary time.	Post	3	0.4%
42	Lack of clarity on the methods and frequency with which the practice should attempt to contact a patient regarding an abnormal result i.e. following up a non-responder.	CO	3	0.4%
43	Actions not always completed so no effective audit trail.	Post	1	0.2%
44	No practice system to ensure appropriate confidentiality for under 16's	CO	1	0.2%
45	Failure to contextualize result with patients medication e.g. Methotrexate	Post	1	0.2%

Key: 'Pre' = Pre-Analytical; 'SPS' = Specimen Processing Stage; 'Post' = 'Post-Analytical'; 'CO' = Communication Outcome Issue