

# A modified walk-in clinic for shoe insoles: Follow-up of non-attendants

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## Abstract

**Background:** In a previous study ( $n = 1286$ ), we found that a modified walk-in system reduced waiting times for prescription of shoe insoles by 40 days compared to scheduled appointments but resulted in a non-attendance rate of 17% compared to 6% for scheduled appointments.

**Objectives:** To investigate the reasons for non-attendance at the modified walk-in clinic.

**Study design:** This is a cross-sectional survey.

**Methods:** Unlike traditional walk-in clinics, a limited number of patients were invited each week from the waiting list to attend the modified walk-in clinic on pre-specified days during the following 5 weeks. A questionnaire was sent to 137 patients who did not attend the modified walk-in clinic, of whom 50 (36%) responded.

**Results:** The most frequently reported reasons for not attending were the following: could not attend on the suggested days and times (30%), had already received help (18%) and illness or other medical interventions (16%). The majority of these issues could have been overcome by rescheduling to a scheduled appointment.

**Conclusion:** The main reason for not attending a modified walk-in clinic was that suggested days and times did not suit the patients. The option to reschedule the appointment needs to be clearly emphasized in the information provided to the patient.

## Clinical relevance

With clear information about rescheduling options, a modified walk-in clinic could be used to reduce waiting times for certain groups of patients.

## Keywords

Rehabilitation, lower limb orthotics, orthotics

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## Background

Waiting times are a common issue in health care, resulting in delayed interventions, worse clinical outcomes and dissatisfaction for patients and staff.<sup>1–3</sup> In our prosthetic and orthotic clinic, waiting times have been a problem for the large group of low-priority patients with less severe problems in need of shoe insoles. Thus, we wanted to test whether an appointment system other than scheduled appointments (SAs) could improve waiting times. A traditional walk-in system can eliminate waiting times for the appointment but has been associated with long waiting times in the waiting room and stress for the staff.<sup>4–6</sup> To address these potential disadvantages, we chose to test a modified walk-in (MWI) system, where patients in need of shoe insoles were invited consecutively from a waiting list to attend our prosthetic and orthotic clinic on a walk-in basis.<sup>7</sup> We found that an MWI system reduced median time from referral to the

first appointment by 40 days (23%) compared to SA, without substantially worsening waiting times in the waiting room, service quality or work environment. However, 17% of those randomized to the MWI system did not attend the clinic, compared to 6% for SA. The aim of the present study was to investigate the reasons for non-attendance at the MWI clinic.

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**Table 1.** Comparison of respondents and non-respondents.

	All subjects			Respondents			Non-respondents			p value <sup>a</sup>
	All	Women	Men	All	Women	Men	All	Women	Men	
n (%)	137 (100)	86 (63)	51 (37)	50 (100)	33 (66)	17 (34)	87 (100)	53 (61)	34 (39)	0.554
Age in years, mean (SD)	50.7 (17.3)	51.2 (17.8)	49.8 (16.4)	54.9 (15.6)	55.3 (17.1)	54.1 (12.9)	48.2 (17.8)	48.6 (18.0)	47.7 (17.7)	0.030

SD: standard deviation.

<sup>a</sup>A two-sided chi-square test was used to compare sex distributions, and a two-sided *t* test was used to compare age distributions between all respondents and all non-respondents.

## Methods

This study was part of a larger project to evaluate the effects of an MWI system and was approved by the regional ethics committee review board in Uppsala, Sweden (number 2014/342).

### MWI clinic

Each week, a number of patients were invited by mail to the MWI clinic on any Tuesday or Wednesday morning of their choice during a pre-specified 5-week period. The system was designed to give patients the freedom to choose the time and date for a visit to our clinic but still gives the staff some control over the inflow of patients. The invitation informed patients that, if they preferred, they could reschedule to an SA by contacting clinic reception. For both MWI and SA, patients were charged approximately 10 euros for the visit to the clinic and 40 euros for a pair of shoe insoles.

### Subjects and methods

Over the course of 12 months, starting from February 2017, we sent a questionnaire by mail to all patients aged 18 years and older who had received an invitation via the MWI system but did not attend. No reminders (letters or telephone calls) were used to facilitate return of the questionnaire. The questionnaire consisted of three questions with pre-specified response options. The first question was about their reason for not attending, with five response alternatives: Forged, No longer in need of insoles, Already received help, Unavailable on the suggested days and times and Other reasons – please describe. The second question was whether they would have preferred to be invited to an SA instead of to MWI, with two response alternatives: Yes and No. The third question was whether they would still like to attend the clinic to try out shoe insoles (Yes or No) and, if Yes, whether they would like to be invited via the MWI system or have an SA.

### Statistical analysis

Descriptive statistics were used to summarize the results. A two-sided chi-square test was used to compare

**Table 2.** Self-reported reasons for not attending the modified walk-in clinic (*n* = 50)<sup>a</sup>.

Forgot about it	5 (10%)
No longer need insoles (pain or other problems/difficulties have subsided)	5 (10%)
Have already received help in another way	9 (18%)
Could not attend on the days and times that were given in the invitation	15 (30%)
Other reasons	
Illness or other medical interventions	8 (16%)
Did not receive the invitation letter	4 (8%)
Economic reasons	3 (6%)
Illness of family member	2 (4%)
Miscellaneous	5 (10%)
Missing/no stated reason	1 (2%)

<sup>a</sup>More than one reason could be stated.

preferences for SA and MWI. Two-sided chi-square tests and *t* tests were used to compare sex and age distributions between respondents and non-respondents. A *p* value of 0.05 or smaller was considered statistically significant. IBM SPSS Statistics for Windows, version 22.0 (IBM Corp, Armonk, NY, USA.), was used for the statistical analyses.

## Results

Of the 137 patients who were sent the questionnaire, 50 (36%) responded and gave consent. The respondents were 33 women and 17 men (Table 1). Sex distributions were similar between the respondents and non-respondents (*p* = 0.554), but respondents were on average 6.6 years older than non-respondents (*p* = 0.030).

The most frequently reported reasons for not attending were that the patient could not attend on the suggested days and times, had already received help, could not attend due to illness or other medical interventions, did not need insoles anymore or had forgotten about attending the MWI clinic (Table 2). The responses to the second question showed no significant difference (*p* = 0.101) between the number of patients who stated that they would have preferred an SA (*n* = 28, 56%) and the number who were

satisfied with being invited to the MWI clinic ( $n = 17$ , 34%; missing data:  $n = 5$ , 10%).

Of the 50 respondents, 28 (56%) patients indicated that they wanted to receive a new invitation to attend the clinic. Of these, significantly more patients ( $p = 0.034$ ) preferred an SA ( $n = 19$ , 38%) than the MWI system ( $n = 8$ , 16%). One patient (2%) had no preference. Twenty patients (40%) answered that they did not wish to receive a new invitation to attend the clinic (missing data:  $n = 2$ , 4%).

## Discussion

This study investigated the reasons why patients failed to attend an MWI clinic. Patients reported a variety of reasons, with the most frequently reported reason being availability during the suggested days or times. Nineteen (38%) of the patients reported that they either forgot or could not attend on the days and times that were given in the invitation. The same reasons have been reported in other studies on patients failing to attend an SA.<sup>8–10</sup>

In the invitation letter to the MWI clinic, patients were instructed to contact the clinic if they wanted to reschedule to an SA, but the results indicate that they did not do so, even though 30% of the patients said that they were unable to attend on the suggested days and times. This indicates that the information about rescheduling options may need to be made clearer in the letter inviting patients to the clinic. The responsibility for remembering to attend the clinic and for rescheduling appointments, if necessary, may be argued to lie with the patients; on the other hand, inviting patients to an MWI clinic who are unable to take on this responsibility may not be ethically defensible, and it may increase non-attendance among certain patient groups. However, it may be acceptable to give specific patient groups this responsibility, even if it results in higher non-attendance. This demonstrates the dilemma in balancing patients' self-responsibility and the clinician's duty of care.

Eighteen percent of patients reported that they had already received help in another way, which likely reflects the long waiting times from referral to appointment. Hopefully, by using the MWI system, waiting times will reduce in the long run.<sup>7</sup> Ten percent of the patients stated that they did not attend the clinic because they did not need insoles anymore as their problems had resolved. This figure is similar to or higher than that in other studies<sup>9,10</sup> and may reflect the fact that our patients typically had activity-related pain in the lower extremities, which may improve over time. This points to a potential advantage of the MWI system: patients are given a time frame wherein they can choose to wait and see whether symptoms resolve without intervention or, if symptoms persist, they can attend the clinic. Thus, the MWI system may reduce the number of unnecessary appointments that may result from giving patients a specific time for an appointment.

Many of the stated reasons for not attending, such as illness and family problems, have been reported previously in studies that have investigated SA non-attendance.<sup>9,10</sup> Consequently, they do not readily explain why the non-attendance rate was higher with the MWI system than the SA system in our original study.<sup>7</sup> Two interpretations are possible. First, the reasons for not attending the MWI clinic and SA could be similar but expressed differently; for example, both MWI clinic visit and SA can be forgotten or postponed if in conflict with other commitments, but it is presumably easier to forget or postpone an MWI visit than an SA, as the person is not committed to attending on a specific day and time. Second, other reasons that differ between MWI and SA may not have been mentioned in the questionnaire because they were less obvious to the patients. For example, attending an MWI clinic requires more planning than attending an SA, due to uncertainties about waiting times in the waiting room. In addition, an active effort is required to cancel an SA, whereas no cancellation is necessary for the MWI clinic. Other less obvious reasons for a lower attendance rate at the MWI clinic than SA are that non-attendance at an SA incurs a fee and is not socially acceptable, while these incentives to attend are not present with an MWI clinic.

While there was no clear preference for an SA over the MWI clinic among respondents who failed to attend the MWI clinic, patients who still wished to attend the clinic preferred an SA over the MWI system. This differs from the preferences identified in our original study, where patients who were randomized to and attended the MWI clinic preferred the MWI system and patients who were randomized to and attended an SA showed no significant difference in preferences.<sup>7</sup> Comparisons should be made with caution, as this study asked for preferences regarding real appointments, whereas our original study asked participants to choose between two, more specific, hypothetical scenarios for future appointments: an SA with 3–4 months of waiting time for the appointment and no waiting time in the waiting room and an MWI clinic with 1–2 months of waiting time for the appointment and up to 1 hour of waiting time in the waiting room. However, our present and previous results suggest that different patients may have different preferences for appointment systems, which is in line with previous research.<sup>4</sup> Based on these various preferences and the potential risk of increasing non-attendance by using one appointment system only, we recommend that two or more systems should be used in parallel. Furthermore, the invitation letter should stress the opportunity to reschedule to a different appointment type if needed.

## Study limitations

The generalizability of the results of this study is limited by the fact that the study was conducted in one clinic only. Furthermore, the sample may have been biased: respondents

were older than non-respondents and people who still wished to attend the clinic were presumably more motivated to return the questionnaire. Thus, the study may have underestimated the proportion of patients for whom problems had resolved. Surveying a comparison group of patients who had not attended an SA would have been useful.

The retrospective nature of the survey is a potential limitation, since retrospectively collected data in general are less reliable than prospectively collected data. However, self-reported reasons for not attending can only be elicited after the fact of non-attending. Thus, no alternative to a retrospective design was feasible.

## Conclusion

There are several reasons that patients may not attend an MWI clinic. Our results suggest that the most frequent reason is related to being unavailable on the days and times of the clinic. We conclude that MWI may be useful for certain groups of patients to reduce waiting times but other appointment systems should be used in parallel to cater for all patient preferences.

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## Author contribution

GJ and LMNH designed the study, GJ collected and analysed the data and GJ and LMNH wrote the manuscript and approved the final version.


## Declaration of conflicting interests

The author(s) declared the following potential conflicts of interest with respect to the research, authorship and/or publication of this article: GJ is a consultant for Novo Nordisk but does not consider this to be a conflict of interest in this work. LMNH declares no conflict of interest.

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