Forensic Science Regulator
Overseeing Quality

Quality Standards Specialist Group (QSSG)

Minutes of the meeting held on 23 November 2018
Home Office, 2 Marsham Street, London, SW1P 4DF

1. Opening and welcome

1.1 The Chair, the Forensic Science Regulator (the 'Regulator'), welcomed all to the meeting. See Annex A for a list of representatives present.

2. Minutes of previous meeting

2.1 The minutes of the previous meeting held on 17 July 2018 had been approved by members prior to the meeting and were published on the GOV.UK website www.gov.uk/government/organisations/forensic-science-regulator/about/membership#quality-standards-specialist-group

3. Matters arising

3.1 Action 1: LAA representative to provide additional information for the FSR newsletter on whether the LAA has a procedure for reporting non-compliant solicitors. This action has been completed.

3.2 Action 2: QSSG members to provide further comments on the defence access guidance to FSRU. This action has been completed. Feedback had been received from CPS representative.

3.3 Action 3: QSSG members to provide any further feedback regarding the expert report guidance to the FSRU within a couple of weeks. This action is complete.

3.4 Action 4: QSSG members were asked if they had any more items that should be included in the annual report to inform the Regulator by the end of August 2018. This action is complete.

4. Codes update

4.1 The QSSG functions as the main editorial group, the first half of this meeting concern the Codes. Some collated feedback reached the Regulator too late to be incorporated prior to the meeting and has been included in a supplemental paper. The

individual issues papers will be discussed first, and then collated feedback will be discussed at the end of this section [specifically in section 10 of these minutes]

5. Gap between implementation and accreditation

5.1 The requirement for a good system of regulation is to enable innovation to be introduced in a safe and controlled manner and not to deter or stop it. A related accreditation issue is that there is generally a requirement for a method to shown to be in use for a period before assessment which means that unless the method is implemented in parallel there could be a gap between implementation and accreditation.

5.2 There is a risk during a gap, but also a risk that uncertainly how to implement a change prevents a necessary process improvement being made at all. One example given was that a forensic unit holds back on moving to the next version of a software tool; some software upgrades and/or patches deal with functionality or security issues not relevant to the forensic unit, but the expectation is this has been assessed. In this case the upgrade that was not implemented did add required functionality by increasing the range of phones that data can be recovered from. Whatever impeded the requirement towards continuous improvement, the impact was to the determent to the Criminal Justice System.

5.3 A second example where it was suggested by a forensic unit representative at a recent conference it was very difficult to introduce a new method when accredited. They had dealt with the need to demonstrate the method by shuffling between periods where the existing method was used and a new method to see if there was a performance difference. However, they did not inform those using and interpreting the results and therefore subsequently this was not mentioned or declared in expert reports. Clearly good practice guidance to assist with controlling risk would have been helpful.

5.4 What is not desirable to have methods stuck in time, set when accreditation is gained, and it is useful to ensure that it is clear how it is change managed.

5.5 The barrier cited by some to innovation is accreditation, but it is the perceived effort required to plan and conduct the validation that is then expanded upon in their explanations. It is believed that some might see the fact that now statements and reports are required to declare compliance with standards there is a reluctance to change a method if the declaration might appear to give the opposing counsel a way in. The title of this segment was the gap between implementation and accreditation, as one issue was that if a new method is implemented there may be a gap between it achieving accreditation, how to control that risk and how it should be declared. This assumes that it does not legally have to be accredited, and a therefore period of use without accreditation is permitted. For example, fingerprint and DNA analysis require accreditation and domestic legislation will require that. With DNA analysis it has long been a requirement for accreditation to be in place to load profiles to the database and therefore the processing of new methods in parallel with existing methods is the established norm. Clearly this does mean some period of non-earning activity, activity not directly delivering actionable results or activity clearing backlog.

5.6 It was suggested that as minor changes to these tools was almost intrinsic with digital forensics, the forensic unit would have been expected to either demonstrate how they manage these types of change safely or deal with the risk of not upgrading the software tool. In digital forensics, the schedule of accreditation would not tend to detail the software tool version number. This does mean there is additional assessment effort as software management is specifically looked at, most forensic units working outside of digital forensics would not upgrade analytical software frequently enough to wish to have this specifically looked at. There were differences in approach by members of the group in whether a correctly managed software upgrade of a digital forensics tool impacts on the accreditation status and/or required declaring in expert reports. One representative said they sometimes declare the software version change as they might implement it before completing validation, which does mean that if re-validation was identified as required and not completed that declaring this as a risk and how it was managed was appropriate. The Regulator concurred, saying that declaration requirement is not a punishment, it is there to ensure disclosure of risk to the court, as well as prompting the assessment of whether the risk manifested itself, and if it might of, what was the likely impact (if any) on the finding in this specific case.

5.7 There is a risk with self-assessment of the adequacy of validation prior to being awarded accreditation. We have had some of the new disciplines coming under the accreditation requirement insisting that their methods are valid only to still be struggling to achieve accreditation to years on because of a lack of adequate validation data. It was suggested the community did not want to be in a position where a forensic unit can say they have fully complied with the Regulator's requirements for a 'grace' period to only find that serious issues where identified at assessment. It was suggested that even if a method was utilising an infrequently used method procedure such as suggested in the Codes, this still carried some risk and it would be best declared this is what is happening and how that risk was mitigated dealt with up front in an annex to the expert report.

5.8 Several of the representatives of forensic units felt that this process was already covered in the Codes. The Codes could clarify if implementation of minor changes in a method such as an assessed software upgrade require any change to the declaration. Organisations should have a procedure for change to deal with this, one suggestion is to deal with these and expand the Codes, or tease out the requirements into guidance, revisit the validation guidance and possibly something in the next newsletter.

ACTION 1: FSRU to consider, when managing change and implementing new methods consider the declarations expected and include in the next version of the Codes or associated report guidance if required.

ACTION 2: FSRU to consider if a Codes change on managing change and implementing new methods is required, or if guidance signposting the existing requirements would be more appropriate (e.g. updating the validation guidance).

6. Integrity definition

6.1 The issue of data and personal integrity has arisen as a result of an issue involving a few individuals affecting thousands of drugs cases. The question here is whether and how to update the Codes without it being a kneejerk reaction to the actions by a few number of individuals. That said, there have been a number of other cases where integrity has been a dimension in the investigation of a quality failing, although not always the root cause.

6.2 The integrity issue is so wide, over the years it has included the clearly criminal involving theft of the drugs the forensic unit were charged with analysing, the manipulation of data in this more recent (and very public) case, commenting on a live case on social media, all the way through to pre-emptively filling in exhibit movement records (in this case the exhibit was destroyed).

6.3 This issue did go to the last Forensic Science Advisory Council, and there where a range of views, the QSSG are inviting to give their views.

6.4 The College of Policing representative said they talk about integrity in context: “Integrity in policing is about ensuring that the people who work for the police uphold the values of the service, strive to do the right thing in all situations and have the confidence of the public.”

6.5 The College of Policing narrative description does however expand on the issue and the controls expected rather than define it.

6.6 A representative from a forensic science provider said that all practitioners have a requirement to act with honesty and integrity, and it was suggested that the dictionary definition of integrity was adequate. The view given was that most organisations should have procedures to deal with integrity, certainly with this is not something that needs to be brought in externally.

6.7 Several items submitted in evidence to the current House of Lords inquiry suggested that the system of regulation using accreditation must be flawed as it allowed a few individuals to manipulate data in the well published data/personal integrity case. The detail of the data manipulation case still cannot be discussed in detail as there is a criminal investigation into that data manipulation. The fact it is a criminal investigation should suggest that this is the same argument as saying that as the law failed to prevent it so the law must be at fault.

6.8 Expert Witness Institute representative supported the view it a context issue and too hard give a meaningful definition, certainly one that doesn’t start have many other values which also need defining. There should be awareness training, which is the next agenda item, and it can talk about the examples in context rather than trying to have a tight definition.

6.9 The view from another forensic unit was integrity is a core value in forensic science, along with impartiality, so a simple definition would be appropriate, but it should not

attempt to give all the examples as there is a risk of defining it too narrowly and diluting the effectiveness.

6.10 There is a suggestion that the short dictionary definition of personal integrity is sufficient, or even cut out entirely as it doesn't have a special meaning. The data definition was however considered fine.

ACTION 3: The FSRU includes either no definition of personal integrity, or simply the short dictionary one.

7. Audit

7.1 The Regulator wrote out to all forensic units soon after the issues with one forensic unit emerged to ask them to perform a targeted data integrity audit as a precaution. The feedback was not that a cast iron guarantee could be given that could be no data issues, but a level of assurance that the audits would have uncovered issues if that had been of a similar nature.

7.2 Those involved with these audits said they generally found them useful and were looking to extend them to other areas of their business. This agenda item is looking to see what level of audit should be included as mandatory in the Codes.

7.3 The suggestion was to pick an area of the business that should be audited anyway and to take a deeper dive into the data as part of their audit schedule. Staff in the organisation ought not to be made aware of what areas will be looked but should be aware that audits do cover data integrity. We are trying to avoid setting up a requirement that is unachievable.

7.4 A discussion on what was level of accuracy was expected in the dataset and therefore what would be expected in any audit. What is an adequate level? It was suggested that the level of accuracy ought to be defined, but it was also suggested that data had to be fit for purpose, that purpose can dictate what acceptable accuracy might be permitted in a laboratory information management system versus any change in an analytical finding or a unique identifier. It was also suggested that the audit wasn't about the accuracy per se of the data, only that it had travelled through the process with integrity intact. Knowing if the analytical result was accurate was an issue for the validation and determination of the uncertainty of measurement. The audit is looking for how the accuracy, consistency and completeness of data is maintained over its entire life-cycle. It is looking at the functioning of the protection to prevent loss corruption or unauthorised access. The proposal is to look at where in the process are the critical control points. Where is data vulnerable and such as when data is entered, transferred, put on another system and what controls should be in place and do they function as expected? This checking functionality is where key data is sampled to check that the results are reliable and analytically sound.

7.5 It was proposed that the Codes are specific about checking critical control points. It was proposed that in addition to these, the paper suggesting minor additions to the Codes would be wise, so the existing b-f and the additional g and h:

b. That unattended equipment has appropriate protection.

c. A clear desk and screen policy.

d. Management of removable storage media.

e. Segregation of developmental and operational IT environments.

f. Network security.

g. Protection steps to prevent loss, corruption and unauthorised access of all repositories of electronic records identified by risk assessment as key data and for maintaining an audit trail; and

h. Sample key data to check that the results are reliable and analytically sound."

7.6 It was suggested that auditing should be useful to the organisation, and proportional. It can assist rationalising the process where required, looking to improve the process by putting in controls or introducing ways to make it easier to see if data is changed.

7.7 It was noteworthy from the audits, that it can be very technical, and labour intensive as different stages have different competency requirements to understand what is going on and may need several individuals to assist the person conducting the audit. One provider described that they went into more depth than a normal vertical audit, including taking it all the way back to the validation, and as a one-off exercise to that level it was appropriate. They felt that as a business as usual approach the vertical audit approach was considered proportionate in their business.

7.8 The Codes have much of this detail, the suggestion is to incorporate the minor additions and then to review this against this objective.

ACTION 4: Make the suggested amendments detailed of adding two extra areas to the audit list as well as the critical control points.

8. Integrity training

8.1 The questions here were:

a. Should the Codes mandate training in 'integrity'?

b. Is there a need to produce any specific guidance on what to include in the training?

8.2 The benefit of using of presenting ethical dilemmas during general training was their training.

ACTION 5: The Regulator to consider producing a set of slides covering some of the ethical dilemmas, errors and lessons learnt which forensic units can use as part of their training material.

9. Definition of competence

9.1 The Regulator's Codes of Practice and Conduct (the Codes) glossary currently describes competence as:
"The skills, knowledge and understanding required to carry out a role, evidenced consistently over time through performance in the workplace."

9.2 The question for the QSSG was whether the description required updating, for instance to explicitly include issues beyond technical ability (e.g. behaviour)? Various other suggestions were given to the group, including adding qualifications and behaviours into the definition.

9.3 The argument was made against putting qualifications in there as this was not the normal way competence is defined. One may have a qualification and not be competent, or competent and not have a specific qualification. It was noted this was probably included as some medical disciplines have specific qualification requirements also.

9.4 The merits of including behaviours in the definition was discussed, as was adding attitudes and even integrity. It was suggested this would introduce the issue of defining what these would be and demonstrating them in the workplace. What attitudes, what behaviours, how should they be listed and if required to be competent, then they have to be demonstrated?

9.5 It was suggested they could have a requirement to have an absence of inappropriate behaviours or attitudes. However, this was felt strayed into performance management. The existing definition as it stands includes that competence is "evidenced consistently over time through performance in the workplace", and performance management would note inappropriate behaviours or attitudes without having to define them. The recommendation is to keep the Codes definition as it currently is.

10. DRAFT Codes of practice and conduct and paper

10.1 The Codes where tabled for any specific comment, but the focus would be the collated feedback paper circulated to members.

10.2 A suggestion in feedback was to split clause 10 of the Code of Conduct into its two distinct parts, one covering the use of "methods of demonstrable validity" and another covering compliance with the "quality standards set by the Regulator" i.e
conduct casework using methods of demonstrable validity.

10.3 Comply with the quality standards set by the Regulator relevant to the area in which you work. The issue was debated but it was agreed there was no need to separate the clause as both are required.

10.4 Changes to numbering following insertions or deletions currently not marked; suggestion in feedback was to mark all changes. This was accepted that this should be investigated further.

10.5 The editorial group felt that the direct cross reference in the section titles to 17025 were less applicable than they were originally, in part as it also applicable to 17020. Referring to G19 in the headings was also considered but not favoured. It was confirmed cross references in titles removed.

10.6 A query has been raised on the following clause, as although the requirement is relatively clear, the practicality of compliance however is reported is sketchy. “Forensic units with methods already within the schedule of accreditation will normally only be required additionally to compile the validation library, which contains a validation report in its original format and specification.”

10.7 A query has been raised on the following clause, as although the requirement is clear, the practicality of compliance however is reported as sketchy. Section 15.2.6 it shall be possible to associate all changes to data with the person having made those changes. Reasons for the changes shall be recorded.” It was felt that this is the aim, but ‘shall’ might be too great an expectation but changes to specific or critical data does need traceability. This was wider than LIMS but includes Word etc. Therefore, it was agreed to change “shall” to “should”.

10.8 One organisation has asked if retention of a copy of fingerprints by the defence is acceptable when they have incorporated it into their notes, and what should the Codes say? This is should be explored with dealing with who is the data controller, and if control can be transferred. This needs to be reviewed with the defence access document.

10.9 A sheet cross-referencing key clauses in various documents/standards is include as a section in this draft of the Codes. This was welcomed, either in the Codes themselves or as a separate document if it was felt changes may be problematic. One related issue, an unsupported assertion was made in evidence to the House of Lords inquiry that the Codes contradicted other requirements. QSSG members are asked to feedback if contradictions are spotted.

ACTION 6: All QSSG members, or other interested parties, to see if any contradictions are contained in the Codes and feed them back as spotted.

10.10 A suggestion in feedback was made on the declaration wording in the Codes, specifically for instances where accreditation to ISO 17025 has been granted but assessment to the Codes has not been included. The suggested text was:

“I confirm that, to the best of my knowledge and belief, I have acted in accordance with the Code of Conduct published by the Forensic Science Regulator (The Regulator) [insert

issue] in all aspects that relate to my personal conduct. However, my organisation is not yet compliant with clause 10 of the Code of Conduct, concerning compliance with the standards set by The Regulator; specifically, the Code of Practice. The remaining clauses of the Code of Conduct, and the requirement to have accreditation to the required standard (insert standard not met) have been complied with for (insert discipline/sub-discipline relevant to the present case). Annex [x] details the steps taken to mitigate the risks associated with this non-compliance.'

10.11 The floor was opened to other comments on the draft version of the Codes: The Regulator was asked whether she was interested in only hearing about 'significant' issues identified in proficiency testing and what does 'significant' really meant. The Regulator said she wasn't after the information for trend monitoring, but the language would be looked at. The Codes currently say reporting of issues is after investigation, but the language would be looked at.

10.12 The Codes currently say reporting of issues is after investigation, but investigations can be very prolonged, so it was suggested removing 'after investigation in section 14.1.1. The change was agreed.

10.13 In relation to the requirements for the keeping of back-ups to data, how separate is separate as far as storage is concerned? The purpose of keeping a back-up separately is in case of events such as fire, so separate must mean a separate building not merely a separate room. It was discussed what the implication for sole traders, but in the same way sole traders need arrangements for peer review potentially with other sole traders then a similar reciprocal agreement can be made for this also.

ACTION 7: Complete suggested changes to the Codes for circulation to the QSSG in two weeks and feedback is requested by January 18th.

11. Sexual Assault Referral centres

11.1 The QSSG were given an update on progress, there is still more work to done but the writing group have produced several draft publications in their technical areas, but noting they are not experienced in standards development. The quality community and others are now asked to input. Feedback is sought on the scope, specificity of the clauses and the questionnaire approach (these documents are also out for public consultation on their contents).

ACTION 8: Feedback on the Sexual Assault Referral Centre drafts is sought on the flow, contents, even the references. Feedback is requested by 21st December please.

11.2 It should be noted that the Regulator's remit in this area is narrow, it is largely only around collection and handling of forensic samples and associated anti- contamination

controls specifically at this stage around Sexual Assault Referral Centres (SARC). Patient care is not in the Regulator's remit, but the medical community preference is for the whole process to be included in a single document.

11.3 There has been press interest in the work the Regulator is engaged with in SARCs, some suggesting that SARCs have not been inspected by the Care Quality Commission (CQC) before; they have, but as part of the larger organisation and not specifically including the forensic aspects.

11.4 Other activity the group was updated on was the following.

- There is work going on to create an apprenticeship.
- The group now has broad engagement including from the CQC, NHS England, policing, medics and relevant professional bodies, and is working effectively to improve performance through standards. Custody sampling is the next area that is pressing.

12. Fingerprint Matcher

12.1 The automatic fingerprint search algorithm which is currently in use by fingerprint bureaux, IDENT1, is due to be replaced in the Spring/Summer of 2019.

12.2 It was identified that there was need for advice and guidance to be provided ensure the validation met the forensic community's expectations. One question was 'is everything covered', without also duplicating existing requirements?

12.3 Home Office Biometrics (HOB) is going to provide the validation plan to forces HOB has been doing biometric accuracy testing, but the testing of the method is still seen as black box using some ground truth data; the testing will be conducted by those from the forensic community. The guidance document is aimed at both HOB and police forces.

12.4 A reference dataset was mentioned in the guidance, but it was suggested this was not a reference dataset as many would understand it. It was a dataset of approximately 2 million individuals which would been seeded with ground truth samples. The dataset itself was not a reference set.

12.5 It was noted that both the Biometrics Commissioner and the Information Commissioner been sighted on the activity.

12.6 It was suggested that it is important that forces should not be lulled into believing that the centrally delivered validation data will remove the effort that they will still be expected to complete the validation/verification of the method in their hands.

ACTION 9: Feedback on the fingerprint matcher paper is requested by 21st December please.

13. Lessons Learnt

13.1 The Independent Police Complaints Commission (now the Independent Office of Police Conduct) has been producing a 'Learning the Lessons' bulletin for some years, which summarises findings from investigations with an anonymised synopsis of the issue referred to them. The Regulator would like to explore the option of producing a similar publication and has had examples in two styles drafted under the working title 'Lessons Learnt'.

13.2 The title, the approach and the format were discussed. Two format styles were presented, most of the group felt that the more formal style was their preference and it was also suggested perhaps there should be a section in the documents covering what regulatory action resulted from the incident (e.g. a Codes update).

14. Video appendix

14.1 The video appendix is being redrafted, various different groups have been feeding back including the Chartered Society of Forensic Sciences' Facial Identification Analysis Division. The nature of the feedback and the different groups feeding in has meant a draft was not ready for this meeting. However, it is being prepared to go to the Digital Forensic Specialist Group in the next couple of weeks and can be circulated to the QSSG at the same time.

15. AOB

15.1 The Regulator will be meeting with the Association of Police and Crime Commissioners, there will be many issues to discuss but the issue of finances is likely to dominate.

15.2 It was mentioned that changes to legal aid had litigants trying to directly instruct experts which is problematic, if not least because litigants understanding of the remit of experts.

16. Date of next meeting

16.1 The next meeting is scheduled for 26 March 2019.

Annex A

Quality Standards Specialist Group (QSSG) meeting held on 23 November 2018

Attendees	Representing
GT	Forensic science Regulator (chair)
AH	The Chartered Society of Forensic Sciences
AB	Cambridgeshire Constabulary
JG	Forensic Science Regulation Unit
KS	National Quality Managers' Group
KM	United Kingdom Accreditation Service
KS	Unaffiliated
LD	The National Police Chiefs' Council
PH	Orchid Cellmark Ltd
AC	DSTL
BR	The Chartered Society of Forensic Sciences
MB	Crown Prosecution Service
NH	Forensic Science Northern Ireland
SI	Forensic Science Regulation Unit
RP	National Crime Agency
DB	College of Policing
CD	Scottish Police Authority Forensic Services

Apologies	Representing
GH	Legal Aid Agency
DW	National Fire Chiefs Council
CLH	Metropolitan Police Service
JL	BSI group
MH	Eurofins Forensic Services