Virtual Clinic Service Evaluation Study. A Survey to evaluate patient experience of Medical Retina virtual clinics.

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Introduction: Many units across the UK have developed virtual medical retina clinics using already available resources to alleviate the pressures on the Medical Retina service.[1,2,3] Virtual or remote assessments are increasingly being utilised by healthcare providers to address the disruption caused by the Covid-19 pandemic. As part of the NHS Long Term Plan, services will be redesigned so that over the next five years up to a third of patients will be able to avoid the need for a face-to-face outpatient visit.[4]

The Nelson Health Centre is one of the designated Diagnostic Hubs in the Moorfields Eye Hospital NHS Foundation Trust where technician-delivered high-volume Medical Retina virtual clinics take place. On average, around 48 patients are assessed in this designated virtual clinic per day.

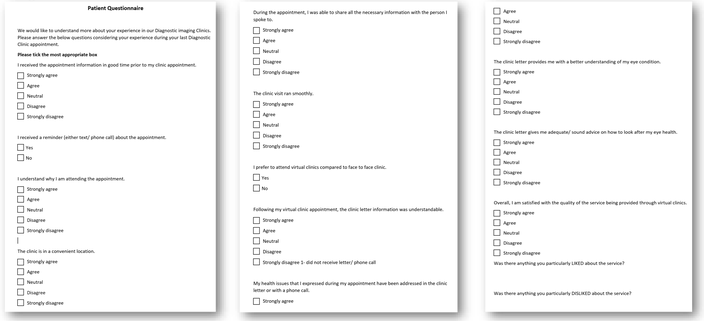
During a patient visit, a technician takes a focussed clinical history, measures visual acuity and intra-ocular pressure and then performs pupillary dilatation. The clinical history is taken based on a series of pre-prepared questions. Once the patient is dilated, widefield retinal imaging using Zeiss CLARUS Fundus camera and Zeiss CIRRUS macula optical coherence tomography (OCT) is performed.

The retinal images are assessed asynchronously and reported by a clinician within 48 hours of the visit. It is explained to patients that they will receive written communication of the diagnosis and management plan from the clinician in due course.

A recent retrospective case series study including 1006 patients has demonstrated that this form of high-volume virtual clinic has the potential to review patients efficiently and safely.[5] The aim of this survey is to evaluate and improve patient experience of the newly developed high-volume Medical Retina virtual clinics taking place at the Nelson Health Centre, Moorfields Eye Hospital, South Division.

Method: A detailed patient satisfaction questionnaire was created to examine patient experience of the medical retina virtual clinics. The questionnaire (figure 1) was composed of fourteen components which evaluated the entire patient journey from when they received the appointment letter, the clinic visit itself followed by the clinic letter received from the clinician. The questionnaires were completed by follow-up patients attending the Medical Retina virtual clinic at the Nelson Health centre between June- October 2021. Patients were asked to anonymously rate their agreement to each statement on the questionnaire (using Likert scale).

Figure 1:



Patient Questionnaire

We would like to understand more about your experience in our Diagnostic imaging Clinics. Please answer the below questions considering your experience during your last Diagnostic Clinic appointment.

Please tick the most appropriate box

I received the appointment information in good time prior to my clinic appointment.
- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly disagree

I received a reminder (either text/ phone call) about the appointment.
- ☐ Yes
- ☐ No

I understand why I am attending the appointment.
- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly disagree

The clinic is in a convenient location.
- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly disagree

During the appointment, I was able to share all the necessary information with the person I spoke to.
- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly disagree

The clinic visit ran smoothly.
- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly disagree

I prefer to attend virtual clinics compared to face to face clinic.
- ☐ Yes
- ☐ No

Following my virtual clinic appointment, the clinic letter information was understandable.
- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly disagree 5- did not receive letter/ phone call

My health issues that I expressed during my appointment have been addressed in the clinic letter or with a phone call.
- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly disagree

The clinic letter provides me with a better understanding of my eye condition.
- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly disagree

The clinic letter gives me adequate/ sound advice on how to look after my eye health.
- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly disagree

Overall, I am satisfied with the quality of the service being provided through virtual clinics.
- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly disagree

Was there anything you particularly LIKED about the service?

Was there anything you particularly DISLIKED about the service?

Results:

Out of seventy three patients asked to complete the patient satisfaction questionnaire, seventy two patients completed the questionnaire (98.6% response rate).

94% (68/72) were aware that they had received a reminder (either text/ phone call) about the appointment.

94% (68/72) of patients felt that the clinic ran smoothly.

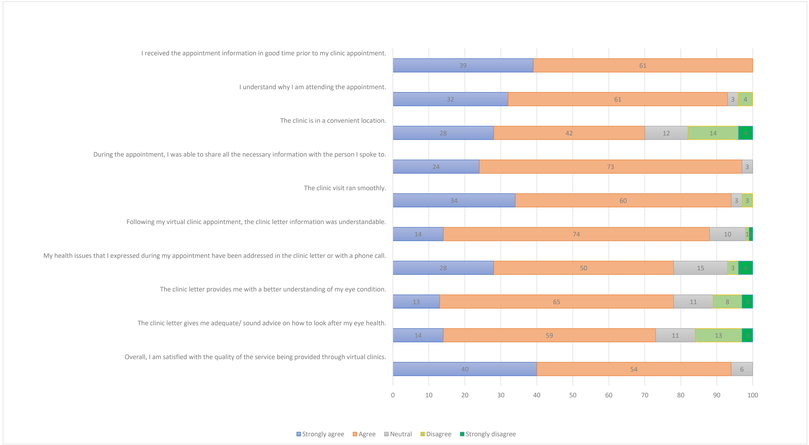
88% (63/72) were in agreement that the clinic letter information was understandable.

78% (56/72) agreed/ strongly agreed that the health issues that they expressed during the appointment had been expressed in the clinic letter or with a phone call.

73% (53/72) agreed that the clinic letter gives adequate/ sound advice on how to look after their eye health.

Overall, 94%(68/72) of patients were satisfied with the quality of the service being provided through virtual clinics and 64% (46/72) of patients preferred to attend virtual clinics compared to face-to-face clinic.

Figure 2 below illustrates the percentage of patient responses for each questionnaire statement based on Likert scale.



Discussion: Overall, the responses received for each of the questions were positive. In particular, 94% of patients were overall satisfied with the quality of the service being provided through virtual clinics and 64% of patients preferred to attend virtual clinics compared to face-to-face clinic. Most patients agreed that the clinic visit ran smoothly which is of particular importance in limiting patient exposure to Covid-19 by potentially reducing waiting times in clinic.

Only 70% of patients agreed that the clinic is in a convenient location. At present, there are a small number of diagnostic hubs within the Moorfields NHS Foundation Trust thereby restricting patient access to certain centres. It is likely that there will be an increase in the number of diagnostic hubs in the future. Virtual clinic services will potentially play an important role in meeting the increasing clinical demand as a result of the rising number of patients with diabetes or macular degeneration.[6,7] The results from a recent large retrospective cohort study has suggested that virtual consultations can be utilised for reviewing newly referred patients from the diabetic eye screening programme in a safe and efficient manner.[8]

This survey has highlighted areas for improvement, which include ensuring that the clinic letter has a detailed explanation when advising patients on how to look after their eye health. At Moorfields, this can be achieved by altering the virtual clinic letter template for diabetic patients or general medical retina patients on the OpenEyes™ electronic patient record. Post the Covid-19 pandemic, some patient may benefit from having a combination of virtual and face-to-face assessment.[5]

Our survey demonstrated that high-volume medical retina virtual clinics have high patient satisfaction rates, particularly during the Covid-19 pandemic where face-to-face clinic appointments have been impacted. Refining this model of care will help to improve the way in which Ophthalmic patient care is delivered in the NHS.

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