

Reviews

Key Components of Traditional Consultation Letters and Their Relevance to Electronic Consultation Replies: A Systematic Review

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Abstract

Background: Effective communication between primary care providers (PCPs) and specialists plays a key role in providing high-quality patient care. A high-quality referral process should involve referral letters containing all information that is necessary to support shared care between primary and specialty care.

Introduction: There is no consensus on the optimal components of specialist-to-PCP communication after a face-to-face patient encounter or in the context of the emerging field of electronic consultations (eConsult). In this study, we aimed at synthesizing the evidence on key components of a traditional consultation letter and at determining whether they can be applied to eConsult replies.

Methods: We conducted a systematic review by using a narrative synthesis approach. We searched Pubmed and Embase from inception to January/March 2016 (English). Included studies focused on features of specialists' responses to PCPs. We extracted components of a consultation letter that were identified to be of importance to PCPs and attempted to relate their applicability to eConsult replies.

Results: The search revealed 744 potentially relevant citations, of which 65 were deemed eligible for full-text review. Forty-one papers were excluded on full-text review, resulting in 24 studies included in the final synthesis. Important components of consultation letters that were applicable to eConsults included: answering a direct question, providing a diagnosis, providing treatment options, providing education around the

case, providing a prognosis, and arranging follow-up, clarity, and organization. Key differences between traditional and eConsult replies included the history and physical investigations, impression, plan, and rationale for plan/education.

Conclusion: When seeking to improve the quality of specialist reply letters in both traditional and eConsult replies, one should consider differences in how information is collected and accessed, the role of each provider, and factors that impact specialist-to-PCP communication.

Keywords: eConsult, primary health care, specialist consultant, referral, reply letters, telemedicine, e-health

Introduction

Well-functioning health care systems require effective collaboration between primary care providers (PCPs) and specialists.¹ In Canada, most patients seeking specialist care must first be referred by a PCP, such as a family physician or nurse practitioner. Communication between PCPs and specialists traditionally occurs through a consultation letter after the patient encounter.² This letter also serves as the specialist's record of the encounter and may be requested by third parties for purposes such as chart auditing and legal proceedings.³ Consultation letters typically include the history of presenting illness, physical examination, allergies, past history, medications, social history, and the specialist's impression of the patient's case and plan for treatment or testing. The specialist will generally communicate the plan directly with the patient during the encounter. Ongoing care may be provided by the specialist, shared between both specialist and PCP, or returned to the PCP after the specialist provides recommendations for the PCP without arranging specialist follow-up.⁴⁻⁹

Electronic consultation (eConsult) represents an alternative to traditional referrals that PCPs can leverage in appropriate cases while potentially improving access to specialty care. Using secure communication channels, eConsult allows PCPs to ask specialists patient-specific questions directly. PCPs choose a specialty group and enter their question, including any

information that may assist the specialist in their assessment (e.g., clinical history, test results, images, or other attachments).^{10,11} In some eConsult systems, PCPs and specialists share the same electronic medical record, enabling specialists to access patient results beyond what is directly provided by the PCP.¹² Specialists respond through the same channel, providing advice on treatment, recommendations for an in-person referral, or requests for more information. Although eConsult services have demonstrated improved access to specialist advice and potential to reduce wait times, it is essential that specialist replies are clear and enable the PCP to act on the advice provided given that unlike a traditional referral, eConsult does not involve a specialist–patient encounter.^{10,13}

Although literature evaluating key components and quality of consultation letters is sparse, a small number of studies have shown that PCPs and specialists prefer a succinct letter with well-defined sections and that any specific questions should be answered with clear information regarding diagnosis, prognosis, treatment, and further follow-up.^{14–16} In the context of eConsult responses, PCPs have expressed appreciation for their educational value, citing improved knowledge exchange, improved dialogue between PCPs and specialists, renewed appreciation of each other's scope of practice, and the opportunity to expand the capacity of PCPs to manage complex patients.^{14–17}

Although there are existing assessment tools to evaluate the quality of consultation letters,^{7,8,18} there is no information available for evaluating the key components of an eConsult reply. Although traditional consultation replies and eConsults share many similar elements, the differences in how information is acquired, the role of the reply, and who is responsible for acting on the recommendations may limit the applicability of previous work on consultation letters to eConsults.¹³ The purpose of this study was to conduct a systematic review examining the literature to identify key components of a consultation reply letter and to determine whether and how they can be applied to eConsult replies.

Methods

DATA SOURCES

We conducted a search of PubMed (from 1966) on January 29, 2016 and of Embase (from 1947) on March 14, 2016 for titles published in any year. The search was conducted in accordance to PRISMA guidelines.¹⁹ The search strategy consisted of three search clusters of keywords: (1) keywords for referral and consultation (consult*, referral*, correspondence*, reply, communication), (2) keywords for PCP (family practice, family physician, family medicine, referring physician, primary care, general practitioner, primary care practitioner*), and (3) keywords for specialist (consultant, specialist). As an additional

step, we reviewed the references cited in all papers that met inclusion criteria and any systematic reviews exploring similar issues that emerged from the literature search.

INCLUSION CRITERIA

Distiller SR was used to screen titles and abstracts based on predetermined inclusion criteria. Inclusion criteria for abstract and full-text screening were English publications within the medical field that analyzed features of specialist responses to the PCPs. In cases where the reviewer was uncertain about inclusion criteria based on the abstract or where discrepancies emerged between the reviewers, the article was moved on to the full text screening. We did not differentiate included papers by study type. Systematic reviews were examined as possible sources of additional studies, but they were not included in the analysis.

DATA EXTRACTION

The primary reviewer (V.S.) assessed all 24 included studies for components of letters that were important in the specialist's reply and for any measures of quality that may have been identified.^{2,4–9,18,20–35} The components relevant to the content of consultation letters were compiled into broad categories. These included the presence of history, physical exam, investigations, impression, plans and rational, and information provided to the patient.^{2,4–9,18,20–35} Some studies analyzed specific components, such as specific history details, but all components were contained in the broader categories cited earlier.

ANALYSIS

We used the PRISMA flowchart to describe the process of study selection.¹⁹ Given the nature of our research question and the lack of a standard methodological approach for evaluating consultation letters, we decided to use simple frequency counts and a narrative approach. We described general characteristics of included studies, the components of consultation letters studied, communication quality, and priority alignment between PCPs and specialists. This information helped to delineate the components of specialist replies that are important in eConsult, and to explore the model of care that arises from this novel approach to specialist consultation.

Results

STUDY SELECTION

A search of the target databases revealed a total of 780 potentially relevant citations. Of these, 36 were duplicates, leaving 744 studies for title and abstract screening. The primary reviewer screened titles and abstracts of all records. A

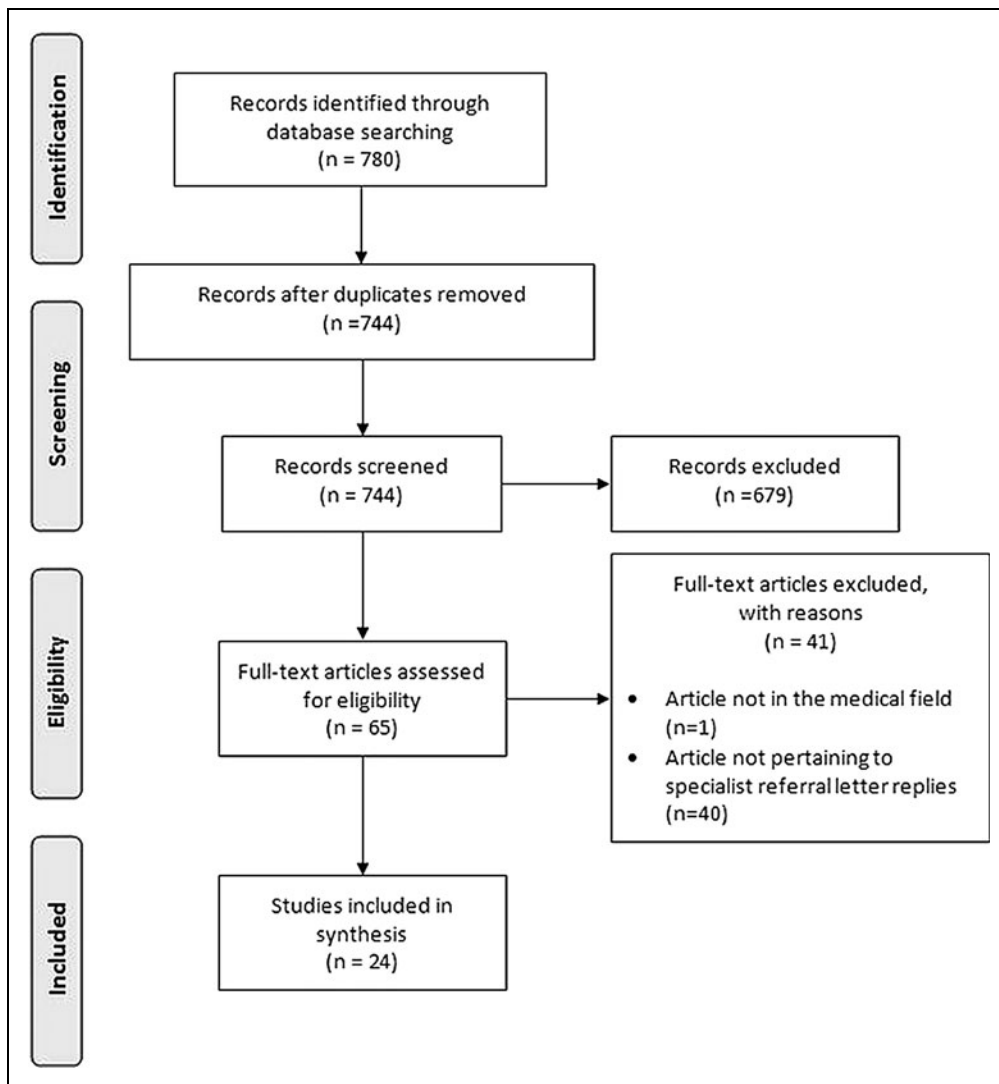


Fig. 1. PRISMA diagram outlining process for determining included studies.

second reviewer (C.G.R.) screened a third of all abstracts (33%). A Cohen's kappa value measuring inter-rater agreement between the reviewers was satisfactory at 0.71. Of the 744 records, 679 did not meet the review criteria and were excluded. We reviewed a total of 65 full-text papers and retained a total of 24 unique studies for inclusion in the review (Fig. 1).^{2,4-9,18,20-35}

CHARACTERISTICS OF INCLUDED STUDIES

The results of the systematic review are presented in *Table 1*. The studies originated from eight countries, with eight studies (33%) from North America and eight (33%) from England. A substantial proportion of studies (67%) were from pre-2000 in terms of publication date, with the most recent being 2012. Study types varied with the most common type classified

as observational (46%), and smaller proportions of prospective reviews (29%), retrospective reviews (17%), cross-sectional reviews (4%), and randomized control trials (4%). As nearly half of the studies were observational in nature, we did not conduct a quality assessment.

Of the 24 studies included in the analysis, 6 (25%) focused on referrals to single specialties,^{6,20,28-30,33} 10 (42%) focused on referrals to multiple specialties,^{5,7,18,21-23,26,27,34,35} and 8 (33%) included referrals to all medical specialties.^{2,4,8,9,24,25,31,32}

OUTCOMES

Twelve studies (50%) compiled the content items that were typically included in consultation letters.^{4-7,9,18,22,24,27,29,32,35} A third of the included studies ($n=8$; 34%) investigated whether specific content items were present in consultation letters, such as inclusion of treatment plans, follow-up or educational items, and whether reply letters were sent back to the referring PCP.^{6,7,9,23,24,27,31,34} A quarter of included studies ($n=6$; 25%) addressed the quality of replies, as

determined by a variety of methods from expert consensus to rating scales.^{2,18,21,26,30,34} Five studies (21%) examined the effectiveness or changes in reply content after quality improvement interventions, such as letter templates or providing feedback or training to specialists,^{2,8,18,30,34} whereas only three studies (13%) focused on the structure of letters, identifying preferred documentation styles, or writing styles.^{7,28,33}

Sixteen studies (67%) helped identify the specific components most commonly included in specialists' replies, including the history of presenting illness, physical exam, allergies, past medical history, medications, past surgical history, social history, diagnosis, rationale for diagnosis, management plan, rationale for management plan, side effects of treatment, follow-up plan, and information given to patients.^{5-7,9,20,22-32} Three studies (13%) looked specifically at

Table 1. Characteristics of Included Studies

BIBLIOGRAPHY	COUNTRY	TYPE OF STUDY	PROVIDERS INVOLVED	COMPONENTS EXAMINED	OUTCOMES
Newton et al. ⁹	England	Observational Postal questionnaire	GPs, specialist consultants	Follow-up info, management plan, exam findings, who saw patient, what patient was told, investigation findings, summary of history. Appropriateness of referral, feedback on quality of work.	GPs placed more importance on follow-up instructions than consultants: 90% vs. 75%. GPs thought it was important for consultant to give feedback on appropriateness of referral: 63% vs. 32%. Both GPs and consultants agreed on variables in the reply letter, which were always or usually important: diagnosis, management plan, findings on exam, who the patient saw, what the patient/relatives were told, investigations ordered.
Jacobs and Pringle ²⁰	England	Retrospective review	Orthopedic surgery	Contents of referral and reply letters, assessment of their educational value, and responses to questions in referral letters.	Items of education were present in 26% of replies, and more likely with senior doctors. 44% of questions in referral letters were answered. Content: follow-up (89%), diagnosis (81%), history of presenting illness 42%, past medical history (16%), exam finding (79%), patient given information (24%). Education more likely when referral to a named consultant rather than to division: 28% vs. 9%.
Westerman et al. ²¹	Netherlands	Retrospective review	Internal medicine, gastroenterology, neurology, dermatology	Subjective judgment of quality, reason for referral answered, teaching value.	Intra-observer reliability on what is a good-quality letter is low. Letter taught GP "a lot" 40–60% of the time, "a little" 30–40% of the time, and "nothing" 15% of the time. Reason for referral answered "very well or moderately well" (80%), "poorly or not at all" 10%. 20% of referrals provided good psychosocial awareness. 75% provided a referral plan.
Byrd and Moskowitz ²²	United States	Retrospective review	Primary care general internists, consultant specialists	Clarity, promptness of reply, questions addressed, aiding in ongoing management of the problem, educational value.	18% do not show rate of patients to consultants. Reply sent 80.5% of time 28 days after visit with specialist. Regression analysis found that two variables improved generalists' satisfaction: (1) aid in management and (2) whether consultant answered direct questions. Less significant were educational value, promptness, and clarity.
McPhee et al. ²³	United States	Prospective review	Primary care general internists, specialist consultants	Communication between referring practitioners and consultants, reply rates.	Referring physicians did not receive the results of consultations in 45% of cases. Reply was more likely if referring physician provided more patient background information, two or more reasons for referral, personally contacted the consultant, or had booked a return appointment for patient.

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Table 1. Characteristics of Included Studies *continued*

BIBLIOGRAPHY	COUNTRY	TYPE OF STUDY	PROVIDERS INVOLVED	COMPONENTS EXAMINED	OUTCOMES
Salathia and McIlwaine ²⁴	England	Retrospective review	All specialists	Assessment of outpatient referral letters and hospital discharge summaries for information related to clarity of diagnosis, clarity of treatment advised, medications suggested, whether information given to the patient was clear, and whether future plans and review arrangements were clear.	Outpatient letters (good or average): Diagnosis 95%, treatment 92%, meds 88%, info to patient 78%, plans 94%. Inpatient discharge (good or average): diagnosis 95%, treatment 95%, meds 92%, info to patient 73%, plans 89%. More agreement to benefit of using standardized letters.
Williams and Peet ²⁵	United States	Observational Postal Questionnaire	All specialists	Value of information communicated between referring physicians and consulting physicians, their roles, preference for method of communication, and content of communication.	Consulting physicians value information in referral letters less than PCPs value information in replies. Both referring physicians and consulting physicians prefer direct communication (verbally if possible) before visit.
Lindstrom et al. ²⁶	Sweden	Observational	General surgery Orthopedics ENT	Adequacy of the reason for referral, the quality of the referral notes, and the quality of the answers to the referrals.	90% of referrals were answered. Quality of reply was determined by: diagnosis stated clearly (88–92%), investigations and treatment described (87–92%), follow-up (81–89%), main question answered (90–94%).
Newton et al. ²⁷	Sweden	Observational	GPs, ENT, and rheumatology	Clinical content of consultants' replies to referral letters: management plan, diagnosis, findings on examination, history, follow-up arrangements findings on investigation, what patient has been told.	Contents of reply: Management plan (ENT–87%, rheumatology–94%), diagnosis (ENT–87%, rheumatology–100%), examination (ENT–69%, rheumatology–81%), follow-up (ENT–56%, rheumatology–69%).
Rawal et al. ²⁸	England	Prospective review	Pediatrics	Preference of structured vs. nonstructured	92% of GPs preferred a structured reply letter.
Lloyd and Barnett ⁴	England	Prospective review	All specialists	Problem lists in letters	90% of GPs preferred a problem list at the end of management. Only 10% had one.
Tattersall et al. ⁵	Australia	Single blind randomized controlled trial	Internal medicine GPs, oncology	What PCPs want in letters vs. what they get	History including past medical history, history of present illness, drug history, and social history—essential from 9% to 40% of the time, present 63% to 93% of the time. Treatment (prognosis, treatment, side effects)—essential 65–71% of the time, present 12–39% of the time. Diagnosis—essential 88%, present 94%. Further investigations—essential 68% of the time, present 30%.
Couper and Henbest ²	South Africa	Prospective review	All specialists	Letter quality and availability after introduction of proforma letter	Quality of reply letters did not improve with introducing proforma consult letter. Counted quality as the presence of historical findings, what the intervention was, and whether follow-up was provided. All rates ranged from 70% to 87%.

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Table 1. Characteristics of Included Studies *continued*

BIBLIOGRAPHY	COUNTRY	TYPE OF STUDY	PROVIDERS INVOLVED	COMPONENTS EXAMINED	OUTCOMES
Graham and Wilson ⁶	Australia	Prospective review	Radiation oncology	Letters examined for presence of specific variables	Diagnosis 65%, prognosis 31%, treatment benefits 53%, investigations 40%, exam findings 62%, side effects 68%, what patient was told 72%, follow-up 88%.
Myers et al. ⁷	Canada	Prospective review	Internal medicine residents	Presence of history, physical exam, and management portions in letters. Writing style (using Likert 1–5)	History 67–92.4% (collateral poor), physical exam findings 93.4%, diagnosis 76.4%, management plan 98%, rationale for plan 73.7%, evidence of discussion with patient 30.9%, follow-up plan 80%. Writing style: Active voice 55%, avoids jargon 85%, avoids repetition 75%, one topic per paragraph 39.5%, paragraphs fewer than five sentences 27.4%, one idea per sentence 88%, headings 18.6%, appealing layout 32.6%.
Babington et al. ²⁹	New Zealand	Prospective review	Oncology	Content of reply letter from oncology	Diagnosis was always present in this population (after previous intervention to include this). Prognosis 20%, treatment options 85%, side effects 45%, management of side effects 2%, what patient was told 55%, follow-up 89%, when to contact the oncologist 10%.
Braun et al. ³⁰	Canada	Cross-sectional	Oncology	GPs' satisfaction after a structured template was added to replies from oncologists. Template included: diagnosis, stage, current problem, treatment objective, treatment plan, problems anticipated, prognosis, information given to patients and family, follow-up arrangement and homecare involvement, and where to contact oncologist.	Inclusion of structured format template increased the proportion of "very satisfied" GPs from 10% (at baseline) to 60%.
Scott et al. ³¹	Australia	Observational	All specialists	Quality of reply letters for new patients referred to clinics at a tertiary teaching hospital.	69% of referrals had reply letters; 53% provided rationale for management; 86% recommended treatment options with 55% of those providing a rationale and 16% providing a contingency plan.
Campbell et al. ³²	England	Observational questionnaire and audit	All specialists	Importance of items in letter by GP and specialist.	Results presented as GP % who found a variable important, specialist % who found a variable important, and presence of a variable (%). Summary of history: GP 73%, specialist 89%, presence 99%; exam findings: GP 90%, spec 87%, presence 92%; Investigations: GP 95%, spec 89%, presence 88%; Diagnosis: GP 98%, spec 99%, presence 99%; Management plan: GP 96%, spec 97%, presence 100%; What patient told: GP 86%, spec 84%, presence 46%; Follow-up: GP 89%, spec 86%, presence 96%.

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Table 1. Characteristics of Included Studies *continued*

BIBLIOGRAPHY	COUNTRY	TYPE OF STUDY	PROVIDERS INVOLVED	COMPONENTS EXAMINED	OUTCOMES
Fox et al. ⁸	England	Observational	All specialists	Letter quality: problem list, problems omitted, irrelevant problems listed, is there a documented history, is there documented examination, current state of health, family's problems addressed, referring doctors addressed, is there a clear plan of investigation, are reasons for the plan just cited justified, are all known treatments or absence of a treatment recorded, are all doses in formal units, is adequate justification given for changes, is information shared with family, is follow-up planned, is purpose of follow-up justified, is there much unnecessary information, does the structure of the letter flow, are there sentences not understood.	No actual numbers for presence of any of the variables given, only an improvement in the global quality score (from 23.3 [95% CI 22.1–24.4] to 26.6 [95% CI 25.8–27.4]).
Hook et al. ³³	England	Observational	Orthopedics	Structured vs. nonstructured reply letters were analyzed and compared for speed of reading and ease of assimilating information and content.	Overall preference for structured letters among 92% of surveyed. Structured letter perceived to contain more information. Reading time was significantly less for a structured letter.
Keely et al. ¹⁸	Canada	Observational	Internal medicine	Feasibility and satisfaction of a peer assessment program on consultation letters components: history, physical examination, summary of impression, summary of management plan, brevity, clarity, organization of letter, educational value to referring physician, overall rating of letter.	Peer assessment of letters was feasible and beneficial to quality of consultation letters, yielding long-term, changes in some individuals' letters. Family physicians and specialists appear to have different expectations on some items of the letter (brevity, history, physical examination and educational value).
Stille et al. ³⁵	United States	Quality improvement iterative process to develop tool for communication. Also observational review	Pediatric primary care and pediatric consultants	Items of value in communication were determined through consultation. In reply: history of condition, physical exam, diagnostic testing, diagnosis, reasoning behind diagnosis, immediate management, long term plan, reasoning for plan, medications, discussion of shared care, education, communications with other specialists.	Presence of history 99%, physical exam 97%, diagnostic testing 82%, diagnosis 90%, reasoning behind diagnosis 70%, immediate management 98%, long-term plan 62%, reasoning for plan 82%, medications 80%, discussion of shared care 23%, education 27%, communications with other specialists 4%. Most valuable part was education of the condition, which was one of the least present.

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Table 1. Characteristics of Included Studies *continued*

BIBLIOGRAPHY	COUNTRY	TYPE OF STUDY	PROVIDERS INVOLVED	COMPONENTS EXAMINED	OUTCOMES
Tuot et al. ³⁴	United States	Observational	Internal medicine	Quality of inpatient fellow-written consultation notes in five quality domains: (1) Reason for consultation (2) Diagnostic plan (3) Therapeutic plan (4) Communication (5) Educational value Using consultation quality assessment tool, coupled with a peer evaluation program	Initial consultation notes were of average baseline quality (mean score 60%), with deficiencies in "Communication" and "Education" domains (mean scores 29% and 52%, respectively). No changes in the quality of consultation notes were observed with interventions. Large 2-page tool, very time consuming to use.

GPs, general practitioners; PCPs, primary care providers.

replies from oncology specialists, which also added staging and prognosis to these components.^{6,29,30} Most studies actively looked for the presence of one or more of the components cited earlier.

All studies in the review examined some facet of communication quality between PCP and specialists. An underlying theme found in all studies was some degree of deficiency in

communicating a few or all of the components cited earlier. For example, Newton et al. noted that though a management plan and diagnosis was present in 87–100% of consultation letters, follow-up information was only provided in 56–70%.⁹ Other studies identified that rationale for management and educational items were only present in just more than half of consultation letters.³¹ Stille et al. found that although PCPs

considered an educational component as the most valuable part of a consultation letter, this component was present just 27% of the time,³⁵ and shared care between providers was present only 23% of the time.³⁵

Three studies (13%) explored the manner in which priorities align and differ between PCPs and specialists.^{9,25,32} Both parties found the history, physical exam, investigations, diagnosis, and management plan to be equally important,^{9,32} though consulting specialists assigned less value than referring physicians to reasons for referral, chief symptoms and symptom chronology, referring physician findings, and referring physician diagnosis.²⁵ PCPs placed more importance on follow-up instructions than specialists, whereas specialists found greater value in the history of presenting illness compared with PCPs.⁹ Although both groups agreed that detailing specific information provided to the patient was important to include in the reply letter, this was only present 46% of the time.³²

The important components of a consultation letter that apply to eConsults are: answering a direct question, providing a diagnosis, providing treatment options, providing education around the case, providing a prognosis, and arranging follow-up, clarity, and organization. To compare how key components of a face-to-face consultation letter translate to eConsult, we summarize their key differences in *Table 2*.

Table 2. Comparison Between eConsults and Traditional Consultation Letters

CONSULTANT'S REPLY COMPONENTS	eCONSULT	TRADITIONAL CONSULTATION
History and physical	Provided by PCP.	Included by PCP, further elicited by specialist directly with patient. Serves as the specialist's record of the interview and examination.
Investigations	Included by PCP or accessed through shared electronic health record.	Included by PCP, accessed through EHR, or subsequent investigation may be ordered by specialist.
Impression	Usually one or more clear question(s) to answer.	May be impression of overall clinical picture.
Plan	PCP is responsible for determining whether plan should be implemented, and initiating it.	Specialist may implement plan such as ordering investigations, starting treatment. May include follow-up appointment with the specialist.
Rationale for plan/education around the case	Should be included.	Should be included.

eConsult, electronic consultation.

Although both forms of communication serve multiple purposes, including acknowledging information from the referral along with medico-legal, clinical, and professional education information, an eConsult differs in that (1) there is no need for the specialist to repeat information already documented by the PCP (e.g., history, physical exams, investigations) and (2) there is no opportunity for the specialist to perform a physical examination or ask patients directly for additional history, nor complete any investigations on their own. Hence, these components do not need to be included in a specialist's eConsult reply. If the specialist accesses results or documents through a shared electronic health record that were not directly supplied by the PCP, this should be acknowledged in the eConsult response. Similarities lie in the consultant's offering their opinions, typically at the closing of the letter. Consultants in both traditional and electronic consults can offer a diagnosis, prognosis, necessary further investigations, or treatment plans; however, after a traditional consultation, the specialist may feel more obliged to initiate these tests or treatments themselves, whereas in eConsult the PCP remains responsible for carrying out any suggested next steps.

Discussion

We found that PCPs and specialists generally agreed on the importance of several components of a consultation letter. This was applicable to the inherent structure of the consult letter and the specific content items (e.g., patient history). The frequency at which specialists included these components in consult letters varied widely, which may be due to limited opportunities for clinicians to receive education or feedback on their written communication and the relatively small focus placed on letter-writing as a skill in specialty training programs. We also observed some differences in priorities between PCPs and specialists. PCPs highly valued the inclusion of educational components with detailed follow-up plans. This may reflect the desire to learn to apply learning from the consultation letter to future patients, as well as to determine whether any steps need to be addressed by the PCP for continued care. In contrast, specialists placed higher value on detailing case histories. This may be due to the fact that the document serves as the specialist's record of the medical interview and examination, whereas PCPs would have likely already obtained a similar history from the patient and are therefore more focused on determining next steps.

There are many factors to consider beyond the written content of letters when comparing consultation models. For example, in a traditional consult model, specialists are limited to the patient information provided by the PCP—a barrier likewise faced by eConsult programs in which the specialist

and PCP do not share an electronic medical record, or the specialist has no other means of accessing patient data that are not provided. It is important that PCPs remain aware of what information is being used to answer their consultation question. Consultations of any nature typically revolve around a clinical question being asked by the referring care provider. In the case of eConsults, ideally the question is very focused and necessitates a direct answer, as nonspecific requests would be difficult to reply to when the patient is not being seen. In any consultation, eConsult or otherwise, the answers to this clinical question and education for the referring physician are valuable components of a specialist's reply.^{10,11} After an eConsult, the PCP remains solely responsible for carrying out any suggested next steps, and so providing actionable advice with appropriate rationale is perhaps even more important in eConsult replies. Follow-up recommendations must be clear in a traditional consultation, whereas an eConsult reply may include information on when a traditional face-to-face consultation should occur and provide anticipatory advice based on the investigation or treatment recommended.

Although PCPs and specialists generally agree on the components and structure of a consultation letter, there are a few instances when priorities differ. Further, agreement on importance does not necessarily translate to inclusion in a specialist's consultation letter. When determining key components of eConsult versus traditional consultation letters, one must compare their differences in how data are collected and accessed (including whether specialists can access shared electronic medical records and can obtain further information independent of the PCP), the role of each provider (in particular the most responsible provider of ongoing care), the opportunity for iterative conversation, and any other factors that impact specialist-to-PCP communication. These key domains can inform development of valid feedback and assessment tools to evaluate the impact of training on quality for eConsult replies. Appraising the evidence for traditional consultation letters can provide a framework and opportunity to study eConsult replies.

This study's key strength is its novelty, as to our knowledge no previous reviews exist that identify the key components of a consultation reply letter and determine whether and how they can be applied to eConsult replies. This knowledge will be of great use to individuals looking to implement eConsult services in their own jurisdictions. We acknowledge several limitations to our review. The included studies were not only limited in number but also observational in nature, and hence of low methodological quality. By restricting our systematic evaluation to studies published in English, we may have excluded relevant manuscripts in other languages. In general,

the studies in our review were older, with most predating the availability of electronic medical records. In fact, we found no studies addressing the use of electronic medical records to create the consultation letter. It is possible that access to information electronically and the need for template-driven documentation has changed the content and style of consultation letters. Several of the studies focused on consultations from individual specialties, including orthopedics, pediatrics, oncology, and radiation oncology.^{6,20,26–30,33,35} This raises an interesting point when considering what a consult letter should contain, as many specialties may have unique components that are critical to their specific fields. Finally, only two databases were searched and the full text review was performed by only one reviewer. Databases less relevant to our research question, such as the Cumulative Index to Nursing and Allied Health Literature (CINAHL), PsycINFO, and Education Resources Information Center (ERIC), were omitted.

Conclusions

The results of our review illustrate that, even though PCPs and specialists generally agree on the importance of several components of a consultation letter related to structure and content, this agreement does not necessarily translate to inclusion within the specialist's reply letter. Opportunities exist for improving quality of both traditional and eConsult letters, but inherent differences between the two forms of consultation need to be considered.

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