**Background**
Workplace-based Assessment (WBA) Tools are used by trainees to demonstrate their level of competency against specific parts of the higher specialist training curriculum in Occupational Medicine. Between January 2014 and January 2015, The Faculty of Occupational Medicine (FOM) Workplace-based Assessment Advisory Group (WBAAG) re-designed the layout of the current 'Direct Observation of Practice' Direct Observation of Procedural Skills (DOPS) tool and completed a national pilot of a suite of six new Supervised Learning Events (SLE-DOPS) tools.

**Aim**
To assess the validity, reliability and usability of the re-designed SLE-DOPS forms.

**Methods**
Face and content validity of the new forms was assessed through a comprehension trial, inter-rater reliability by video scoring exercise and usability and acceptability via an electronic survey of trainees and trainers.

**Results**
- **Stage 1.** No specific areas of concern/difficulties were identified by the comprehension trial (CT) of trainees or trainers relating to the comprehension of the revised tools. Further areas for development of the guidance notes and training handbook were identified in the trainee CT, relating to the use (numbers and activities) of SLE DOPS expected. The trainer CT identified other opportunities to enhance the utility of the tools and to potentially modify the areas of assessment and rubric.

- **Stage 2.** Overall, 25 educational and clinical supervisors participated in the video pilot of SLE DOPS forms. The majority of assessors marked the individual categories as 'satisfactory', with greater disparity in the marks for the spirometry activity. Some assessors assessed the trainee against the end stage of training (in terms of expected competency), whereas others assessed against early stage of training, which was likely to contribute to the disparity in grading, particularly for spirometry. This was reflected in the comments. A 'below expected' outcome was given where the trainee was assumed to be at the end stage of training rather than the actual observed performance in the video, consistent with early training. The disparity may also have been affected by assessors' assumption about some of the information not covered in the video (e.g. consent). The key factor in understanding any 'below' or 'above expected' scoring, was the presence of expanded comments and feedback boxes in the new SLE DOPS forms. This is reassuring, given the intended formative use of the new forms.

- **Stage 3.**

**Trainers’ responses**
27 participants completed the survey. There was an overwhelmingly positive response (90-95%) to questions relating to whether or not the re-designed tools represented an improvement over the currently available WBA DOPS tools.

- **Trainees’ responses**
35 participants completed the survey: 6 from ST3, 7 from ST4, 15 from ST5 and 6 from ST6. Trainees used between 0 and 5 of the tools - with communication activity, generic and workplace visit as the most commonly used.

Trainees reported generally positive responses (54 - 74%), but less so than the trainers, relating to whether or not the re-designed tools represented an improvement on the currently available WBA DOPS tools.

**Is it clear from the design of the new form that the purpose of the tool is formative?**

Answered: 30  Skipped:5

- **Yes**
- **No**

<table>
<thead>
<tr>
<th>Question</th>
<th>Trainees - No responding to question</th>
<th>Yes</th>
<th>No</th>
<th>Trainees - No responding to question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is it clear from the design of the new form that the purpose of the new tool is formative?</td>
<td>30</td>
<td>25 (83%)</td>
<td>5 (16%)</td>
<td>25</td>
<td>22 (88%)</td>
<td>3 (12%)</td>
</tr>
<tr>
<td>Are the SLE DOPS easier to link to the curriculum?</td>
<td>26</td>
<td>19 (73%)</td>
<td>26 (26%)</td>
<td>21</td>
<td>20 (95%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>Do you think that the SLE DOPS enhances your/the trainee’s learning and development?</td>
<td>26</td>
<td>14 (53%)</td>
<td>12 (46%)</td>
<td>21</td>
<td>20 (95%)</td>
<td>1 (4%)</td>
</tr>
<tr>
<td>Did you receive / provide feedback following the SLE-DOPS?</td>
<td>26</td>
<td>19 (73%)</td>
<td>7 (27%)</td>
<td>18</td>
<td>16 (89%)</td>
<td>2 (11%)</td>
</tr>
<tr>
<td>Do the SLE DOPS give you an insight into your performance?</td>
<td>23</td>
<td>17 (74%)</td>
<td>6 (26%)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Do you find the new rubric accompanying the SLE DOPS forms to be useful?</td>
<td>24</td>
<td>17 (70%)</td>
<td>7 (29%)</td>
<td>21</td>
<td>20 (95%)</td>
<td>1 (4 %)</td>
</tr>
<tr>
<td>Do you think the new SLE DOPS forms are an improvement over the previous forms?</td>
<td>22</td>
<td>15 (68%)</td>
<td>7 (31%)</td>
<td>20</td>
<td>19 (95%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>Do you think there should be another SLE DOPS form for a particular activity?</td>
<td>22</td>
<td>4 (18%)</td>
<td>18 (81%)</td>
<td>19</td>
<td>2 (11%)</td>
<td>17 (89%)</td>
</tr>
</tbody>
</table>

**Table 1:** Design of the tool, linkage to the curriculum, value in giving feedback and educational impact

- Questionnaire responses of trainees and trainers: on-line survey April to December 2014

**Recommendations**
- The WBAAG recommends that the FOM Assessment Subcommittee evaluates the findings of the pilot and considers it as sufficient and suitable for submission of curriculum changes to the GMC.
- The WBAAG converts the remainder of the WBA tools (mini-CEX, CBD and SAIL) into the new SLE format in 2015, as agreed with the GMC (see minutes of the meeting in June 2014).
- Once they are converted, the WBAAG then undertakes a further 3-stage pilot using methodology described above. WBAAG already considered improvement strategies for the subsequent pilot. An economy of effort can be achieved by undertaking all three stages of the pilot on an SLE training Day, supported by the Faculty.
- WBAAG collaborates closely with the NSOH in development of a bank of videos with examples scenarios and instructions on their usage.
- WBAAG shares pilot results via national publication or any other suitable means as advised by the FOM.

**Faculty of Occupational Medicine**
**Workplace Based Assessment Advisory Group - 28 January 2015**

Dr L Batty (chair/NHS)  Dr K Targett (NHSScotland)
Dr M McKinnon (deputy chair/industry) Dr L Curran (trainee/NHS)
Dr AK Skimore (NHS)  Dr S Chavda (trainee/industry)
Dr K McKinnon (Armed Forces)  Mr B Szafranski (FOM)
ASM SOMI Manchester 6-9 July 2015

Dr Lucia Batty MRCP FFOm
lucia.batty@nhs.net
Clinical Lead Consultant Occupational Physician
Department of Occupational Health and Wellbeing
King’s College Hospital

For publication in the Oxford Journal of Occupational Medicine (summer 2015)