



The efficacy of telephone consultations in ear, nose, and throat (ENT)

Marina Brimiouille[^], Prathibha Nanoo, Darren Yap, Alison Hunt

Ears, Nose and Throat Department, Milton Keynes University Hospital, Milton Keynes, UK

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Correspondence to: Marina Brimiouille. Ears, Nose and Throat Department, Milton Keynes University Hospital, Milton Keynes, UK.

Email: marina.brimiouille@gmail.com.

Background: Telephone consultations have been shown previously to be effective and safe in general practice and in specialties for specific conditions such as human immunodeficiency virus (HIV), inflammatory bowel disease (IBD) and epilepsy. They include certain advantages such as gain of time, but these must be balanced against potential disadvantages in terms of efficacy and patient satisfaction. Until recently, there was no information available on the adequacy of telephone consultations in ear, nose, and throat (ENT).

Methods: The study design was a cross-sectional observational study in the context of a service improvement project in a single ENT department during the COVID-19 pandemic. Telephone consultations by three ENT doctors were studied over a 3-week period. Total consultation time, including administrative tasks, and telephone call time were calculated and compared to pre-COVID consultation times. Clinician-assessed adequacy of the consultation was determined.

Results: Ninety-six consultations were included; 65 were deemed adequate whereas 31 were inadequate due to the lack of examination. Telephone consultations took an average of 16 minutes, of which 9 minutes were spent on the telephone call, compared to an average of 20 minutes for face to face consultations.

Conclusions: Telephone consultations were quicker than face to face consultations by 20% and were an appropriate alternative in two-thirds of cases. This suggests that routine practice would benefit from the addition of telephone consultation with selected patients, based on clinical presentation and patient preference.

Keywords: Telephone consultation; ear, nose, and throat (ENT); otorhinolaryngology (ORL)

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Introduction

The COVID-19 pandemic has driven many of us to work in imaginative ways in order to maintain a degree of service provision for our patients. Telephone consultations have been used for many years, and their value has become particularly significant over the past few months. They have been used by doctors and nurses, in both primary and secondary care. In primary care, telephone consultations have been shown to be effective: 50% of calls can be

managed on the telephone alone and this appears to be safe, however there may be an increase in return consultations (1,2). One study found that primary care telephone consultations were slightly shorter (1.5 minutes) compared to face to face consultations (3). Most studies demonstrate equivalent patient satisfaction (1-3). In secondary care, telephone consultations are used successfully in various fields and, according to the existing literature, mostly for follow-up of specific conditions, such as human

[^] ORCID: 0000-0001-6800-1358.

immunodeficiency virus (HIV), inflammatory bowel disease (IBD) and epilepsy (4-6). Until recently, there was no published data on the efficacy of telephone consultations in ear, nose, and throat (ENT). A recent study found telephone consultations to be a useful tool in the ENT department (7).

Advantages of telephone consultations include a reduction in travel and gain of time for the patient and potentially for the health care provider, which could be cost effective. The main disadvantage is the lack of clinical examination and the possible subsequent need for face to face review, which may negate the advantages. It is reasonable to speculate that telephone consultations can be used effectively in any specialty, with adequate patient selection.

In our ENT department, telephone follow-up consultations had been used by one consultant but were not routine. During the COVID-19 pandemic, routine face to face clinics were suspended and, where possible, patients received a telephone consultation instead. This triggered the following questions: should telephone consultations be incorporated in our normal activity? And if so, how much time should be allocated for telephone consultations? This service improvement project aims to answer this by investigating the efficiency of telephone consultations in ENT.

We present the following article in accordance with the MDAR reporting checklist (available at <https://jhmhp.amegroups.com/article/view/10.21037/jhmhp-21-4/rc>).

Methods

This service evaluation and improvement project was approached as a cross-sectional observational study. Data was recorded for all telephone consultations undertaken by three middle grade ENT specialists over a 3-week period (8th to 29th of June 2020) to include an assessment of time and of clinician-perceived efficacy. Results are reported directly and no statistical analysis was employed. As the project was a service evaluation, ethical approval was not required.

Patient selection

All patients were selected by consultants as being appropriate for telephone consultation, across ENT subspecialties. During this period, due to COVID restrictions, no face to face consultations were taking place, except for selected cancer patients and high risk new patients, and almost all patients received telephone

consultations instead. All 2-week wait referrals (UK suspected cancer pathway) were screened via a telephone consultation and the ENT UK triage tool was used to identify high risk patients, who were given a face to face consultation (8). Routine referrals were not accepted during this period, other than a handful marked as particularly urgent by the general practitioner. These all received a telephone consultation in the first instance. Follow-up consultations outside of the cancer pathway and on the cancer pathway 1 to 2 years post-treatment (depending on risk) were done by telephone.

Time assessment

Time assessment data included total duration of consultation (this included the time spent reading notes, looking at results and scans before calling the patient; telephone call; and time completing any paperwork, investigation requests and dictations after speaking to the patient) and duration of the telephone call itself. To compare the duration of consultations by telephone and face to face, an average time for face to face consultation was obtained using clinic numbers prior to the COVID-19 pandemic.

Efficacy assessment

Efficacy assessment data included the outcome of the consultation and the clinician's assessment of how appropriate the telephone setting was. If the patient was discharged, a telephone consultation was clearly sufficient to make a final decision, and telephone consultation was deemed adequate. For patients requiring review, the clinician had to select whether the telephone consultation was adequate, i.e., allowed for an appropriate assessment and adequately replaced a face to face consultation (in which case, a follow-up appointment would also have been required had the patient been seen face to face) or inadequate, i.e., a face to face consultation would have been preferable because telephone assessment did not allow for required examination and prevented safe decision-making (in which case the telephone consultation added an unnecessary step).

Results

A total of 96 telephone consultations were carried out by three ENT middle grade doctors over the study period. They consisted of 65 follow-up consultations, 27 new

'2-week wait' referrals and 4 routine referrals (Figure 1).

Duration of the consultation

For all consultations, including new and follow-up, the average time for the whole consultation, including pre- and post-telephone call work, was 16 (median 15) minutes, with a range of 5 to 38 minutes. The average time for the telephone call only was 9 (median 8) minutes, with a range of 2 to 28 minutes.

For new consultations, the average time for the whole consultations was 17 (median 16) minutes and the average for the telephone call was 11 (median 9) minutes. For follow-up consultations, the average time for the whole

consultation was 14 (median 14) minutes and the average for the telephone call was 7 (median 7) minutes.

Comparison with face to face consultation duration

In middle grade clinics within our ENT department, the overall time spent per patient in clinic (time with patient administrative tasks) was on average 20 minutes.

Outcome of the telephone consultations

Out of 96 patients, 38 were discharged and 58 were booked for review; 47 for routine review and 11 for urgent review (Figure 2).

Out of the 58 patients requiring follow-up, 27 telephone consultations had been adequate and 31 were inadequate because examination was required.

In total, telephone consultation was adequate for 65 of the 96 patients (Figure 2): in these 65 cases, the assessing ENT specialist was satisfied that they could adequately manage the patient based on the information available from the telephone consultation.

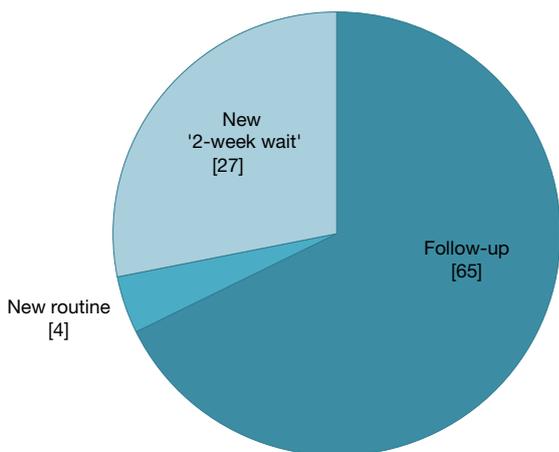


Figure 1 Appointment type.

Discussion

The aim of this study was to assess the efficacy of telephone consultations to inform future service provision. To achieve this, we began by assessing whether telephone clinics were likely to lead to a gain of time overall.

The first part of this assessment was achieved by

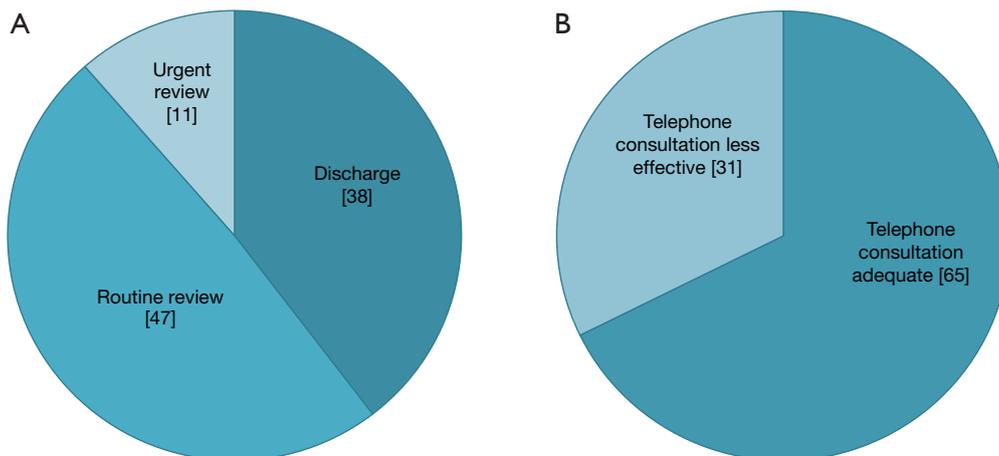


Figure 2 Outcomes: (A) objective follow-up measure, (B) clinician's assessment of effectiveness.

comparing the time spent in telephone versus face to face consultations, which can demonstrate a potential immediate time benefit. Results indicate a 20% time gain with telephone consultations (16 *vs.* 20 minutes). Face to face timing is non-specific as it is derived from a whole clinic session that likely includes time spent otherwise, such as waiting for patients. Direct comparison between telephone consultation and face to face consultation duration was not possible because (I) the face to face cohort would not be matched as patients were specifically triaged for telephone consultation and (II) during the study period, no clinics were taking place other than specific cancer clinics, and their format was very different due to the COVID-19 risk. Although this is a limitation, our aim is to plan future service provision and as such, comparing whole sessions is still realistic, and relevant in this context.

The second part was achieved by reviewing the outcome of telephone consultations to determine whether they were a suitable alternative or whether they simply postponed definitive patient assessment, which would invalidate the initial time gain. Results show that two-thirds of consultations were a suitable alternative, as the patient was either discharged, or booked for a follow-up appointment that would have been equally necessary following a face to face consultation. For a third of patients, it was felt by the clinician that a face to face consultation would have been more appropriate as the patient could not be appropriately managed or safely discharged without examination.

About 47% of all patients presented with a head and neck complaint. Of these, half of the patient receiving a follow-up telephone consultation were discharged and half received a routine follow-up. New 2-week wait head and neck referrals resulted in a majority of routine follow-up consultations (often following investigations) and one third were invited for urgent face to face review. Of the patients presenting with a rhinological complaint (41%), all but one were follow-up consultations and about half were discharged while half received a routine follow-up. Patients with otological symptoms only constituted 12% of all patients, and they were mostly follow-up consultations; about half were discharged and half received a routine follow-up.

In the context of the COVID-19 pandemic, as face to face clinics were restricted and there was no alternative for these patients, we have unfortunately had to accept a temporary reduction in standard of care for non-urgent conditions. Going forward, targeted examination clinics are being considered in our department for patients requiring

examination following the initial telephone consultation. Several time consuming steps were identified during the telephone consultations, such as obtaining a valid telephone number or patients not answering. This is likely related to the fact that these clinics were arranged with very little notice and in uncertain times in terms of the clinicians' schedule, with patients' telephone numbers not being checked by the secretaries beforehand and patients being given a likely date but no timeslot for the consultation; all of which should be optimised in the future as clinics are set up formally. Patients who did not answer were called twice more, and if the patient did not answer on three separate occasions, a letter was dictated inviting the patient to contact us.

When it comes to service provision planning, these results indicate that telephone consultations are a suitable alternative to face to face consultations in selected cases as they can save time for the patient and for the clinician. A proposed model for selection is to identify patients suitable for telephone consultation on triage of new referrals and at the end of a consultation when booking a follow-up appointment. The choice can then be offered to the patient, which puts them at the centre of care and in our opinion would increase patient satisfaction. Telephone consultations with patients who have opted in are likely to be more efficient: although patient perspective was not systematically assessed, anecdotal evidence from our department indicates that for patients who were satisfied with this format, telephone consultations tend to be quicker and lead to fewer face to face review.

Two recent publications have investigated telephone consultations in ENT departments during the COVID-19 pandemic. A Spanish article reports that 21.7% of consultations could be managed by telephone for new and follow-up consultations (7). A British team investigated patient satisfaction and found that using a standard format for the consultation increases patient satisfaction (9). In our department, no initial training was provided and no protocol was followed during the study period, but training was organised later and a standardised approach is likely to be useful in the future.

Conclusions

During the COVID-19 pandemic, telephone clinics have become an important part of our work and have been shown to be efficient. This new way of working will be a beneficial addition to the existing face to face clinics in the future. Our

data suggests that 16 minutes are required on average per telephone consultation in a district general hospital setting. This information can help inform service planning for the future.

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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Footnote

Reporting Checklist: The authors have completed the MDAR reporting checklist. Available at <https://jhmhp.amegroups.com/article/view/10.21037/jhmhp-21-4/rc>

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Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. As the project was a service evaluation, ethical approval was not required.

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