## 1 Investigating the positive impact of the visual arts on patients

2	with ophthalmic conditions
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28 29 Sir 30 31 The recent Keeler Lecture, 'Vision, eye disease, and art', delivered by MF Marmor 32 (1) highlights the complexities of vision and art. It is not an uncommon belief 33 that sight-impaired individuals are unable to appreciate art. Whilst a 2004 34 review for the Arts Council England cited almost 400 papers demonstrating the 35 positive impact of art in healthcare (2), there is no published literature on the 36 role of visual art in the ophthalmology setting. 37 38 To address this an art and photography exhibition was held at Moorfields Eye 39 Hospital, London, UK. Patients, staff and visitors, both sighted and sight-40 impaired, were invited to respond to a pre-validated questionnaire asking 41 agreement on a 5-point Likert scale to statements about art appreciation and 42 display in the healthcare setting. 43 44 There were 102 respondents: 39% male, 61% female; mean age 50.7 years 45 (range 17-90); 65% were patients and those accompanying them, 28% staff; 46 54% had an ophthalmic condition, 51% of these bilateral. 47 48 An overwhelming majority of respondents agreed/strongly agreed that display 49 of visual art in the hospital improves patient experience (92%), relaxes patients 50 (91%), makes clinic waiting times more bearable (85%) and improves staff morale (70%). For the first two statements, agreement was stronger amongst 51 52 staff and visitors than patients (Kruskal-Wallis ANOVA, p=0.007 and p=0.016),

53 and amongst those without an eye condition versus those with (Mann Whitney 54 U; p=0.006 and p=0.02). The display of tactile art was thought to be beneficial 55 for the visually-impaired patient experience by 86% of respondents. 56 57 Of those with an ophthalmic condition, 77% agreed/strongly agreed that they 58 enjoyed visual art and 75% could express themselves through art-creation 59 similarly to before visual problems developed, with no difference between those 60 with unilateral versus bilateral disease (Mann Whitney U; p=0.107 and p=0.129). 61 62 Our results demonstrate strong opinion that visual art positively enhances 63 patient and staff experience in ophthalmology, and proves that those with visual 64 impairment are able to enjoy and create art. There is a suggestion that 65 displaying tactile art may make a more significant improvement to the visually impaired patient experience. Future exhibitions showcasing tactile art could 66 67 investigate this further. 68

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