



# THE FINANCIAL IMPACT OF THE PHARMACY OF YOUR CHOICE SCHEME ON COMMUNITY PHARMACIES

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## ABSTRACT

**OBJECTIVE** To give an insight into the financial impact of the Pharmacy Of Your Choice (POYC) scheme on community pharmacies.

**METHOD** A time and motion study was carried out in three community pharmacies that are enrolled in the POYC scheme to provide information on the time allocated to the various activities pertaining to the scheme. Two different methods were used to calculate the costs incurred to implement the system in the three pharmacies.

**KEY FINDINGS** The direct costs that are related to the implementation of the POYC scheme are reasonably close to the government's remuneration.

**CONCLUSION** Expenses incurred due to the POYC scheme run into thousands of Euro every year. Consequently, the POYC scheme does not seem to be very profitable for the community pharmacies where it has been implemented. It is highly recommended that the remuneration by the government ought to be revised.

**KEYWORDS** Pharmacy of Your Choice Scheme, pharmacist remuneration, financial impact.

## INTRODUCTION

The Pharmacy of Your Choice (POYC) scheme was introduced in 2008. The main aim of the POYC scheme was to reduce the long queues at the Health Centre Government Dispensaries. Moreover, monitoring of patients by the community pharmacists can be improved since they ensure that the medicines prescribed are being administered correctly and more patient advice is given on a one-to-one basis when compared to the previous system.<sup>1</sup> As a result of this POYC scheme, there is also a decrease in wastage because patients are not given medications if they are not required, even though they are entitled to them.<sup>2</sup>

The main problem associated with the POYC scheme is the large number of medicines that are out of stock.<sup>2</sup> This is causing unnecessary stress on the pharmacists and patients. The POYC scheme has also affected the daily running of the community pharmacies where it has been introduced. Due to the increased work load, some pharmacy owners had to employ additional staff. The community pharmacists who are involved in the implementation of the POYC scheme now have an increased work load and therefore do not provide their patients with the same service as before the initiation of the POYC scheme.<sup>3</sup>

This study aimed to identify and quantify the activities pertaining to the POYC scheme that are normally undertaken by the three chosen community pharmacies, together with any expenses incurred. The reimbursement by the government is consequently questioned to assess whether it is adequate.

## METHOD

Three pharmacies were identified for the purpose of this study. They were named Pharmacy A, Pharmacy B and Pharmacy C for the sake of anonymity. When the study was carried out, the pharmacies had approximately 200, 500 and 1,500 registered patients respectively.

A time and motion study was selected for the purpose of this research since it was found that this qualitative approach would provide the best information about the research question.<sup>4</sup> The participants in the study were pharmacists who are directly involved in the POYC scheme.

Two templates, which included all the activities related to the POYC scheme, were designed. One template dealt with the back office work that is involved in the POYC scheme, whereas the other listed all the activities that revolve around the patient. Both templates were validated and reliability tests were performed. These tests confirmed the accuracy and precision of the templates, consequently making them valid for future studies.

The time spent on POYC activities in the three pharmacies was quantified for a period of six working days in each pharmacy. The duration of the study was one week to take into consideration both busy and quiet days, to minimise unnecessary bias.

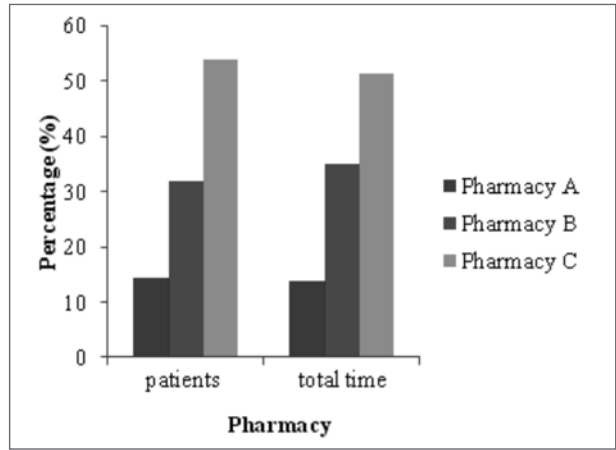


Figure 1: Percentages of patients and the total time spent in the three pharmacies

All the various costs and benefits incurred by the three pharmacies in relation to the POYC scheme were identified and quantified. The time spent on POYC-related activities was converted into monetary terms and the total costs incurred to implement this scheme were identified. These values were subsequently compared to the income from the government to determine whether the latter outweighs the costs.

Two different methods were used to calculate the direct costs incurred to implement the system in the three chosen pharmacies. Method 1 was based on the total time taken on all the activities pertaining to the POYC scheme. This was applied to the three individual pharmacies. The second method was based on the average time taken per patient per pharmacy and the time taken to do back office work was separated from the time taken to deal with the patients.

RESULTS

A total of 598 patients were involved in the study; 86 patients were from Pharmacy A, 190 patients were from Pharmacy B and 322 patients were from Pharmacy C. The total time that was attributed to all POYC-related activities in the three pharmacies was 2900 minutes. About 14% of the total time was spent in Pharmacy A, 35% in Pharmacy B and about 51% in Pharmacy C (Figure 1).

The weighted average time of each activity relating to the POYC scheme was calculated. The results show that some tasks take longer to complete than others. The frequency of most of the tasks occurring in the individual pharmacies varied considerably since the pharmacies had a different number of patients registered with the POYC scheme.

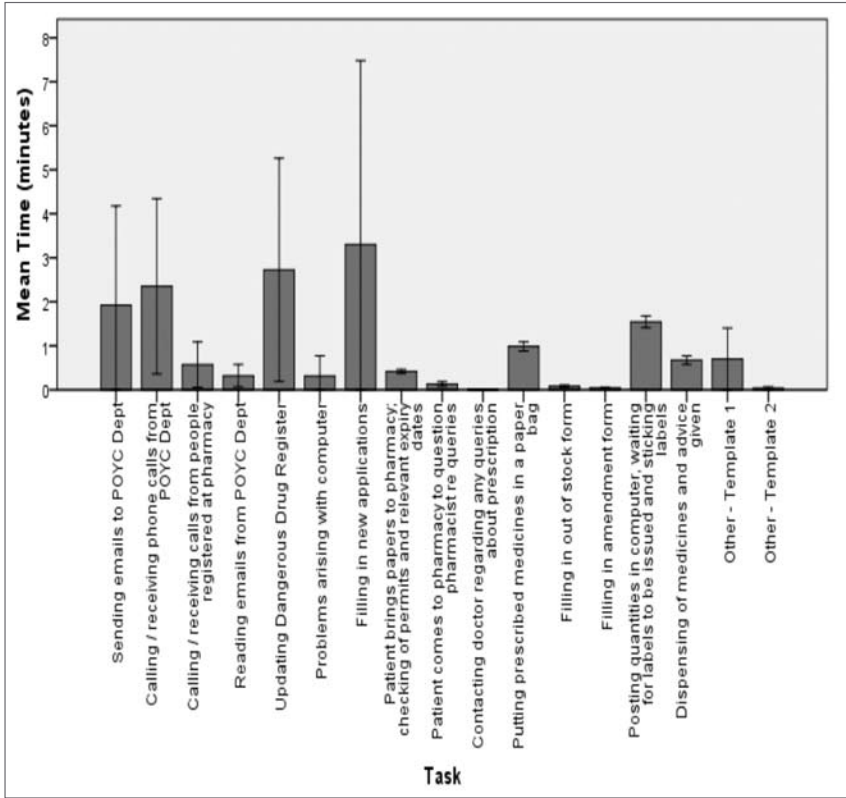
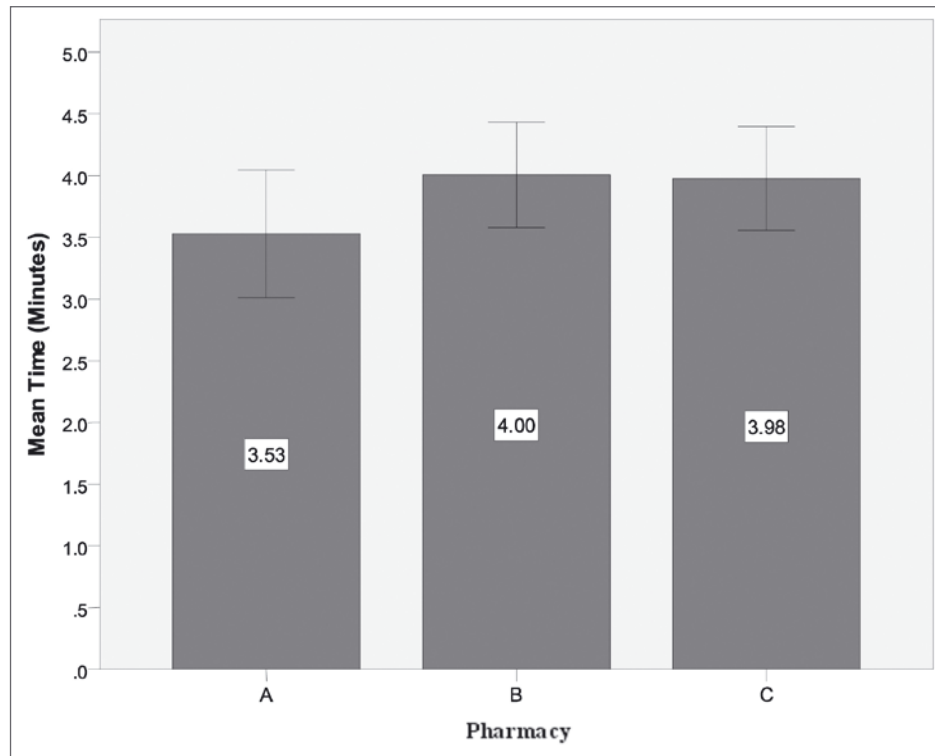


Figure 2: Mean time (minutes) of each task



**Figure 3:** Mean time per patient in three pharmacies

The resulting p value of 0.000 indicates that the mean durations to perform the different tasks vary significantly. If confidence intervals are disjoint, i.e. they do not overlap, this indicates that the mean durations differ significantly. The fact that the confidence intervals do not overlap, explains why the One - Way ANOVA test yields a significant result ( $p < 0.05$ ) (Figure 2).

The average time per patient was 3.53 minutes for Pharmacy A, 4 minutes for Pharmacy B and 3.98 minutes for Pharmacy C. The p value, 0.509, exceeds the 0.05 level of significance and indicates that the mean duration per patient do not differ significantly between the three pharmacies. The fact that the three confidence intervals overlap explains why the One - Way ANOVA Test yields a result which is not significant ( $p > 0.05$ ) (Figure 3).

The cost models for both methods are shown in Table 1. Overheads are not included.

## DISCUSSION

From this study, it is evident that the POYC scheme involves several activities that are related to back office work. These take up a relatively large proportion of the total time that is attributable to the POYC scheme. Nevertheless, such activities are necessary and their importance cannot be underestimated. Back office work and other activities that do not directly involve the patient, such as inputting the dispensed quantities of medication in the computer can be carried out by staff, other than the pharmacist. In this way, more time is dedicated to the patient and to pharmaceutical care.

The overheads for each pharmacy have increased since the start of the POYC scheme. This is particularly so for Pharmacy B and C which have a large number of registered patients. Such overheads include telephone calls, electricity consumption, floor space and an increased

PHARMACY	METHOD 1 (€)	METHOD 2 (€)	REMUNERATION BY THE GOVERNMENT (€)
A	4,991.48	2,203	4,660
B	12,772.76	6,115	11,650
C	18,691.92	11,261	34,950

**Table 1:** Cost models for the pharmacies and comparison with the remuneration by the Government

number of employed staff, incurring extra expenses on wages. Additional costs which include intangible costs, maintenance costs and opportunity costs must also be considered.

In Method 2, it was assumed that each patient goes to the pharmacy to collect the medicines pertaining to the POYC scheme six times a year. This excludes the prescriptions for warfarin and controlled drugs, changes in treatment and out of stock forms. This is why Method 2 gave different results from those of Method 1.

The remuneration from the government may need to be questioned from different aspects. The remuneration for the patients who receive several medications is the same as for those who only take one type of medication. Furthermore, a patient should theoretically go to the community pharmacy six times a year to collect the medicines that are required from the POYC scheme since a two-month supply is dispensed every time. However, due to the prescriptions for warfarin and controlled drugs, out of stock forms and changes in medication, a large number of patients present at the pharmacy several times a year, at times on a weekly basis, thus adversely impinging on the time-factor. The results obtained from Method 2 indicate that the POYC scheme would be more profitable for the pharmacies if such prescriptions were not included. Since this is not possible and it is not in the patients' interests, the government may consider revisiting the remuneration to the pharmacies, thus making the POYC scheme more worthwhile and reinforcing the incentive for pharmacists.

The main limitation of this study is that the research was conducted in a very short time due to the limited amount of time that was available. Consequently, a small sample size was used. In fact, only three community pharmacies were visited. Generalisations to other community pharmacies that have implemented the POYC scheme are difficult to make. A wider spectrum covering a larger sample spread over a longer period of time, would give a clearer indication of the actual situation.

Most of the overheads, such as the intangible costs and benefits, were only mentioned and were not quantified. Future research should attempt to identify and quantify these costs and benefits. Such studies ought to assess in detail the impact of the POYC scheme on the quality of life of the pharmacist who is involved in its daily implementation.

## CONCLUSION

Despite the fact that the study was carried out over a short period of time, the use of a case study report allows the investigator to throw some light on the issues being explored. While there is no attempt to generalise the results

to all pharmacies and pharmacists in the POYC scheme, it is hoped that this study will raise questions about the POYC scheme and open up a forum of discussion.

Expenses incurred due to the system run into thousands of Euros every year. Consequently, not much money is to be made through implementing the POYC scheme. This, however, should not be the case. The service given by the community pharmacies should be adequately compensated for, thus making the implementation of the POYC scheme a worthwhile investment that is rewarding for all stakeholders.

This study was carried out when the remuneration by the government was €23.30 per patient per year. In the future, such payment will increase to €25.63 per patient per year, and later even to €27.96 per patient per year. This however does not necessarily result in larger profits as the incurred costs due to the POYC scheme may also increase. Furthermore, such costs may increase to the extent that the community pharmacies will be worse off than the current scenario. It is therefore recommended that such studies are done and analysed on a regular basis.

Discussions on a broader level regarding the proper implementation of the POYC scheme can be organised. In conducting these workshops, the inclusion of stakeholders, particularly pharmacists who are operating the system in the pharmacies is recommended so that an interactive dialogue will act as an ongoing process to the continued development of the POYC scheme.

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