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BRIEF COMMUNICATION Are electronic medical records a medicolegal risk to the oculoplastic surgeon? A survey of British Oculoplastic Surgery Society Members

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Electronic Medical Records (EMRs) are used increasingly throughout medicine, with 45.3% of ophthalmology units reporting use in 2017 [1]; external pressures including pandemic-induced new ways of working may soon render them compulsory. With widely publicised benefits and challenges of EMR across specialities and nations [2–4], the Royal College of Ophthalmologists (RCOphth) issued standards EMR systems should meet to optimise usage [5]. The introduction of ophthalmologyspecific EMR in the UK has generated ground-breaking highvolume data, particularly in cataract, anti-VEGF treatments and glaucoma surgery [1]. However, perhaps due to the subspecialty interests of the pioneers paving the way in this field, anecdotal grumblings exist about the quality of EMR in others, including oculoplastics.

We invited all full members of the British OculoPlastic Surgery Society (BOPSS) to complete an online survey exploring current practices and opinions regarding EMR in oculoplastics from January to June 2021, receiving 71 responses (39.4% response rate). Table 1 outlines the quantitative responses. 80% report using EMR (38% of these Medisoft, though 15 different systems were reported), 49% both for outpatient clinics and recording operations. 40/56 (71%) described documenting a complete examination as 'somewhat' or 'very challenging', 32/54 (56%) find recording important positives or negatives 'harder' or 'much harder'. 59% have been involved in medicolegal aspects of clinical care; 33% have undertaken formal medicolegal training. 57% perceive an increased medicolegal risk with EMRs compared with hand-written notes. However, no statistical association was found on chi square testing between involvement in medicolegal care, or formal training, with perception of increased risk. 23% report documenting inadequate clinical information to manage a complaint, 35% citing poor user-friendliness of the systems for this.

Thematic analysis of qualitative free-text responses was undertaken, summarised in Table 2. Negative comments outweighed positive/neutral comments in all questions. Most comments related to system design, with access to or reviewing records, and user–system interaction also featuring highly.

Concerns identified included lack of oculoplastic-specific, userfriendly programmes allowing rapid review of historical data and flexibly supporting complete data input. Difficulty integrating diagrams featured frequently, though some feel ability to upload photos mitigates this. Opinions conflicting regarding EMR templates included: lack of templates, template inflexibility, potential as educational tools and prompts for complete documentation. Comments on EMR being faster or slower than hand-written documentation included duplication of work due to poor integration with other specialties/IT systems.

Our survey highlights widely ranging opinions regarding EMR in oculoplastics, with overriding feelings still mostly negative. Reported concerns suggest that current systems do not meet the published RCOphth standards. It is particularly concerning that 23% of respondents believe they document inadequately in EMR to defend a complaint or medicolegal issue. Most EMR systems were not purposefully designed for oculoplastics, which may contribute to perceptions of poor user-friendliness and difficulty recording examination findings. Photographs form a valuable part of the patient's clinical record. However, imaging services are not readily available in all units, or outside traditional office hours. Oculoplastic surgery is uniquely positioned in often needing to document nuanced, subjective examination findings outside the immediate periocular region, including facial asymmetry and both static and dynamic function. Such details are ill-suited to documentation by frequently-adopted drop-down menus in EMRs and may create clunky, time-consuming data entry that poorly captures the clinical picture, or a heavy reliance on free-text input. We believe that specialists should work closely with software designers to develop systems tailored to oculoplastic needs that can be delivered safely and effectively within the clinical environment.

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| | | | | | | Weighted average | 3.8 | Weighted average | 3.7 | | | | | | | | | | |
|--|------------------------|---------------------------|--------------------|----------|---------------------|---------------------------------|--|------------------------------|---|----------------|--|--|--------------------------------------|-----|-----------------------------|--------|---|------------------------------|------------------|
| | | | | | | N/A | 15 | N/A | 16 | | | | | | | | | | |
| | | | | | | Very challenging | 21 | Much harder | 16 | | | | | | | | | Other | 6 |
| | | Never | 14 | Other | 22 | Somewhat challenging | 19 | Harder | 16 | No | 29 | No | 29 | | | N/A | 41 | N/A | 34 |
| | | Operations and clinics | 33 | None | 13 | Neither easy nor challenging | 7 | Neither easier nor harder | 14 | Yes—other | 7 | Subject of litigation case | 16 | | | Unsure | 16 | Also document in paper notes | 14 |
| | | Clinic | 6 | OpenEyes | 6 | Somewhat easy | 2 | Easier | Q | Yes—clinics | 34 | Called as witness for litigation case | 12 | No | 47 | No | 16 | Time constraints | 20 |
| | Response options | Operations | 12 | Medisoft | 27 | Very easy | 7 | Much easier | 2 | Yes—operations | 24 | Paid expert witness | 28 | Yes | 24 | Yes | 25 | EMR not user- friendly | 24 |
| sponses. | No. of responses | | 68 | | 71 | | 71 | | 70 | | 68 | | 71 | | 70 | | 71 | | 68 |
| Table 1. Outlines quantitative survey re | Question (paraphrased) | | Current use of EMR | | Which EMR software? | | Ease of recording complete examination findings | | Impact of EMR on documenting important positives and negatives | | Is EMR higher risk than paper notes medicolegally regarding documentation? | | Involvement in medicolegal care work | | Formal medicolegal training | | Document enough on EMR to manage complaint or medicolegal issue? | | If not, why not? |

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Table 2. Reports the results of thematic analysis of qualitative responses according.

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|-----------------------------|----|-----------------------------|-----|-----------------------------|----|-----------------------------|----|
| Positive | | Negative | | Neutral | | Desirable | |
| Access to/review of records | 25 | Access to/review of records | 9 | Access to/review of records | 0 | Access to/review of records | 0 |
| Cost of system | 0 | Cost of system | 1 | Cost of system | 0 | Cost of system | 0 |
| Education | 1 | Education | 0 | Education | 0 | Education | 0 |
| Non-specific | 5 | Non-specific | 3 | Non-specific | 0 | Non-specific | 0 |
| Security | 3 | Security | 3 | Security | 0 | Security | 0 |
| System design | 37 | System design | 122 | System design | 16 | System design | 16 |
| User-system interaction | 1 | User-system interaction | 57 | User-system interaction | 19 | User-system interaction | 0 |
| Total | 72 | Total | 195 | Total | 35 | Total | 16 |
| | | | | | | | |

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COMPETING INTERESTS

The authors declare no competing interests.

ADDITIONAL INFORMATION

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