

## Research paper

# Quality and general practitioner satisfaction with reply letters for dementia patients

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## ABSTRACT

**Objective** The exchange of information between specialists and general practitioners (GPs) is an important aspect of the referral process at the stage of diagnosis. Comprehensive and satisfactory information from specialists guides GPs in choosing the best possible management. The objective of this study was to assess the quality of information in reply letters with regard to the GPs' problem as presented, and the level of GP satisfaction, and to determine if there is any relation between the quality of the referrals and the reply letters.

**Design** A retrospective review of reply letters from the Department of Geriatric Medicine to primary health care. A data sheet was developed using the existing literature. Three GPs assessed the quality of the reply letters and GP satisfaction.

**Setting** Patient records in the geriatric department were collected, registered and examined according to pre-defined criteria.

**Subjects** A total of 135 first-time replies from January 2002 to December 2002 were evaluated. All patients and relatives were informed that participation was voluntary and anonymity was guaranteed.

**Main outcomes** Assessment of the quality of replies and GP satisfaction.

**Results** The mean age of all referred patients was 78.7 years (standard deviation (SD) 7.3, range: 42 to 90 years) and 61.5% were female. Multi-rater agreement analysis showed that 86% of the replies were classified as very good/good quality, 10% as fair, and 4% as poor quality. The mean agreement was 85% ( $\kappa$  0.37; 95% confidence interval (CI) 0.29–0.45;  $P < 0.0001$ ); 89% of the replies were classified as very satisfactory/satisfactory, 9% as less satisfactory and 2% as unsatisfactory. The mean agreement was 86% ( $\kappa$  0.34; 95% CI 0.25–0.42;  $P < 0.0001$ ).

**Conclusion** The reply letters were overall of good quality and GPs were generally satisfied with the reply letters. No association between the quality of referral and reply letters was found.

**Keywords:** communication, dementia, geriatrics, primary health care, quality, satisfaction

### How this fits in with quality in primary care

#### What do we know?

Geriatricians' skill in replying is based on given information from general practitioners' (GPs') referral in assessing dementia diagnosis.

#### What does this paper add?

Reply letters were rated of good quality and overall GPs were satisfied with the reply letters. No relationship between the quality of referrals and the quality of replies was found, even though there was inconsistency in the quality of referrals. The mean delay between referral and the first clinical appointment was 20 weeks. Adequate information, guidance and timely reply letters from specialists are important for further follow-up care.

## Introduction

In the Norwegian healthcare system, professional collaboration between physicians in primary and secondary health care is based on written communication in the form of referral and reply letters. Geriatric specialists' services are hospital based. The assessment of patients suspected of suffering from dementia renders a particular challenge to both general practitioners (GPs) and specialist services. Cognitive impairment is a key symptom of dementia.<sup>1</sup> It is widely accepted that dementia should be diagnosed as early as possible in order to implement appropriate interventions. Available anti-dementia drugs have a moderate but significant effect on cognitive functioning in Alzheimer's disease,<sup>2</sup> and have also been proven to be beneficial in Lewy body disease,<sup>3</sup> and vascular dementia.<sup>4</sup> Psychosocial intervention is beneficial for both the patient and the caregivers.<sup>5</sup> Furthermore, cognitive stimulation therapy has been shown to improve cognition and quality of life.<sup>6</sup> Disclosure of dementia diagnosis is another important issue.<sup>7</sup> Has a demented person the right to know his/her diagnosis, or is it better to 'spare' the patient from the truth? Uncertainty regarding diagnosis, and help in decision making with respect to management are significant reasons for referrals to specialist services.<sup>8</sup> This places an important responsibility on the specialist to provide the GP with comprehensive and satisfactory information in order to offer the best possible management.<sup>9</sup>

Studies have shown that GPs expect information about diagnosis, test results, further tests, prognosis, treatment options, treatment risks, side-effects, follow-up plans, psychosocial support, drug treatment, patient assessments, future recommendations, long-term care, and help for the family.<sup>10–15</sup> It has been reported from previous studies that reply letters commonly contain inadequate or incorrect information;<sup>16,17</sup> the studies showed they were delayed or did not answer specific questions;<sup>10,18,19</sup> there was an absence of recommendations and details pertaining to follow-up care;<sup>10</sup> and

an absence of treatment suggestions and co-management plans.<sup>20</sup> No diagnosis or treatment consideration was given in 80% of replies;<sup>21</sup> information about activities of daily living (ADL) was given in only 50% of replies;<sup>22</sup> and specialists' feedback was given in only 55% of cases.<sup>23</sup> Certain information was omitted, such as answers to specific questions raised by GPs, specialists' assessments, test results and proposed or initiated treatment. Furthermore, GPs were often dissatisfied with follow-up information in reply letters.<sup>24</sup>

Studies in other disciplines have emphasised the importance of proper communication between GPs and specialists at the stage of diagnosis. For example, it has been reported that improvement in communication was necessary between GPs and specialists at the diagnostic stage of breast cancer,<sup>25</sup> and that insufficient detail and delayed replies were of great concern in cancer care.<sup>10</sup> While studies were carried out in other disciplines, only one study has examined the referral letter in the dementia care setting.<sup>26</sup> In this study, the authors concluded that the most relevant and important information was not communicated in the referral letter, time-consuming tests were not carried out, and there was disagreement between GPs and between GPs and geriatricians regarding the quality and appropriateness of referrals. No such studies have specifically assessed the quality of reply letters from geriatricians in the dementia care setting.

Since 2002, one of the official Norwegian health quality criteria has been the quality of the discharge letters. In a study assessing discharge letters from a medical department, the quality in general was judged as modest to good, with only 44% of the letters deemed deficient according to several criteria.<sup>27</sup>

The aim of this study was to assess the quality of the information in reply letters, the GPs' satisfaction with content, and whether there was any relationship between the quality of the original referral letter and the initial response.

## Methods

This study was carried out at the Geriatric Outpatient Department, Haraldsplass Deaconess University Hospital, Bergen, Norway. All replies ( $n = 135$ ) from geriatricians to GPs from January to December 2002 were included.

Based on other studies,<sup>26,27</sup> we developed a registration sheet to assess the information given in reply letters from geriatricians. This was successfully piloted with three GPs. The registration form covered information with regard to investigations performed by specialists, clinical information given (the patient's medical history, physical examination findings, investigation findings, diagnosis, prescribed medication, side-effects and a co-management plan), clinical information given to patients and relatives, and diagnostic assessment of suspected dementia including clinical and laboratory examinations, neuropsychological evaluation, daily living activities and diagnostic imaging.

An expert panel of three GPs, each with more than 15 years' work experience, and all certified specialists in general practice and public health, assessed the reply letters. All identifiable data (patient's name, birth date, address, referring GP and specialist's name) were removed. Reply letters along with referrals, were copied and sent to members of the expert panel. Each GP rated the 135 reply letters ( $3 \times 135 = 405$  assessments) individually.

The quality of the geriatricians' reply was assessed using pre-defined criteria in accordance with earlier studies.<sup>26,27</sup> GP satisfaction was studied using a four-point scale of response alternatives: very satisfactory, satisfactory, less satisfactory and unsatisfactory, and assessed using the criteria given in Table 1.

The present study is an extension of our earlier study that assessed the quality of the referrals.<sup>26</sup> After calculating the mean value of the raters' quality

assessment of the replies and the referrals, we compared the quality of the replies and the referrals.

## Statistical analyses

Statistical analysis was carried out using the statistics package SAS 9.1. Descriptive statistics were presented for the information frequencies. Multi-rater agreement analysis was assessed to calculate Fleiss' kappa ( $\kappa$ ) value. Landis and Koch's guidelines for interpreting the strength of agreement for  $\kappa$  statistics were used:<sup>28</sup> 0.81 to 1.00 (almost perfect), 0.61 to 0.80 (substantial), 0.41 to 0.60 (moderate), 0.21 to 0.40 (fair), 0.00 to 0.20 (slight), and less than 0.00 (poor). A *P* value of less than 0.05 was considered statistically significant.

## Results

The mean age of all referred patients was 78.7 years (standard deviation (SD) 7.3, range: 42–90 years) and 61.5% were female. One-hundred and seven replies contained information about diagnostic imaging, 127 about daily living activities, 127 about Mini-Mental Status Examination (MMSE), 127 about activities of daily living (ADL), 130 about psychological information, and 103 had information regarding somatic diseases. Information on neurological examination was given in 79 replies, diagnosis was given in 130 but ICD-10 (International Classification of Diseases) was only specified in 90 replies. Treatment information was given in 128 letters, the proposed strategy in 105 and follow-up information in 122 replies. One-hundred and twenty-eight replies were evaluated as having carried out optimal investigation. The median

**Table 1** Satisfaction assessment criteria

Satisfaction	Definition
Very satisfactory	A reply letter that includes information on: (i) how well geriatricians aided the GPs in the overall management that led to referral; (ii) how well geriatricians answered the specific questions raised by GPs; (iii) additional information that gave adequate guidance for the continued care of the patient; (iv) inclusion of a co-management plan; (v) information given to patients/relatives; (vi) clarity and promptness of the reply
Satisfactory	Included all except one of above
Less satisfactory	Included only two of the above
Unsatisfactory	Included only one or none of above

delay between referral and the first clinical appointment was 131 days (range 10–158 days).

## Quality of replies

GP1 (the first GP rater) rated the quality of reply letters from geriatricians as very good/good for 109 (80.7%), as fair for 18 (13.3%) and as poor for 8 (5.9%) letters. GP2 rated the quality of reply letters from geriatricians as very good/good for 127 (94.1%) cases, as fair for 7 (5.2%) cases and as poor for 1 (0.7%) case. GP3 rated the quality of reply letters from geriatricians as very good/good for 114 (84.4%) cases, as fair for 14 (10.4%) cases and as poor for 7 (5.2%) cases. Multi-rater agreement analysis showed that 86% of reply letters were classified in the very good/good category; 10% of reply letters were classified in the fair category and 4% of reply letters were classified in the poor category. The mean agreement was 85% ( $\kappa$  0.37; 95% CI (confidence interval) 0.29–0.45;  $P < 0.0001$ ).

## GPs' satisfaction

GP1 rated satisfaction as very satisfactory/satisfactory for 118 (87.4%) cases, less satisfactory for 14 (10.4%) cases and not satisfactory for 3 (2.2%) cases. GP2 rated satisfaction as very satisfactory/satisfactory for 127 (94.1%) cases, less satisfactory for 7 (5.2%) cases and not satisfactory for 1 (0.7%) case. GP3 rated satisfaction as very satisfactory/satisfactory for 114 (84.4%) cases, as less satisfactory for 17 (12.6%) cases and as not satisfactory for 4 (3.0%) cases. Multi-rater analysis showed that 89% of cases were classified as very satisfactory/satisfactory, 9% of cases as less satisfactory and 2% of cases as not satisfactory. The mean agreement was 86% ( $\kappa$  0.34; 95% CI 0.25–0.42;  $P < 0.0001$ ).

## Discussion

The analysis of this sample of reply letters revealed that responses from geriatricians were rated to be of good quality and that, overall, GPs were satisfied with them. Our findings identified that essential information was often included that reflected a high standard and quality of reply letter, which was in accordance with national guidelines.<sup>8</sup>

The limitations of this study should be acknowledged. It was conducted at a single university hospital, hence generalisability may be limited. Also, it was a retrospective study and only three GPs assessed the reply letters. Furthermore, the quality of the referrals for the present samples was assessed in an earlier study by different GPs from those participating in this study.

Good-quality reply letters are essential to provide a communication link between GPs and specialists which, in turn, may have a positive impact on patients' quality of care.<sup>24</sup> It has been reported that high-quality referral reply letters offer an inexpensive way to transfer practice-based, relevant educational information to GPs, thus leading to improved continuity and quality of care.<sup>29</sup> Failure to provide optimal information may affect patients' treatment as well as the interpersonal and professional relationship between GPs and specialists. Furthermore, GPs may be embarrassed as a result of not knowing the consultants' results, and the absence of or inadequate reply letters may adversely affect continuity.

Our study showed that overall, GPs were satisfied with the information provided by the geriatricians. Specific questions regarding a co-management plan and a follow-up strategy were commented on in the reply letters. Addressing specific questions raised by GPs and the inclusion of a co-management plan has an impact on GPs' satisfaction.<sup>20,30</sup>

The median delay from referral to first clinical appointment was 20 weeks. This is not in accordance with the national waiting list guarantee. We have no clear explanation for this delay. One possible reason could be the shortage of geriatricians. Various changes in workloads for geriatricians and other hospital staff may also contribute to the delay. One possibility is that additional time is needed for collecting missing basic information from GPs or nursing homes/other institutions, resulting in delays in treatment. Forty-three percent of the referral letters on which the present study is based were considered inappropriate.<sup>26</sup> However, it has been reported that timely and informative replies are essential for patients who need follow-up care by GPs.<sup>31</sup>

Our results showed that there was fair agreement between GPs on the quality of replies ( $\kappa = 0.37$ ) and GPs' satisfaction ( $\kappa = 0.34$ ). The mean agreement for the quality of reply letters was 85% and the mean agreement for GP satisfaction was 86%. This is due to an effect of case distribution. 'Kappa is significantly reduced if one classification category dominates'.<sup>32</sup> We estimate that, on average, any two of the three GPs would agree about 85% of the time on a *quality* classification, and about 86% of the time on a *satisfaction* classification. Our result seems reasonable since all participating GPs were certified specialists in general practice and had a work experience of more than 15 years.

Our study showed that there was no association between the quality of referral and reply letters, although variation in the quality of referral letters was identified.<sup>26</sup> One possible reason could be that geriatricians, being competent in caring for dementia sufferers, provided comprehensive information even with the varied quality of referrals.

## Conclusion

On the basis of our findings we conclude that, overall, the reply letters were of good quality and GPs were generally satisfied with them. There was no association between the quality of original referral and reply letters. The mean delay between referral and the first clinical treatment was 20 weeks, which is not in accordance with the national guideline. We recommend that more effort be made to reduce the waiting time, and that a common guideline be developed to enhance understanding and communication between GPs and specialists. Since managing dementia is an important aspect of primary care, it is essential that GPs are given adequate information, guidance, and a plan for the future management of the patient, with emphasis on the well-defined sharing of tasks and responsibilities between the outpatient department and the GP.

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## ETHICAL APPROVAL

The Regional Ethics Committee for Medical Research approved this study. The study was granted licence by the Norwegian Data Inspectorate. All patients and relatives were informed that participation was voluntary; they could refuse use of their data; and anonymity was guaranteed.

## CONFLICTS OF INTEREST

None.

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