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### Improving care of vulnerable elders through computerized clinical decision support

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## **Chapter 7**

# **Improving the number and timeliness of letters sent from the hospital outpatient clinic to the general practitioner: a pair-randomized controlled trial**

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IN PREPARATION

## Abstract

**Background:** Letters from the hospital to the general practitioner are important for maintaining continuity of care. Although doctors feel letters are important, they are often not written on time.

**Objective:** To improve the number and timeliness of letters sent from the hospital outpatient department to the general practitioner using an email-based intervention evaluated in a randomized controlled trial.

**Methods:** Users were interviewed to determine the requirements for the intervention. Due to high between-doctor variation at baseline, doctors were matched for baseline performance and pair-randomized. The effectiveness of the intervention was assessed using meta-analytic methods. The primary outcome was the number of patient visits which should have generated a letter that had a letter by 90 days after the visit. Satisfaction was assessed with an anonymous survey.

**Results:** The intervention consisted of a monthly email reminder for each doctor containing a list of his or her patients who were (over)due for a letter. Doctors in the intervention group had 21% fewer patient visits which did not have a letter by 90 days (OR = 5.7,  $p = 0.0020$ ). Satisfaction with the system was very high.

**Conclusion:** This non-interruptive email reminder proved to be successful at improving the number and timeliness of letters from the outpatient department to the general practitioner, and was viewed as a useful service by its users.

## Introduction

Letters from the hospital to the general practitioner are the main channel of communication between the hospital and the primary care provider [197]. The Assessing Care of Vulnerable Elders (ACOVE) quality indicators include it as an aspect of the quality of continuity of care [25]. In the Netherlands, the general practitioner is the central coordinator for the patient's care [198], and thus it is especially important that the general practitioner remains informed about the care the patient receives at the hospital, whether as an inpatient or outpatient. Poor communication between the hospital and the general practitioner at discharge has been associated with higher rates of readmission [199], and clinicians recognize good communication between the hospital and the general practitioner as an important component of patient safety [200]. However, letters to the general practitioner are often delayed or forgotten [201].

Computerized clinical decision support can be defined as any computerized system which helps in making clinical decisions [1], including assistance with communication and documentation tasks [202][56]. Automated reminders have been shown to be effective in supporting clinical documentation tasks [203][204], but thus far have not been applied to help doctors identify patients for whom letters need to be written and ensure that the letters are sent in a timely manner. Although alerts which are interruptive [57] and require a reason for dismissal [Roshanov] have been shown to be more effective than alerts that do not have these characteristics, interruption also has the potential to negatively impact patient care [38]. For example, 11% of hospital medication dispensing errors were attributable to interruption, and 19% of interrupted tasks in the emergency department are never completed [38]. Thus, the objective of this study was to develop and evaluate a non-interruptive computerized clinical decision support intervention to improve the number and timeliness of letters sent to the general practitioner from the hospital's outpatient clinic.

## Methods

### Setting

The Academic Medical Center is a tertiary-care, university medical center seeing 56,000 patients per year [205]. The general internal medicine and geriatric medicine outpatient clinics agreed to participate in the trial. Together, these clinics are staffed by 11 staff doctors and 5 to 7 residents, and see approximately 4000 patients per year.

### Intervention design

We planned to develop and perform a patient-specific, email-based decision support intervention. To determine the content, format, timing, and interaction options for the intervention, we conducted semi-structured interviews consisting of three questions: the doctor's current workflow regarding letters, the parameters they would like (e.g. how often they wanted reminders), and what capabilities and style of user interface they would like for controlling the content of the emails. Interview subjects were chosen by purposive sampling to represent both staff doctors and residents in both departments. Based on these results, we developed a stand-alone, open-source program to generate email reminders. The query to match letters to patients was refined for each participating department to minimize the number of false positive reminders (i.e. a patient visit is included in the email, but a letter was already written for that visit) and the number of false negatives (i.e. a letter is incorrectly attributed to a patient visit, thus no reminder is generated).

### Baseline and trial design

The trial was registered with the Netherlands Trial Registry (NTR3369). Due to high between-doctor variation, pairwise randomization was used for the randomized controlled trial. Doctors were paired according to their baseline performance, and one member of each pair was randomly selected to be in the intervention group. Each pair of doctors then acts as a small "trial" of the system. Baseline performance was measured as the percentage of patient visits to the outpatient department in the 12 months prior to the start of the study which did not have a letter associated with the visit at 90 days after the visit. Using a threshold simplified the analysis by eliminating the need to account for censoring, and a cut-off of 90 days was chosen because, in the baseline data set, fewer than 10% of letters that were not written by 90 days after the visit were ever written at all. Pairs were assigned to minimize the within-pair difference in this outcome measure. Doctors consisted of both staff doctors and residents. Residents move to different departments during their training, and the new resident inherits the outpatients of his predecessor. Therefore, new doctors entering the service also kept the same pair assignment as their predecessor, allowing patients to remain in the same arm of the trial. For the purposes of analysis, the new combination of doctors was considered a new pair. For example, if Dr. A and Dr. B are a pair, and Dr. B leaves and is replaced by Dr. C, then Dr. A and Dr. C form a new pair. Thus, the same doctor could be a member of more than one pair during the trial, but only one pair during any given time period. A doctor was required to stay on the outpatient clinic for at least two consecutive months during the trial in order to be entered into the analysis. Based on this design, we estimated that we would need to continue the trial for 6 to 12 months to include enough doctors in the analysis. Randomization was performed using the random integer generator from the website <https://www.random.org>. One doctor in each pair was randomly selected to be in the intervention group, and the other was assigned to the control group.

## Analysis of trial data

The main outcome measure was the percentage of patients who visited the outpatient clinic during the trial who had a letter written within 90 days of their visit. To analyze the clustered, pair-randomized data, we chose a meta-analytic approach as suggested by Thompson et al. [206]. The data from each pair of doctors is analyzed as if it were a trial in the meta-analysis. A mixed-effects model with the Restricted Maximum Likelihood (REML) estimator was used, with the difference in performance within each pair at the time of randomization as a moderator variable (R version 3.1.0, package metafor)[73, 207].

As a secondary analysis, we repeated the meta-analysis with the patient as the unit of analysis rather than the patient visit. Patients can visit more than once during the study period, and may see different doctors. Each visit has the potential to trigger a reminder, and thus is the unit where the intervention has its main effect. However, in terms of clinical relevance, it is more important to ask whether the patient has a letter associated with their visit. Thus, we also perform the analysis with the patient as the unit of analysis rather than the patient-visit. For this analysis, patients were assigned to the doctor that they saw on their first visit during the trial. We also compared the before-after performance of both the control and intervention groups using a chi-squared test and measured the median number of days between the visit date and the start date of the letter and the median number of days between the visit date and the date the letter was sent to the general practitioner in the control and intervention groups. In addition, we performed a post-hoc sensitivity analysis with the  $\log(\text{ratio})$  of the number of patients seen by the control doctor to the number of patients seen by the intervention doctor as an additional moderator variable to control for workload.

The software written in Java as open source software. It gathers a list of patients with a recent or planned visit to the outpatient department, checks whether the patient has a letter that matches to the visit (according to the criteria set for each department), and if not, marks the patient as eligible for a reminder. The software checks the agenda, checks for letters, and then sends reminders, so all information is up to date when the reminders are sent. (Timelines of the possible relationships between the visit date and the reminder date are illustrated in Figure 7.2.)

## User Satisfaction survey

To assess the users' perception of the system, two of the researchers (SM and DS) constructed a survey based on the Information Systems Success Model (DeLone/McLean model) [208]. The constructs from this model that were relevant to this intervention were identified and instantiated with questions from existing standard questionnaires: the IBM Computer System Usability Questionnaire [209], the System Usability Scale [210], and the Computer User Satisfaction questionnaire [211]. The resulting survey (Appendix 1) was assessed for face validity and completeness by two experts in medical informatics (SE and AA). It was distributed to the doctors in the intervention arm of the trial as an email to their hospital email address. A paper version was also distributed in the hospital mail boxes for doctors who were still working in our hospital.

## Results

### Intervention design

We conducted interviews with a purposive sample of five doctors (the heads of the geriatrics and internal medicine departments, one additional senior doctor, and one resident from each department). Based on these interviews, we designed an intervention consisting of a monthly,

plain-text email formatted in three sections (Figure 7.1). Hospital policy states that letters should be sent for “new patients” (the patient’s first visit to the department) within 2 months of the visit. The policy for recheck patients varies per department; the departments in our study recommend a letter every 2 years (internal medicine) or every year (geriatrics). Because the email was sent monthly, reminders would be sent for new patients 6 to 10 weeks after their visit. If any of the sections had no patients due for letters, that section contained a message that said “Well done! No (new/recheck) patients are in need of letters!” The subject line of the email read “letters due” and was the same for emails with or without patients in need of letters. The emails were signed “Snelle Cor” (“Cor” alludes to correspondence and is a common Dutch first name, and “snelle” means fast). The doctors we interviewed did not want a user interface for controlling the content of the reminders, therefore we instead added information about contacting the administrator to their hospital email accounts.

```

Dear Dr. Smith,

Last check for letters: Monday 6 July 2015

New patients (NP) in need of a letter:
patient #...visit date.....time since visit
ABCD11111...27 Feb 2015..... 129 days
ABCD22222...09 Apr 2015.....  88 days
ABCD33333...18 May 2015.....  49 days

Recheck patients (RP) with a past appointment and in need of a letter:
patient #...visit date.....last letter
ABCD44444...02 Jul 2015.....no letter
ABCD55555...17 Mar 2015.....no definitive letter
ABCD66666...25 May 2015.....20 May 2010
ABCD77777...03 Jun 2015.....28 May 2013

Recheck patients (RP) with a planned appointment and in need of a letter:
patient #...visit date.....last letter
ABCD88888...09 Jul 2015.....08 Jul 2013

Does your patient already have a letter? Recheck patients appear on this
list if there is no letter in the last 2 years before their most recent
visit. New patients appear on the list if there is no letter 6 to 10 weeks
after their visit. Please reply to this email if you find errors or if you
have questions. We will then correct any errors. Please do not use
identifying patient information (names, etc.) in your emails.

Sincerely,
Snelle Cor

```

Figure 7.1: Example of email reminder

The software written in Java as open source software. It gathers a list of patients with a recent or planned visit to the outpatient clinic, checks whether the patient has a letter that matches to the visit (according to the criteria set for each department), and if not, marks the patient as eligible for a reminder. The software checks the agenda, checks for letters, and then sends reminders, so all information is up to date when the reminders are sent. Timelines of the possible relationships between the visit date and the reminder date are illustrated in Figure 7.2.

## Baseline

In the year before the trial there were 8173 patient visits in the internal medicine and geriatrics services of the outpatient clinic, with an average of 2.4 visits per patient (3473 patients). A total of 9.3% of the 8173 visits were > 90 days overdue for a letter, 9.4% in the control group and 9.1% in the intervention group ( $\chi^2 = 0.25$ ,  $p = 0.62$ ). This percentage varied between doctors, ranging from 0.3% to 27.5%. Doctors were paired to minimize the difference in initial performance between the intervention and control group; the median absolute difference in the baseline between

members of a pair was 1.0% (IQR 0.3-2.2%).

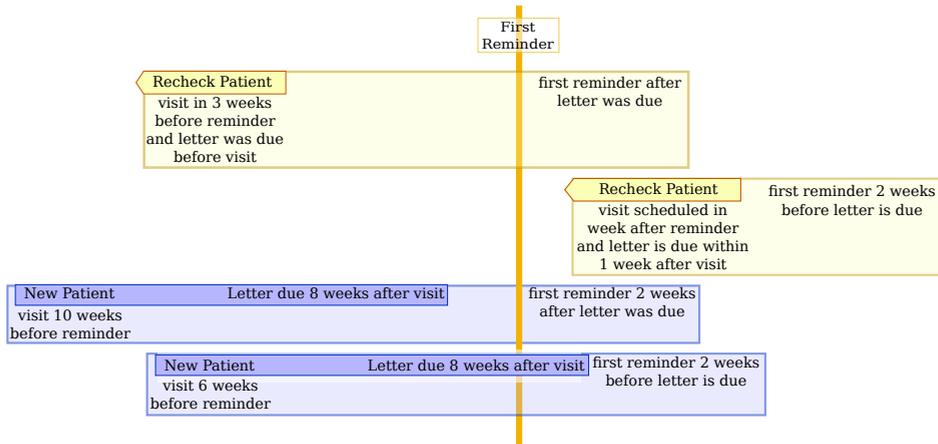


Figure 7.2: Range of possible relationships between the patient visit, the letter due date, and the first reminder. Recheck patients should get a letter every year (or 2 years for internal medicine). If a recheck patient had a visit during the trial, they were eligible for a reminder if the letter was due before the visit (sometimes, long before the start of the trial) or up to 1 week after the visit. Reminders were sent for appointments that had already occurred and appointments scheduled for the coming week, meaning that reminders were sent no more than 2 weeks before the letter was due. New patients should get a letter within 8 weeks of their visit. Patients were considered eligible for a reminder if they did not yet have a letter at 6 weeks after their visit, meaning that the first reminder for a patient was issued 6 to 10 weeks (an average of 8 weeks) after the visit.

## Analysis of trial data

### Participants

The trial included patients visiting the internal medicine or geriatrics service of the outpatient clinic between 1 April 2012 and 31 March 2013. The intervention was preceded by an announcement at the monthly staff meeting of the included departments. The trial included 26 doctors, assigned to 15 pairs (as described in the Methods, if one doctor in the pair left the service, a new doctor would take over the patients of the one who left, and also be given the same randomization assignment). The trial started with 16 doctors in 8 pairs; of these, 6 doctors remained on the service for the whole trial period. The pairs had a median duration of 6 months (range 2 to 12 months). A total of 7690 patient visits were included in the trial, with an average of 2.3 visits per patient (3310 patients). Participating doctors saw a median of 27 patients/month (2 new patients and 26 recheck patients; range 2-112, IQR 15-65), with a median of 7 patients needing a letter in any one month (range 0-48, IQR 5-15). The patient-visits consisted of 7253 recheck visits (3064 patients) and 437 new patient visits (434 patients). A total of 2057 of these visits should have been followed by a letter (864/3140 intervention, 27.5%; 1193/4550 control, 26.2%). Of these, 1206 (611 intervention, 71%; 595 control, 50%) received a letter within 90 days of their visit. For 981 of those visits (417 intervention, 564 control), the letter had not yet been written at the time the monthly reminders were sent, and thus would generate a reminder in the intervention group.

The intervention consisted of 12 monthly emails, containing a total of 474 reminders about 415 patients. Each email contained a median of 7 reminders (IQR 2-24), with a range of 0-81 reminders in one email. The users notified us of 3 patients erroneously included in the reminders during the trial (false positive alerts).

### Primary outcome: Meta-analysis

The intervention group had significantly fewer overdue letters than the control group in the meta-analysis (OR = 5.7, CI = 1.9 - 17.2,  $p = 0.0020$ ). The effect of the within-pair differences at baseline was not significant ( $p = 0.83$ ). The results per pair are illustrated in the forest plot in Figure 7.3.

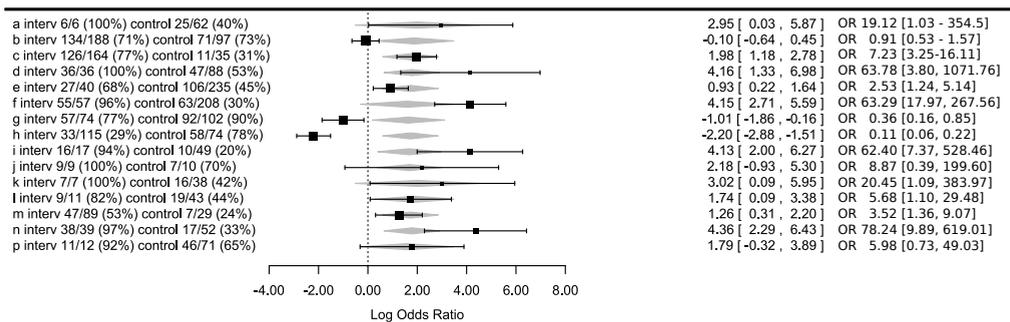


Figure 7.3: Forest plot of effect of intervention on each matched pair of clinicians, with correction for the (non-significant) differences in baseline performance (the percentage of patients with letters sent within 90 days of the visit) at the time of randomization.

### Secondary outcome: Analysis per patient

Analysis on with the patient as the unit of analysis yielded similar results, with significantly fewer patients overdue for letters in the intervention than control group (OR = 4.4, CI = 1.5 - 12.4,  $p = 0.005$ ).

### Secondary outcome: Before-after

In the year of the trial, 598/4550 visits resulted in letters that were overdue by  $> 90$  days in the control group (13.1%, baseline = 9.5%), compared to 253/3140 in the intervention group (8.1%, baseline 9.1%). Compared to the period before the trial, there was an increase in overdue letters in the control group during the trial ( $\chi^2 = 0.31$ ,  $p = < 0.0001$ ). In the intervention group, overdue letters decreased ( $\chi^2 = 2.17$ ,  $p = 0.14$ ).

### Secondary outcome: Average time to write letters

For the control group, a median of 58 days (IQR 7.5-159) passed between the patient visit and the date that the associated letter was started. For the intervention group, this was 30 days (IQR 6-82). Likewise, the median number of days elapsed between the visit date and the date the letter was actually sent was 77 in the control group (IQR 26-174) and 39 in the intervention group (IQR 12-88).

## **Sensitivity analysis: Number of patient visits per month**

The relative workloads of the control vs intervention doctors, measured in terms of the log(ratio) of the number of patients seen per month by the control/intervention doctor, did have a significant effect when added as a modifier to the meta-analytic model (OR = 2.61, CI = 1.1-6.1, p = 0.03). Thus, doctors who saw more patients wrote letters for a smaller percentage of their patients. However, the significance of the effect of the intervention persisted as well (OR = 3.8, CI = 1.4-10.7, p=0.01).

## **Satisfaction**

The survey consisted of 19 questions: 17 seven-point rating scale questions and 2 free text questions (Appendix 1). The survey was sent to the twelve doctors who had received email reminders during the trial. All twelve were sent via email, and nine were also distributed in paper form. Seven responses were received, all using the paper form (58% of all doctors who received reminders during the trial, and 78% of doctors who were still working in the hospital at the time the survey was sent). Median overall satisfaction was rated as 6 of a possible 7 points (range 3 to 7), and six of the seven respondents indicated that they felt the system helped them write their letters on time (median score 6/7). The median score was 6 or better on use, usefulness, content, length, organization, value, and importance. Lower ratings (median score 4 or 5) were given on consistency, completeness, control of the content, age of information, and timeliness of the information (three indicated that the information came “too early” relative to when they need the information). The free text comments were positive; three users indicated that they wanted the service to continue after the trial, and none indicated that they wanted it discontinued.

## **Discussion**

We found that a monthly email reminder was effective at improving the percentage and timeliness of letters sent to the general practitioner from the hospital outpatient clinic. The email contained a list of patients of the outpatient department who were (over)due for a letter to their general practitioner. Doctors in the intervention group had 21% fewer patients who were lacking letters at 90 days after their visit, and they sent their letters a median of 48 days sooner than in the control group. Comparison with data from before the trial showed that the percentage of patients without letters had increased in the control group and decreased in the intervention group. User satisfaction with the system was very high, and doctors found the service made it easier for them to do their work and asked for it to be continued after the trial.

This study used a randomized controlled trial design and demonstrates that the intervention was effective on several different outcome measures. We chose to employ a user-centered approach to designing the intervention, which probably contributed to its success. The system was extensively tested to minimize incorrect reminders, which also likely contributed to its acceptance. We use a meta-analytic approach to analyze the data, which can account for the clustered, paired randomization. We assessed the process-oriented outcomes of the intervention's effect on writing letters, and also the effect of the system on its users through the use of a user satisfaction questionnaire. However, there are some limitations to this study. The control group had considerably more patient visits and patients due for letters than the intervention group. Part of the apparent effectiveness of the intervention may be due to this difference in workload. However, the intervention still appeared to be effective after correction for this potential confounder, and was perceived to be effective by its users. We did not analyze for differences in effect between new patients and recheck patients. The doctors tend to view timely letters for new patients as more important, so the intervention may have affected these groups differently.

Although we were able to include a large number of patients, this was a single-center study with a fairly small number of participating doctors, and the variation between doctors at baseline was large. We accounted for this by using a matched-pair randomization, but our results should still be considered preliminary. We chose to use the number of letters sent by 90 days as the main outcome of the trial. The threshold of 90 days was chosen based on assessment of when letters were sent prior to the trial, as well as the behavior of the system (the first reminder about a patient could arrive as much as 70 days after the visit). However, one could argue for a lower threshold (in that ideally, the general practitioner should be informed much sooner) or a higher threshold (in that a further 10% of letters were still sent after 90 days). Thus, although the use of prior data to establish the threshold and the improvement on secondary outcomes mean that it is unlikely that the use of a different threshold would change the result, the use of a threshold is a limitation of the study. We chose to use the percentage of *all* patients who did not have a letter at 90 days after their visit as the outcome for pair matching, while we used only *patients who were due for a letter during the trial* to assess the outcome of the trial. Because reminders were only issued about patients who were due for a letter during the trial, the latter is a better outcome to assess the effect of the reminders. However, if a doctor writes the letters before they are due (as some of our participants do), they will have nearly zero patients who are due for letters. Thus the first outcome is better for assessing the overall behavior of the doctor, and therefore we used this measure for pair-matching and for the before-after assessment. Originally we planned to only include doctors who served in the outpatient department for at least 6 months, but due to circumstances such as maternity leave, this would have excluded 4 doctors and would have resulted in the need to extend the trial. Instead, we chose to include doctors who had served on the outpatient department for at least 2 months, which was long enough to receive at least one reminder which included both new and control patients.

Recent studies have implied that more interruptive alerts, for example those requiring the physician to enter a reason for override, tend to be more effective [4, 54, 57]. However, if this finding were applied to all decision support, it would likely exacerbate alert fatigue. Thus the challenge becomes designing non-interruptive decision support that is effective in improving care. The intervention described in this study notifies users that information is available, and allows users to digest the information and react to it whenever they wish. This combination, actively notifying users that advice is available but allowing users to choose when they receive the advice, may prove useful in other decision support implementations. The staff and residents use their hospital email account on a daily basis, which made it likely that doctors would see and read the emails from the system. Doctors feel a sense of responsibility regarding these letters, and the system provides a concrete way for doctors to demonstrate that they perform their work promptly. This social influence may also have positively impacted response to the alerts. It is likely that the very low false positive rate also contributed to alert acceptance.

General practitioners view the hospital letter as a key component of their ability to provide high-quality care [200]. Likewise, our interviews with users during the design phase indicated that they feel writing letters is an important part of their job, and the survey indicated that users valued the service we provided. Prior work in this area includes other interventions directed at improving writing of discharge letters in a timely manner. These have involved conversion to computer-generated letters [212, 213] or multi-faceted interventions of which automated reminders were a part [204, 214]. To our knowledge, this is the first randomized trial investigating reminders for outpatient clinic doctors to write letters to the general practitioner. Although this study took place in the Netherlands, the patient letter is the typical means of communication throughout the world. Furthermore, we expect that these findings would be directly applicable in other settings and countries, as well as indirectly applicable to other documentation and communication tasks.

Future work should investigate the barriers experienced by the doctors who respond. less to the email reminders, and improve the service to meet their needs. For example, we hypothesize that emails which contain a long list of patients in need of letters may be discouraging, and that limiting the length of the email may improve acceptance. Although we assessed several outcomes relating to the number and timeliness of letters, we did not assess the content or quality of the letters. An ideal intervention would not only remind doctors to write the letters, but also assist them in writing good ones, for example by extracting relevant information from the patient record into a template letter. Integration with the electronic patient record would likely also make the reminders more useful. In this study, we did not use any patient-specific characteristics, such as age, to modify the parameters on when reminders were sent. This means that reminders were sent much later than is typically recommended, for example in the ACOVE quality indicators [25]. This could also be a useful modification to the system. In this study we demonstrated that a non-interruptive reminder can be effective, and even appreciated, to assist with a non-urgent clinical task. A feature of email reminders is that they combine an automated notification (the message title appearing in the inbox) with a user-controlled receipt of advice (opening the email to read the content). This principle may be applicable in other contexts to address other tasks which are important, but not urgent.

### **Conclusions**

A monthly email reminder was an effective intervention to improve the number and timeliness of letters written from the outpatient clinic to the general practitioner. Doctors' satisfaction with the system was high, and they viewed it as a valuable service to assist them in providing good care for their patients. This study demonstrates that a non-interruptive intervention can be an effective form of clinical decision support.

### **Acknowledgements**

The authors would like to thank Eric Herman and Remco Piening for assisting with the writing of the SnelleCor software. We would also like to thank Winston Tjon Sjoe Sjoe and Eric van der Zwan for technical assistance. We would like to acknowledge the contributions of Gerben ter Riet and Koos Zwinderman for consultation on the statistical analysis, and Marcel Levi in administrative support. Finally, we would like to thank the doctors of the internal medicine and geriatrics departments for their participation in the trial.

## Appendix: Survey Instrument

Over the last year we have been conducting a trial of an email reminder system (“SnelleCor”) for letters to the *huisarts* for patients visiting the Polikliniek. Please let us know if you received the email reminders while you were seeing patients for Poli Interne, and let us know your opinions about this reminder system. Your individual responses will only be seen by the researcher and will be kept confidential. Your evaluation is important in understanding and improving workflow support. Thank you for helping us to improve.

### I received email reminders from Snelle Cor: Yes / No

→ If “No,” please skip to the last two questions (on the back of this sheet).

I read the emails	infrequently	extremely	quite	slightly	neither or equally	slightly	quite	extremely	frequently
I used the emails to find patients who needed letters	infrequently	extremely	quite	slightly	neither or equally	slightly	quite	extremely	frequently
I wrote letters sooner because of the emails	infrequently	extremely	quite	slightly	neither or equally	slightly	quite	extremely	frequently
The list of patients needing letters was	consistent	extremely	quite	slightly	neither or equally	slightly	quite	extremely	inconsistent
The list of patients needing letters was	complete	extremely	quite	slightly	neither or equally	slightly	quite	extremely	incomplete
The “age” of the information at the time I read the emails was	reasonable	extremely	quite	slightly	neither or equally	slightly	quite	extremely	unreasonable
The availability of output information at a time suitable for its use	late	extremely	quite	slightly	neither or equally	slightly	quite	extremely	early
The amount of information about each patient was	too little	extremely	quite	slightly	neither or equally	slightly	quite	extremely	too much
The length of the email was	long	extremely	quite	slightly	neither or equally	slightly	quite	extremely	short
The information in the emails was	useful	extremely	quite	slightly	neither or equally	slightly	quite	extremely	useless

# Chapter 7

<p>The organization of the information in the emails was</p>	<p>clear    extremely    quite    slightly    neither or equally    slightly    quite    extremely    confusing</p>
<p>For improving the timeliness of my letters and reducing the number of my patients without letters, the emails were</p>	<p>worthless    extremely    quite    slightly    neither or equally    slightly    quite    extremely    valuable</p>
<p>For improving the timeliness of letters in the department and reducing the overall number of patients without letters, I think the emails were</p>	<p>worthless    extremely    quite    slightly    neither or equally    slightly    quite    extremely    valuable</p>
<p>My ability to control the content and delivery of the reminders (by replying to the emails) was</p>	<p>sufficient    extremely    quite    slightly    neither or equally    slightly    quite    extremely    insufficient</p>
<p>Generally, getting automatic reminders via email is</p>	<p>useful    extremely    quite    slightly    neither or equally    slightly    quite    extremely    useless</p>
<p>Generally, writing letters for the GP for poli patients is</p>	<p>unimportant    extremely    quite    slightly    neither or equally    slightly    quite    extremely    important</p>
<p>Overall, my feeling about the emails is</p>	<p>satisfied    extremely    quite    slightly    neither or equally    slightly    quite    extremely    unsatisfied</p>

**De volgende vragen mag u ook in Nederlands beantwoorden.**

Please give us your suggestions for how we can improve SnelleCor:

Please give us your suggestions for how we can improve the timeliness of letters to the GP:

Other comments: