

*Errata: These paragraphs had transcription errors from the statistical analysis to the evaluation document which was published. This revision corrects the numbers and adds some additional percentage calculations to aid comparison; however, these amendments do not affect the observations or conclusions drawn.*

### Issues at Intervention

For each medicine, whether being taken as prescribed or not, there were a variety of needs that the patient had and which were identified by the pharmacist, as shown in Table 10.

Table 10 - Needs identified at Intervention

Need Identified	Condition	Using As Prescribed	Not Using As Prescribed
Need more information about the medicine	Antiplatelet/Anticoag	1397	149
	Asthma/COPD	3565	1043
	Diabetes	1718	266
	Hypertension	6518	773
Side-effects	Antiplatelet/Anticoag	1721	398
	Asthma/COPD	4041	1176
	Diabetes	4548	926
	Hypertension	20175	4511
Negative feelings about the medicine	Antiplatelet/Anticoag	359	169
	Asthma/COPD	1467	1081
	Diabetes	649	338
	Hypertension	3274	1717
Uncertainty whether the medicine is working	Antiplatelet/Anticoag	663	49
	Asthma/COPD	4843	1285
	Diabetes	1542	168
	Hypertension	7606	718
Concern about remembering to take the medicine	Antiplatelet/Anticoag	191	43
	Asthma/COPD	447	256
	Diabetes	209	77
	Hypertension	772	201

Using the data in Table 6 and Table 10 to calculate the proportion of those patients affected by side-effects provides potential insight into patient attitudes to therapy and disease. The results of this in Table 11 indicate that asthma and COPD therapies have the lowest incidence of side-effects of the four. However, these side-effects cause non-compliance at a higher rate than the other three disease states. Clinical experience indicates that this may be due to patient perception of the ultimate effects of their condition. Thus, the incidence of side-effects for patients on drugs that treat diabetes is twice than that for the respiratory conditions (20.5% compared to 8.4%); however the proportion of non-compliance is lower than the latter. These patients will be aware that their condition has a very real risk of morbidity and mortality. Similarly, those patients with a diagnosis of diabetes or hypertension experience side-effects in a fifth of cases but have higher compliance than those using a respiratory medicines.

The engagement with the patient around the understanding of their condition is therefore relatively more important in the respiratory cohort.

Table 11 - Compliance and Non-compliance caused by side-effects

Condition	Experiencing side-effects but using as Prescribed	Experiencing side-effects so not Using As Prescribed	*Ratio of compliant:non-compliant
<b>Antiplatelet/Anticoag</b>	1721/18607 (9.2%)	398/18607 (2.1%)	4.3:1
<b>Asthma/COPD</b>	4041/62397 (6.5%)	1176/62397 (1.9%)	3.4:1
<b>Diabetes</b>	4548/26766 (17.0%)	926/26766 (3.5%)	4.9:1
<b>Hypertension</b>	20175/128638 (15.7%)	4511/128638 (3.5%)	4.5:1

\* Higher ratio indicates higher compliance and less non-compliance

For the 11,352 medicines that were specifically identified as not being taken as particularly prescribed, where the reason could be elicited they are recorded in Table 12. This question did not mandate a response and the responses were non-exclusive.

Table 12 - Reasons for not using medicines as prescribed

Reason for Not Using As Prescribed	Number of Medicines
<b>Not started the medicine</b>	1642
<b>Prescriber stopped the medicine</b>	1148
<b>Not using as advised</b>	1640
<b>Missed a dose in last 7 days</b>	2410

### Incidents of Side-Effects at Intervention

As we may expect to see different levels of side-effects within each condition area, analysis was performed to examine the rate of adherence to prescribing instructions in Table 13.

Table 13 - Incidence of Side-effects

Condition	Not Using As Prescribed		Using As Prescribed	
	No Side-effects	Some Side-effects	No Side-effects	Some Side-effects
<b>Antiplatelet/Anticoagulant</b>	2866 (15%)	398 (2%)	13622 (73%)	1721 (9%)
<b>Asthma/COPD</b>	11850 (19%)	1176 (2%)	45330 (73%)	4041 (6%)
<b>Diabetes</b>	3526 (13%)	926 (3%)	17766 (66%)	4548 (17%)
<b>Hypertension</b>	17071 (13%)	4511 (4%)	86881 (68%)	20175 (16%)