INDUSTRIAL INJURIES ADVISORY COUNCIL

Minutes of the IIAC Meeting – 21 January 2016

Room 1.25/1.26, Caxton House, London

Present:

Professor Keith Palmer	IIAC (Chair)
Dr Paul Baker	IIAC
Professor Paul Cullinan	IIAC
Dr Sara De Matteis	IIAC
Mr Paul Faupel	IIAC
Dr Ira Madan	IIAC
Professor Damien McElvenny	IIAC
Mr Hugh Robertson	IIAC
Mr Doug Russell	IIAC
Professor Anthony Seaton	IIAC
Dr Karen Walker-Bone	IIAC
Dr Emily Tucker	Strategic Health and Science Directorate
Dr Anne Braidwood	MoD
Ms Sally Lister	DWP Legal Services (for agenda item 1-2)
Mr Andrew Darnton	HSE
Mrs Rebecca Murphy	IIAC Secretariat
Dr Marianne Shelton	IIAC Secretariat
Ms Catherine Hegarty	IIAC Secretariat

Welcome: Ms Sally Lister and Dr Emily Tucker

Apologies:, Professor Neil Pearce, Mr Richard Exell, Professor Sayeed Khan, Ms Karen Mitchell, Dr Andrew White, Mr Keith Corkan and Mr Mark Smith

1 Announcements and conflicts of interest statements

1.1 **Devolution –** The Scotland Bill will enact powers to devolve Industrial Injuries benefits to the Scottish parliament. The Secretary of State has decided IIAC should not be designated as a cross border public authority. IIAC will continue to provide advice about the Industrial Injuries Scheme to the Secretary of State for Work and Pensions and the Department for Social Development in Northern Ireland only.

1.2 **Publication of IIAC reports** –The 'Interventional cardiology, interventional radiology and cancer' position paper was published on www.gov.uk/iiac on 17 December 2015. Members signed off the ionising radiation and cancer

Command paper in December and the Secretariat are currently liaising with Press Office to secure a publication date.

1.3 **DWP stewardship of IIAC –** Lexi Rees will be taking over as Head of the IIAC Stewardship team in March 2016, following the retirement of Ros Sannachan.

1.3.1 **Conflicts of interest –** No conflicts of interest were raised.

2 Minutes of the last meeting

2.1 The minutes of the October IIAC meeting were cleared with minor amendments. The amended minutes will be circulated for sign off ahead of their publication on gov.uk/iiac.

2.2 The following action point updates were provided:

2.2.1 *Action point 3: Secretariat to identify and share with the chair of the Council the report in which the doubling of risk approach was first used during consideration of prescription.* The doubling of risk approach to attribution of a disease to an exposure was an evolving idea within the Council over a number of years. IIAC first suggested a greater than doubled risk as one means of disease attribution in the 1986 Command paper 'Occupational lung cancer'. Use of a doubled risk as a threshold for prescription was first stated in position paper 8 'European Commission Recommendation - Occupational Diseases' published in 1992. The standard paragraphs IIAC currently use to describe the rationale behind the doubling of risk approach first appeared in 1998 in 'Diseases induced by ionising and non-ionising radiation'.

2.2.2 Action point 5: Mr Neil Walker to provide raw data about IIDB expenditure and amounts recovered by the Compensation Recovery Unit in the week commencing 9 November 2015. This had not yet been received; the Secretariat will chase up this request. An IIAC member had made a request for Employers Liability Compulsory Insurance claims recovered by the Compensation Recovery Unit (CRU) under the Freedom of Information Act (FOI) to address this issue. The member agreed to send the CRU statistics to the Secretariat for circulation to all Council members.

2.2.3 *Action point 12: Ms Sally Lister to find out how many claims are turned down due to the employment question.* These statistics are not routinely collected. However, Departmental operational officials had provided data to indicate only a small proportion of the IIDB caseload is turned down based on the employment question (542 decisions of around 25,000 claims received annually). However, this only highlights the number of claimants who claimed in error. It would be interesting to know how many potential claimants do not make a claim based on their perceived occupational eligibility for a prescribed disease. There are no data sources that could provide this information.

2.2.4 All other action points were cleared.

3 Industrial Injuries reform

3.1 In the Summer Budget 2015 it was announced that the Department would be considering ways in which employers and insurers could play a greater role in supporting those with industrial injuries. Departmental policy officials have since been considering reforms to the Scheme. An announcement about proposed plans was not made as part of the Autumn Statement but the work on Scheme reforms is still ongoing and the Department will be taking forward this work during 20162017. The Council's independence, commitment to openness, credibility, specialist knowledge and tripartite experience could be useful to the Department in reviewing the Scheme. It is likely the Council will have a role in the reform process but the nature of this role will depend on the Ministers.

3.2 At the October IIAC meeting, members had discussed a draft note about the history of prescription and the historical development of the doubling of risk approach to occupational attribution (paragraph 2.2.1). This information may be useful during the review of Scheme reforms.

3.3 It might be useful to consider the effectiveness and efficiency of international compensation schemes where insurers and employers play a greater role than in the UK. However, members agreed to wait for a formal request and terms of reference from the Minister before considering matters of reforms to the Scheme.

4 Diesel engine exhaust emissions and lung cancer in miners

4.1 The Council has been reviewing the case for prescription for lung cancer in miners exposed to diesel exhaust emissions. Two studies from one cohort reported a greater than doubled risk of lung cancer in miners exposed to diesel exhaust emissions working in non-metal mines in the US. This type of mine was chosen to minimise the effects of other potential co-exposures such as radon and silica. Elemental carbon was used as an estimate of exposure to diesel exhaust. Whilst this is a valid and useful measure for research purposes, it would be difficult to translate this into an exposure definition which could be used practically under the Scheme. A large, well-conducted UK study by the Institute of Occupational Medicine (IOM) in coal miners did not indicate much, if any, increase in risk of lung cancer (Miller *et al*., 1997), perhaps because exposures to diesel emissions were insufficient.

4.2 On the balance of the evidence prescription is not warranted for lung cancer in miners exposed to diesel exhaust emissions. An information note detailing the Council's review and conclusions was included in the meeting papers. Members suggested a few minor amendments and agreed to sign off the report.

SUMMARY –IIAC has been considering the case for prescription for lung cancer in miners (coal and non-coal) exposed to diesel exhaust emissions. Interpretation of the evidence is complicated by the presence of co-exposure to other factors which can cause lung cancer (e.g. radon). The evidence is mixed with some studies suggesting there is a doubled risk of lung cancer in miners exposed to diesel fumes, whilst others show no association. The evidence in support of prescription uses elemental carbon to measure exposure, which would not be practical to use to verify exposures within the Industrial Injuries Scheme. Moreover, findings in the sole high-quality British study (of coal miners) was negative. The Council has drafted an information note detailing its review which will be published in February 2016.

5 Medical assessments

5.1 IIAC has been reviewing medical assessments to ensure they adequately reflect current scientific knowledge.

Audit

5.2 Two Council members had audited 50 cases involving consecutive claims both for accidents and for prescribed diseases. The prescribed diseases were chosen for their potential to be problematic. The audit specifically tested how often causation and presumption featured in decision making. The quality of the assessment and the inherent scientific challenges were also considered. MAWG members then discussed the audit results with national clinical managers from the Centre for Health and Disability Assessments (CHDA).

5.3 The justification for a disablement percentage is a key part of assessment, but was not clearly recorded in a quarter of cases. Legibility of texts was a concern in some reports.

5.4 The level of disablement awards was generally satisfactory in the audited cases. However, in some cases there tended to be lower awards where objective testing was used compared to assessments based on medical history.

5.5 Variations in use of objective tests used were noted for Chronic Obstructive Pulmonary Disease and Hand-Arm Vibration Syndrome. CHDA managers had highlighted that this may be because of a request by the claimant or due to the nature of the disease in an individual case.

5.6 Only one case was found where causation was a feature. IIAC's advice about causation and presumption for medical assessments for PD A14 (osteoarthritis (OA) of the knee) had been taken on board.

Offsets

5.7 Assessing the effects of pre-existing conditions was particularly complex, often involving judgement calls where scientific evidence would be very hard to come by. Members discussed a PD A14 case where a claimant's assessment was offset by knee surgery 40 years prior to the onset of OA knee. There was no evidence the claimant had suffered any knee problems in the years after the surgery. Whilst knee surgery in people with non-occupational reasons for OA knee is a risk factor for OA knee, it would be difficult to arrive at a valid offset in such a case.

5.8 Scientifically valid offsets would also be difficult to apply in cases where a disease would have occurred anyway, but where occupational factors have accelerated its onset.

5.9 Assessments are intended to take into account relevant and non-relevant (due to non-occupational factors) loss of faculty; allowances are made for the interaction between relevant loss of function and other health issues using a specific formula:

$$G = R + N + I$$

Where **G** = the **G**lobal disablement; **N** = the disablement had the accident or disease **N**ot occurred; **I** = any **I**nteraction and **R** = the **R**elevant disablement attributable to the accident or disease.

5.10 Legislation requires that an offset for **N** is made so that only **R** and **I** are compensated. However, arriving at value for **N** is not straightforward. A question was raised was whether it is legally permissible for a deduction for **N** to be made based on a risk factor rather than a disease.

5.11 Similar to IIAC's advice on rebuttal, members discussed whether offsets should be restricted to very clear cut cases, since there is a legal requirement to apply them but in many circumstances it is challenging to do so. Making offsets only in clear cut cases would simplify the decision making process, thus, potentially increasing efficiency, consistency and equity.

Industrial Injuries Scheme reforms and medical assessments

5.12 Members discussed whether assessing claimants could be undertaken in a more efficient and effective way. A review of the effectiveness of medical assessment within the War Pensions Scheme is currently being undertaken which could provide interesting background information for the Council to consider.

SUMMARY – IIAC has been reviewing medical assessments within the IIDB Scheme to ensure they are up-to-date with current scientific and medical knowledge. There is a statutory list of percentage assessment awards for certain physical injuries (e.g. severe facial disfigurement is awarded 100%).

The Council commissioned a review to see how the percentage assessments

and the coverage on the IIDB list compare with other lists for similar state compensation schemes internationally. The commissioned review and a commentary from the IIAC were published on the IIAC website in December 2014. The commissioned review suggested that the disablement rankings for the scheduled list of IIDB injuries were similar to those found in other comparable schemes internationally. IIAC welcomes the findings of this review as it continues to investigate further aspects of medical assessments within the IIDB Scheme.

IIAC is currently considering medical assessments in the War Pensions Scheme and the Armed Forces Compensation Scheme to see if there are any lessons to be learnt for the IIDB Scheme. Guidance for assessments of certain conditions contained within the Medical Services Handbook is also undergoing review by the Council. An audit of decided cases has also been conducted.

6 Extrinsic allergic alveolitis and isocyanates

6.1 A member of the public has asked IIAC to consider extrinsic allergic alveolitis (EAA) (hypersensitivity pneumonitis; PD B6) due to spray painting and sanding of plywood and MDF cabinets, and the use and sanding of car body fillers. Currently PD B6 only covers exposure to moulds or fungal spores in farming, horticulture, forestry, mushroom cultivation, maltworking, handling mouldy vegetables, the caring/handling of birds, handling bagasse and exposure to metal working fluid (microbially contaminated).

6.2 EAA is an uncommon disease, which is disabling and is diagnosed by respiratory consultants. There is sufficient evidence to prescribe for EAA and isocyanates based on unique clinical features. Due to the growing number of agents known to cause EAA the Council has been considering recommending extending the prescription for PD B6 to include an open category for any other causes of EAA.

6.3 A draft Command paper was included in the meeting papers which contained a list of known causes of EAA in the Appendix. This list could be included in Departmental guidance to assist in adjudication of open category claims. The Council agreed to provide the Department with a regularly updated list based on the its biannual research abstract searches.

6.4 Departmental medical policy officials had raised concerns about the use of ‘established’ or ‘known’ causes of EAA for the open category in the draft amended terms of prescription for PD B6. Departmental solicitors highlighted that the terms ‘established’ or ‘known’ could lead to uncertainty and lack of clarity in the regulations and suggested an alternative wording. Members agreed to sign off the report after the open category wording had been circulated and agreed.

6.5 Departmental solicitors indicated that EAA should remain located in the diseases due to biological agents (the 'B' diseases) section of the Schedule, despite the recommended coverage for the chemical agent, isocyanates, within the terms of prescription for PD B6.

7 Diagnostic criteria for diffuse pleural thickening (PD D9)

7.1 Departmental medical policy officials had asked the RWG to consider the requirement for involvement of the costophrenic angle in the terms of prescription for diffuse pleural thickening (DPT; PD D9) after the matter was raised by medical assessors and a small number of respiratory consultants.

7.2 Reference to involvement of the costophrenic angle followed recommendations made in the 2004 IIAC Command paper 'Asbestos related diseases'. Prior to this the terms of prescription instead specified the minimum degree of pleural thickness as measured on a standard chest radiograph. The changes were instigated as, at that time, there was increasing usage of non-standard sized chest radiographs which made measurements of thickness no longer reliable.

7.3 Obliteration or blunting of the costophrenic angle is a radiological finding used to describe a specific feature on a plain chest radiograph. It is not a descriptor intended to relate to appearances seen on any other imaging technique, such as a computed tomography (CT) scan. Increasing numbers of claimants provide CT scans to support their claims. Departmental medical policy officials highlighted that medical assessors consider CT scan evidence presented to them, and attempt (using suitable training images) to judge whether CT appearances could be consistent with obliteration of the costophrenic angle, had a chest radiograph been available. Furthermore, CT scan evidence is often accompanied by a small chest radiograph, provided for orientation, thus enabling a further judgement to be made. However, respiratory specialists may not be aware of the admissibility of CT images when advising their patients since the terms of prescription imply radiographic rather than CT-based criteria for diagnosis.

7.4 Involvement of the costophrenic angle is a standard feature in diagnosis of DPT by chest radiograph. However, in rare cases there is no involvement of the costophrenic angle on a chest radiograph but clear evidence of DPT by CT scan and respiratory disability in the individual, although by these criteria they would not currently have entitlement to benefit.

7.5 Members agreed to remove reference to the costophrenic angle from the terms of prescription for PD D9. A draft Command paper was included in the meeting papers which detailed the Council's review and draft recommendations. The Council agreed to sign off the report after the addition of a prevention section.

8 Stakeholder engagement

8.1 IIAC has been discussing effective means of engaging with stakeholders. The Code of Practice for Scientific Advisory Committees recommends bodies are open, transparent, engage with their stakeholders and hold open/public meetings. The Secretariat tabled recommendations for stakeholder engagement for 2016. Two members will be giving presentations about IIAC and its work at events held by the RMT and the Society for Occupational Medicine.

8.2 Members discussed which stakeholders the Council should be targetting and for what purpose, such as:

- Stakeholder target: Occupational medicine researchers and healthcare professionals
    - Why?
    - To highlight IIAC's work and what type of evidence it requires to those undertaking research
    - How?
        - Occupational Medicine articles, preceded by an introductory commentary (Lancet Oncology, a similar approach to IARC reports)
        - SOM conference presentation
- Stakeholder target: General practitioners and healthcare professionals
    - Why? To highlight the existence of the Scheme and its provisions to healthcare professionals
        - How?
        - Pulse educational pieces
        - Royal College of General Practitioners conference presentation
- Stakeholder target: Claimants and their representatives
    - Why? To highlight Scheme existence of the Scheme and its provisions to claimants and their representatives
        - How?
        - RMT presentation
        - Council's trade union representatives flagging up new prescriptions to union officials and reviewing content of online advice

8.3 Council members suggested it would helpful for the Department to consider holding a stakeholder meeting with representatives from the National Union of Mineworkers (NUM) to answer their specific queries. Many of the NUM queries raised at past Public Meetings were not matters for IIAC. Such a meeting would not require a Council presence.

9 RWG Update

9.1 The RWG Chair gave a brief update of matters discussed at the November meeting.

9.2 Occupational osteoarthritis (OA) of the knee (PD A14) – The RWG has been considering this matter in connection with construction workers following a request about joiners by an MP on behalf of a constituent. PD A14 currently covers coal miners and carpet fitters only.

9.3 Prescription for coal miners was possible by combining limited direct evidence of a greater than doubled risk of OA knee in miners together with a large amount of indirect evidence of a greater than doubled risk of OA knee due to kneeling and squatting under heavy load (activities typically undertaken by coal miners). Kneeling and squatting under heavy load is associated with a high risk of OA knee. The case for prescription for carpet fitters was supported by direct evidence of an increased risk available according to occupational title.

9.4 Construction work covers a broad range of occupations, not all of which are likely to be associated with activities at risk of OA knee. Most studies group all construction workers together and do not give risk estimates for each separate occupation. The RWG has written to several researchers of key studies asking for further exposure information to enable the RWG to pinpoint specific construction trades at risk of OA knee. These enquiries have proved uninformative with one minor exception.

9.5 Considering the indirect approach to description, based on activity, the RWG is currently seeking evidence about whether any construction trades kneel or squat as much as carpet fitters and floor layers (who do have a qualifying level of activity), or underground coal miners. This could provide a way of supporting prescription. Thus, for example, in a Danish self-reported questionnaire study, three-quarters of paviours and plumbers reported that they squatted or knelt for a quarter of their working day; this represented about two-thirds to 70% of the exposure reported by floor layers in the same survey.

9.6 The RWG had checked whether the HSE Workplace Survey had relevant data. Information was collected on time spent working in awkward positions, but this was not specific to the knee, or kneeling and squatting. Trade union officials had asked relevant trade unions, but no evidence was available. Members agreed the Council should make a call for evidence on the www.gov.uk/iiac webpages. Members agreed to contact the Secretariat with any sources of relevant data. It was suggested that the evidence base might grow over time, even if not sufficient for prescription at this stage.

9.7 There is no information about kneeling and squatting *under heavy load*. Undertaking activities under heavy load provides an additional risk factor, but the risk of OA knee remains doubled for the combination of kneeling and squatting only.

9.8 Many construction workers will be self-employed. This would limit the number of additional claims should prescription prove possible.

9.9 Depression and anxiety in teachers – Following a request from an IIAC member the RWG has been considering clinically diagnosed depression and anxiety in teachers. Work-related 'stress' is outside the scope of this review. An RWG member has been reviewing literature searches about occupational depression and anxiety in general and specifically in teachers. The search was also widened to include healthcare workers. However, preliminary consideration of the evidence suggests a lack of evidence that risks of clinically diagnosed depression and anxiety are more than doubled for any particular occupational group.

9.10 Sports and neurodegenerative diseases – Two members are currently writing a journal article about this topic; a summary of evidence was tabled. There is some evidence of excess risks of motor neurone disease in professional sportspersons. The RWG will consider this topic further at its March meeting.

9.11 Occupational breast cancer – An IIAC member suggested the RWG consider the Breast Cancer Fund report on 'Breast cancer and working women'. The paper included 28 studies of variable quality. Whilst the risks of cancer were doubled in several occupations, these were not occupations where there was a biologically plausible explanation of a link with occupational breast cancer. The spread of occupations showing a greater than doubled risk suggests there may be a clustering of confounders which may be skewing the results. For example, breast cancer is known to be linked with later first pregnancies. Some of the occupational categories associated with a greater than doubled risk of breast cancer in the Breast Cancer Fund report, such as bankers, teachers and scientists, tend to have higher educational attainment and those with higher educational attainment tend to have children later. Thus, while membership of the occupational group could be associated with an excess risk of breast cancer, non-occupational risk factors that tend to be more commonly found in these groups could explain that excess.

9.12 The RWG, following a close reading of the BCF's evidence tables, does not propose any additional action is required but will continue to monitor emerging evidence, especially that relating to shift working when the Million Women's Study reports its findings.

9.13 Carpal tunnel syndrome (CTS) and twisting and turning - The RWG has been considering CTS due to twisting and turning activities following a request from a member of the public in relation to tanker driving. Relevant papers had been considered but tended to specify exposures in different ways, such as 'bending and turning' or 'tightening with force', making it difficult to amalgamate data to provide sufficient evidence to consider whether the

threshold for prescription had been reached for any specific exposure. As such, the RWG agreed it was currently not possible to recommend prescription for CTS for twisting and turning occupational activities. An information note is being drafted.

9.14 Occupational risks and exposure to trichloroethylene or polychlorinated biphenyls - As part of a horizon scanning exercise a RWG member had considered new carcinogen classifications published by the International Agency for Research on Cancer (IARC). At the March RWG meeting members will consider the IARC evidence tables for cancer risks from occupational exposure to trichloroethylene (TRIKE) and polycyclic biphenyls (PCB).

10 Any other business

a) Correspondence – Noise induced hearing loss

10.1 A MP has asked on behalf of his constituent why nail guns are not prescribed for PD A10 (noise induced hearing loss). The Secretariat identified a HSE research report which provided some helpful relevant information. A HSE Specialist Noise Inspector has been contacted for further advice.

b) Correspondence – Hand Arm Vibration Syndrome and jack hammers

10.2 A MP has asked on behalf of his constituent about prescription for Hand Arm Vibration Syndrome (HAVS; PD A11) for the use of jack hammers for work involving underpinning. PD A11 covers only the use “of hand-held powered percussive drills or hand-held powered percussive hammers in mining, quarrying, demolition, or on roads or footpaths, including road construction”. A preliminary literature search has not identified any relevant research about HAVS and work with jack hammers in construction or building work. The Secretariat will be contacting an expert at the Institute of Sound and Vibration Research to request evidence and be making a call for evidence on www.gov.uk/iiac.

c) Correspondence – Asthma and metalworking fluid

10.3 IIAC has been contacted by a claimant about a rejected claim for asthma due to exposure to metalworking fluid (MWF). The claimant was turned down for PD D7 (asthma) as MWF was not at the time a recognised sensitising agent. This decision was later upheld by a Tribunal. Since then a case report about MWF and asthma based on the claimant’s case has been pubilshed suggesting MWF may be a sensitising agent. PD D7 includes an open category for ‘any other sensitising agents’. The Department takes advice about which agents can be classified as sensitising agents by seeking specialist advice. Members agreed that whether MWF was a sensitising agent was a matter for the Department and its specialist advice service. The

Secretariat will write back to the claimant and pass on his query to the Department.

10.4 **Dupuytren's contracture (DC) and hand-transmitted vibration** The Council has previously published a Command paper recommending prescription for DC for workers exposed to hand-transmitted vibration. Correspondence was mentioned from Professor Burke, who had noted from a report by Khan et al that DC appeared to be more common in social class (SC) I than SC V individuals. This was based on the morbidity survey covering consultations with general practitioners. Professor Burke inferred this was evidence against hand-transmitted vibration causing DC, although the researchers did not collect information on exposure to vibration. Furthermore, the grading by SC was U-shaped – higher in SC I, lowest in SC 3N, but increasing from SC 3N to SC V. Possibly, the higher rates in SC I reflected the "worried well" since assigning consultation rates with minor pathology is more common in professional people; if SC 3N was taken as a comparator, risk of DC would appear to increase with lower social class. In any event, a study coloured by consultation behaviour and which did not collect information on hand-transmitted vibration could not provide strong evidence against the association.

Date of the next meeting: 21 April 2016