



LETTER OF INSTRUCTION: STATISTICIANS EXPERT GROUP

25.09.2019

Professor Stephen J. W. Evans

Dear Professor Evans,

Re. The Infected Blood Inquiry

1. I am writing on behalf of the Chair to the Infected Blood Inquiry, Sir Brian Langstaff with instructions for the preparation of a report by an expert group of statisticians ('the Group'). You have kindly agreed to convene this Group, and to act as a point of contact between the Group and the Inquiry. The other members of the Group are: **Professor Sheila M. Bird, Dr Penny Chan, Dr Daniela De Angelis, Professor Christl A. Donnelly, Professor Nicholas P. Jewell, Professor Graham Medley and Sir David Spiegelhalter**. I have provided copies of this letter to all members of the Group.
2. Throughout this letter I refer to the production of 'a report' by the Group. However, it may be that during the course of your work you feel it is appropriate to produce a series of reports. You should feel free to adopt this approach. Any reference to 'the report' in this letter should be read as including the possibility that more than one report will be produced.

3. Having read and considered this letter, you may wish to respond in writing to some of the points raised and/or to propose the approach that you intend to take to your work.
4. The purpose of the report is to provide evidence about matters within the expertise of the Group that may assist the Chair in fulfilling the Inquiry's Terms of Reference. I set out in more detail below the topics and questions that the Chair asks you to address. The report will be provided to the Core Participants to the Inquiry and will be published on the Inquiry's website.
5. In due course, I may ask members of the Group or the Group as a whole to undertake further work to assist the Inquiry. This may include: answering questions raised by Core Participants; preparing further reports; conducting discussions with, or providing opinions to, other expert groups instructed by the Inquiry; giving oral evidence at the Inquiry's public hearings; and carrying out other duties appropriate to the role of an expert to this Inquiry as directed by the Chair through me.

Background

6. As you are aware, the Infected Blood Inquiry has been established to examine the circumstances in which people treated by the National Health Service in the United Kingdom were given infected blood and infected blood products, in particular since 1970. It is an independent public inquiry under the Inquiries Act 2005 ('the 2005 Act').
7. The provision of such blood and blood products led directly to people becoming infected with Hepatitis B virus ('HBV'), Hepatitis C virus ('HCV'), Human Immunodeficiency Virus ('HIV'), and other diseases. Other people were indirectly infected.
8. The Inquiry's Terms of Reference require it to consider and report upon a wide range of issues. These include:

“To ascertain, as far as practicable, the likely numbers of people who have been infected (directly or indirectly) in consequence of:

- a. the use of infected blood; and*
- b. the use of infected blood products.”*

9. Among the other matters that the Inquiry is required to consider are the following:
 - 9.1. What was, or ought to have been, known at any relevant time about the risks of infection associated with blood donations and blood products.
 - 9.2. The actions of relevant individuals and bodies involved in decision-making in relation to the use of blood and blood-products.
 - 9.3. The nature, adequacy and timeliness of the response of relevant individuals and bodies to the use of infected blood or infected blood products to treat NHS patients.
 - 9.4. The nature and extent of any attempt to identify those who may have been infected and/or might benefit from treatment, including the adequacy of any ‘look back’ exercise.
 - 9.5. Whether and to what extent people may have been exposed to the risk of diseases other than HBV, HCV and HIV as a consequence of the use of infected blood and blood products.
 - 9.6. The identification of any individual responsibilities as well as organisational and systemic failures in relation to any of the matters falling within the Terms of Reference.
10. The Inquiry must report its findings to the Minister for the Cabinet Office, and make any recommendations, as soon as practicable.

11. A full version of the [Terms of Reference](#) may be found on the Inquiry's website. The website also contains the Inquiry's [List of Issues](#), which provides more detail of the matters that may be explored during the course of the Inquiry.

Instructions

12. The Chair is conscious that as members of the Group you have great expertise and experience in your respective fields. The topics set out in the paragraphs that follow are intended to provide a focus and structure to your work for the Inquiry. If you, as a group, feel that the topics or questions could helpfully be rephrased, or if there are matters that you consider should be added or omitted from those set out below, then please provide your suggestions in a letter to me. The Chair will consider any points that you raise and I will respond to you with his decision.
13. The topics and questions set out below are deliberately framed in broad terms. This is intended to allow the Group to approach the matters as you see fit in light of the evidence and data available to you.
14. Some of the topics and questions refer to time periods. The Inquiry is not limited in its chronological scope and you should feel free to consider any periods that would assist in addressing the matters set out below. You should also feel free to propose a different chronological structure if that would allow for a more effective and informative analysis of the evidence and data. The Inquiry will be assisted by your assessment of how and when things changed, but the Chair leaves it to you to identify the best approach to structure your report. Again, I ask that you identify in your report, or in a letter to me, any proposed re-ordering of the matters set out below.
15. The questions below refer to a number of classifications of groups of people. If you consider that different or further classifications would assist your analysis of these or any other questions, then please identify these in your report or in a letter to me.

16. The Chair is conscious that some of the questions below will be difficult to address given available evidence and data, and that some may not allow for a meaningful answer. If you consider that it will not be possible to provide a meaningful answer, then please indicate this in your report, or in a separate letter to me, giving reasons. I address below the approach to take where further evidence or research may be required.
17. The Chair is also conscious that in some instances answers will be available, but subject to a degree of uncertainty. In such circumstances, please set out the degree of uncertainty involved and the components contributing to it.
18. Your report should cover the following topics, insofar as they are within your area of expertise and it is possible to address them on the evidence and data available to you.
 - 18.1. The number of people who were directly infected through the use of blood transfusions and blood products¹ with,
 - 18.1.1. HBV,
 - 18.1.2. HCV,
 - 18.1.3. HIV.
 - 18.2. The number of people directly infected with those viruses through the use of blood transfusions and blood products, classified by reference to:
 - 18.2.1. Periods of time (such periods to be defined by the Group in light of the evidence and data available to them),

¹ For the avoidance of doubt, 'blood products' includes products manufactured, whether by commercial or state owned entities, from blood cells and blood plasma, including immunoglobulins.

- 18.2.2. Infections attributable to blood transfusions, and (if achievable) the medical reasons for those transfusions,
 - 18.2.3. Infections attributable to blood products, and (if achievable) the medical reasons for the administration of those products (e.g. treatment of particular bleeding disorders or other conditions),
 - 18.2.4. The type and source of blood products causing infection,
 - 18.2.5. The region or country within the United Kingdom where the infection occurred or was detected,
 - 18.2.6. Any other category that may assist in understanding the extent and nature of direct infection of people with HBV, HCV and HIV as a result of the use of blood or blood products within the United Kingdom.
- 18.3. The survivorship of those directly infected with HBV, HCV or HIV as a result of the use of blood transfusions and blood products, including (where achievable) by reference to the categories set out above.
- 18.4. The effectiveness of exercises, including 'look-back' studies, intended to identify those directly infected with HBV, HCV or HIV through the use of blood transfusions or blood products.
- 18.4.1. Any recommendations that you have to improve the effectiveness of such exercises.
- 18.5. The number of people directly infected with HBV, HCV or HIV as a result of the use of blood transfusions and blood products who were, or are, undiagnosed during their lifetimes.

18.6. The number of people who were indirectly infected, in particular those who were infected before the diagnosis of the primary infection, as a result of the use of blood transfusions and blood products with:

18.6.1. HBV,

18.6.2. HCV,

18.6.3. HIV,

including, where possible, by reference to the categories set out above.

19. The Inquiry will also be assisted by your consideration of the following matters.

19.1. Please consider and comment upon the statistical evidence, data, analyses and reports referred to by the Penrose Inquiry to assess levels of infection and consequent numbers of deaths in Scotland, in particular in Chapter 3 of the Final Report.

19.2. The Inquiry will consider the extent to which, if at all, the earlier introduction of various measures may have reduced the number of people infected by exposure to blood or blood products. For each of the measures listed below, please consider:

(a) What evidence and data are available to assess the effectiveness of the measure in preventing infection or reducing the risk of infection,

(b) What further evidence and data may assist in making such an assessment, and

(c) What other material you would require, including from other expert groups, to provide an informed opinion on whether and to what

extent earlier introduction of the measure may have reduced levels of risk and infection.

- 19.2.1. Self-sufficiency in the production and supply of blood and blood products within the United Kingdom, given the relative risk profiles and use of (i) blood products produced within the United Kingdom and (ii) blood products manufactured commercially and imported for use in the United Kingdom.
- 19.2.2. Surrogate testing of blood donations within the United Kingdom for the virus that was later identified as HIV.
- 19.2.3. Testing of blood donations within the United Kingdom for HIV.
- 19.2.4. Surrogate testing of blood donations within the United Kingdom for non-A, non-B hepatitis.
- 19.2.5. Testing of blood donations within the United Kingdom for HCV.
- 19.2.6. Reduction of the size of pooled plasma from which product was derived.
- 19.2.7. The heat-treatment of Factor VIII and Factor IX blood products.
- 19.2.8. Alterations to self-referral rules or donor-sites.
- 19.2.9. More extensive screening of donors to identify and exclude higher risk donors.
- 19.2.10. Look-back exercises following the identification of infective donors or recipients.

19.2.11. Leucodepletion of blood.

19.2.12. Recipients do not donate.

(Where applicable, please consider the effect of different types of testing in respect of each of the relevant questions.)

19.3. The Inquiry will consider whether and to what extent people receiving blood products or blood have been exposed to the risk of vCJD. Please consider:

19.3.1. Whether people in the United Kingdom who have received blood products or blood transfusions have been exposed to a risk of infection with vCJD.

19.3.2. Whether it is possible to assess and quantify that risk.

19.3.3. The evidence or data that would assist you in such an assessment.

19.3.4. To estimate, if possible, the survivorship of people directly infected by vCJD through the use of blood transfusions or blood products.

19.4. The Inquiry will consider the extent to which the risk to individuals of infection with HBV, HCV, and/or HIV increased as a result of the use of particular blood products. Please consider:

19.4.1. What evidence and data are available to assess the relevant risk profile of different products,

19.4.2. What further evidence and data may assist in making such an assessment, and

- 19.4.3. What other material you would require, including from other expert groups, to provide an informed opinion on this matter.
- 19.5. The Inquiry will consider the manner in which data about the cause of infections and death have been collected, including at post-mortem examinations and in coronial proceedings. Insofar as it is within your expertise to do so, please (a) identify any examples of helpful and unhelpful practice that you identify during the course of your work, and (b) provide evidence of what information and data would be of assistance in the future in identifying and quantifying those infected and affected by blood and blood products.
- 19.6. The Inquiry would be assisted by a discussion of general concepts of risk, uncertainty, risk profiles and management of risk, in the context of medical products and medical techniques. The Chair is conscious that members of the Group have considerable experience and expertise in this area.

Further Evidence and Research

20. If there are issues on which you consider that you require further evidence before being able to reach a conclusion on the topics above, then please set that out in the report or in a separate letter to me. Where practicable, the Inquiry will seek to obtain such evidence as you require and provide it to you.
21. Members of the Group are invited to consider and use international data and comparators where that would assist their analysis. Please provide me with copies of any evidence or data that you obtain independently of the Inquiry, subject to any legal and professional obligations that may be binding upon you. Please raise any concerns you have about such obligations with me by letter. Please also be aware that it may be necessary to provide evidence or data that you disclose to the Inquiry to Core Participants (where appropriate, in anonymised form).

22. If you consider that specific research projects or literature reviews would assist you in addressing the topics above, then please set that out in the report or in a separate letter to me. Please be aware that such correspondence may be disclosed to Core Participants and may be published on the Inquiry website.
23. The Chair will give careful consideration to funding any proposal that you make for such research projects or literature reviews. He will need to take into account, among other matters, the proposed cost and duration of the work, the extent to which it is likely to assist the Inquiry in fulfilling its terms of reference, and the overall proportionality of commissioning the research. Section 17(3) of the 2005 Act imposes a statutory duty on the Chair to act with regard to avoid unnecessary cost (whether to public funds or to witnesses or others). To this end, it would be of great assistance if you could provide as much detail as possible about the project(s) that you propose.
24. Where appropriate, you should provide provisional answers to the questions set out above, qualifying them as necessary with reference to further evidence or research that may be required to provide a more complete answer.
25. The manner in which you address the topics set out is a matter for you, as is the way in which you express your conclusions and any qualifications that accompany them (including qualifications on the confidence or uncertainty that accompany a particular answer or range of answers).
26. The report should make clear if there are any matters on which it is not, or may not be, possible to provide an expert opinion, for example due to the lack of available information. The report should give the reasons for any such limitation.
27. If there is a range of professional opinion on a particular issue covered in the report that must be made clear and the range of opinions summarised. The

report should explain why you have reached the particular conclusion that you have.

28. If there is a disagreement among Group members about any matter within the report, then this too should be made clear. The report should summarise the range of opinions, attribute them to the relevant Group members, and provide reasons explaining the views expressed.
29. The Inquiry will be instructing other expert groups during the course of its work. You may consult freely with the members of these other experts groups, as may help you, but should acknowledge in your report what, if any, material assistance their input has given you.

Expertise and Duties of an Expert

30. If having read this letter you or other members of the Group feel that you do not have the appropriate experience or expertise then please let me know immediately. You should also notify me if you have any queries or require any further information.
31. As an expert witness, you have a duty to exercise reasonable skill and care in carrying out your instructions and must comply with any relevant professional code of practice. Your overriding duty is to assist the Inquiry and to provide your unbiased opinion as an independent witness in relation to those matters which are within your expertise.

Format of the Report

32. In preparing your report please make sure that:
 - 32.1. It sets out details of the qualifications of all members of the Group and their academic experience.

- 32.2. It gives details of any literature or other material which you have relied on.
- 32.3. It contains a statement setting out the substance of all facts and instructions which are material to the opinions expressed.
- 32.4. It makes clear which of the facts stated are within your knowledge.
- 32.5. It identifies who carried out any other work used for the report or, where appropriate, any section of the report. The report should give the qualifications for the individual and indicate whether their work was carried out under your supervision.
- 32.6. Where there is a range of professional opinion on the matters dealt with in the report, it summarises the range of opinions and gives reasons for the opinion reached.
- 32.7. It contains a summary of your conclusions.
- 32.8. It sets out any qualification to an opinion or conclusion provided.
- 32.9. It contains a statement that each of the Group members understands their duty to provide independent evidence and has complied with that duty.
33. The report must be verified by statements from all Group members who have contributed, saying:

“I confirm that in respect of those parts of this report to which I have contributed:

- (i) I have made clear which facts and matters referred to in this report are within my knowledge and which are not.*
- (ii) Those that are within my knowledge I confirm to be true.*

(iii) *The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.”*

34. You should let me know immediately if at any time after producing your report and before the conclusion of the Inquiry you change your views. It is also important that you notify me promptly if you feel it is necessary to update your report after it has been finalised, for example because new evidence has come to light.
35. The report should be reasonably concise and expressed as far as possible in straightforward language. Where technical or clinical terms are used, and their meaning may not be obvious, please provide a brief explanation as to their meaning.
36. I would be grateful if Professor Evans would undertake to be the principal point of contact for all correspondence between the Group and the Inquiry.

Timetable

37. Once the members of the Group have had an opportunity to discuss this letter and to plan the work that it intends to undertake, we will discuss with you a timetable for the production of the report.
38. I ask for the report to be provided in draft in the first instance so that I can approve its format, check that the formal requirements for an expert report mentioned above are fulfilled correctly, and ask for any queries to be addressed before the report is signed.
39. Once the report is finalised, a copy will be disclosed to the Core Participants and will be published on the Inquiry website. It may be that once Core Participants have reviewed your report they will identify further issues that I may wish to raise with you.

40. In due course, you and other Group members may be asked to attend the Inquiry to give oral evidence.
41. I may also provide you with further instructions at a later date in respect of other matters on which we seek evidence from you or the Group.

Fees

42. I will correspond with you separately about arrangements for your fees.

Next Steps

43. To progress matters as quickly and efficiently as possible, I would be grateful if you and the other Group members can return to me a signed confidentiality undertaking, if you have not already done so. I will contact you to discuss how best to provide access to the evidence that the Inquiry has obtained. Among the materials that will be provided to you will be a chronology of some of the events relevant to your work, which will be extracted from the Inquiry's main chronology. The main chronology is a work in progress and will necessarily be updated as further documents are disclosed. I will, at a later date, discuss with members of the Group whether further chronologies would be of assistance.
44. As I have indicated in this letter, and if you feel that it is appropriate, please write to me if you consider that the questions or topics should be amended or changed, and with any proposals for research projects or literature reviews.
45. May I thank the Group members once again for agreeing in principle to assist the Inquiry. If there is anything that I can do to assist or there are any aspects of these instructions that you would like to clarify then please do not hesitate to contact me.

Yours sincerely,

A handwritten signature in blue ink that reads "Moore Flannery". The signature is written in a cursive style with a prominent loop at the end of the word "Flannery".

Moore Flannery

Infected Blood Inquiry, Secretariat.