

Pharmaconomists contribute to counselling and handling drug-related problems at community pharmacies

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A study mapping the counselling activities in community pharmacies with a focus on handling drug-related problems (DRPs).

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Background

Pharmaconomists (the Danish title for pharmacy technicians) are the largest group of staff at Danish community pharmacies. They play a vital role in counselling customers on prescription medication, over-the-counter (OTC) medication and non-medical products.

This is the first study carried out to specifically analyse how pharmaconomists contribute to counselling and how they handle drug-related problems at Danish community pharmacies.

The study was carried out in collaboration between the Danish Association of Pharmaconomists, the Association of Danish Pharmacies and Pharmakon (Danish College of Pharmacy Practice).

Method

The study is descriptive. 76 pharmaconomists from 38 community pharmacies were included from all Danish regions. The pharmacies were selected in such a way that the number of included pharmacies in each region reflected the number of pharmacies as much as possible (Figure 1).

The participating pharmaconomists registered data on all their customer visits to the community pharmacies for five days over a four-week period between January and March 2019. They registered the visits on different days of the week, so that their registration covered the pharmacy's opening hours.

At the beginning of the study period, the pharmaconomists were introduced to the study in a webinar. They received training on registration consisting of an instruction and eight cases, that they had to solve before starting registration. During the study period the research group held two Q&A webinars and could further be contacted for support.

Data analysis

Data was analysed in SPSS version 24.

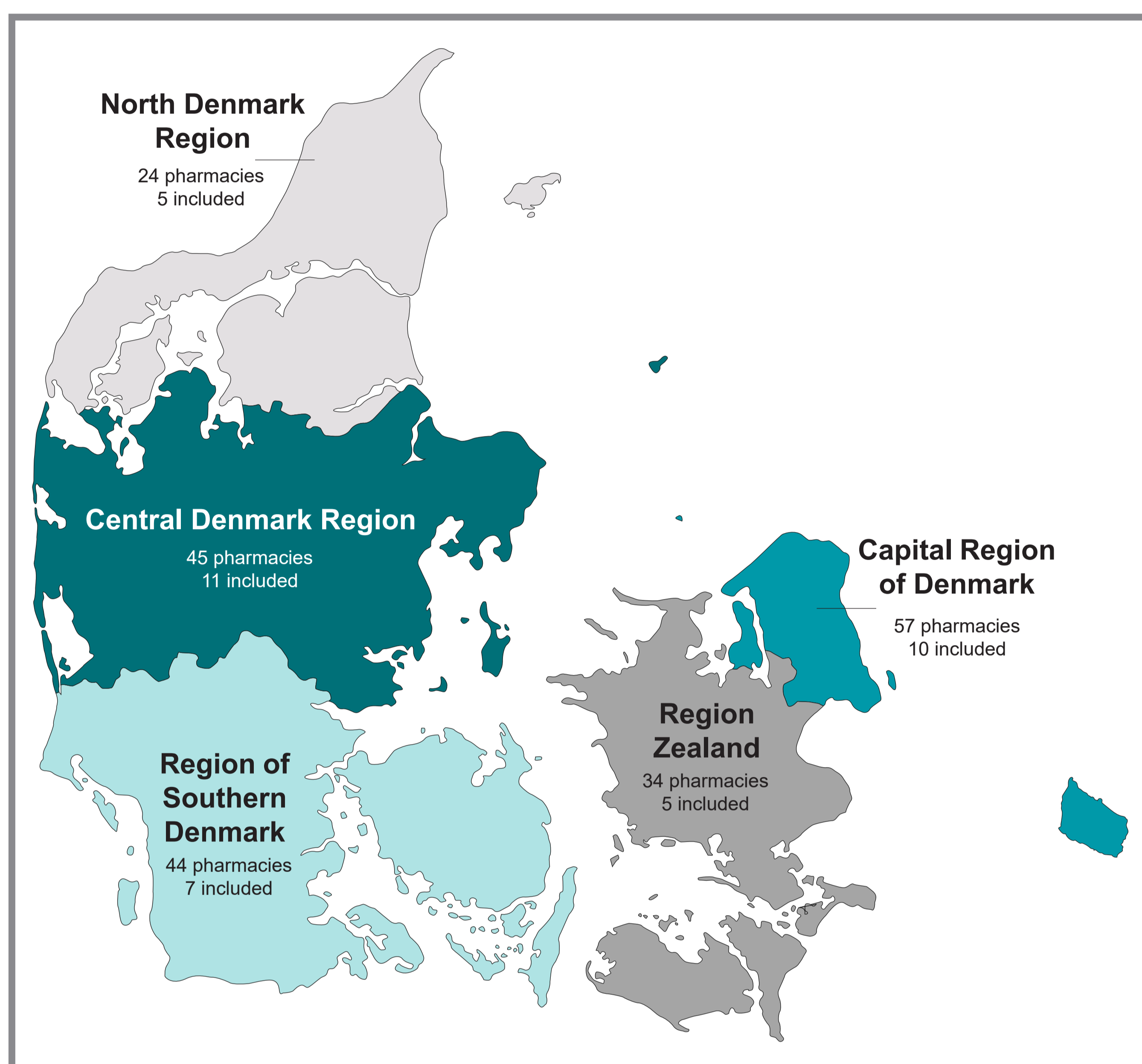


Figure 1: Number of pharmacies included from each region

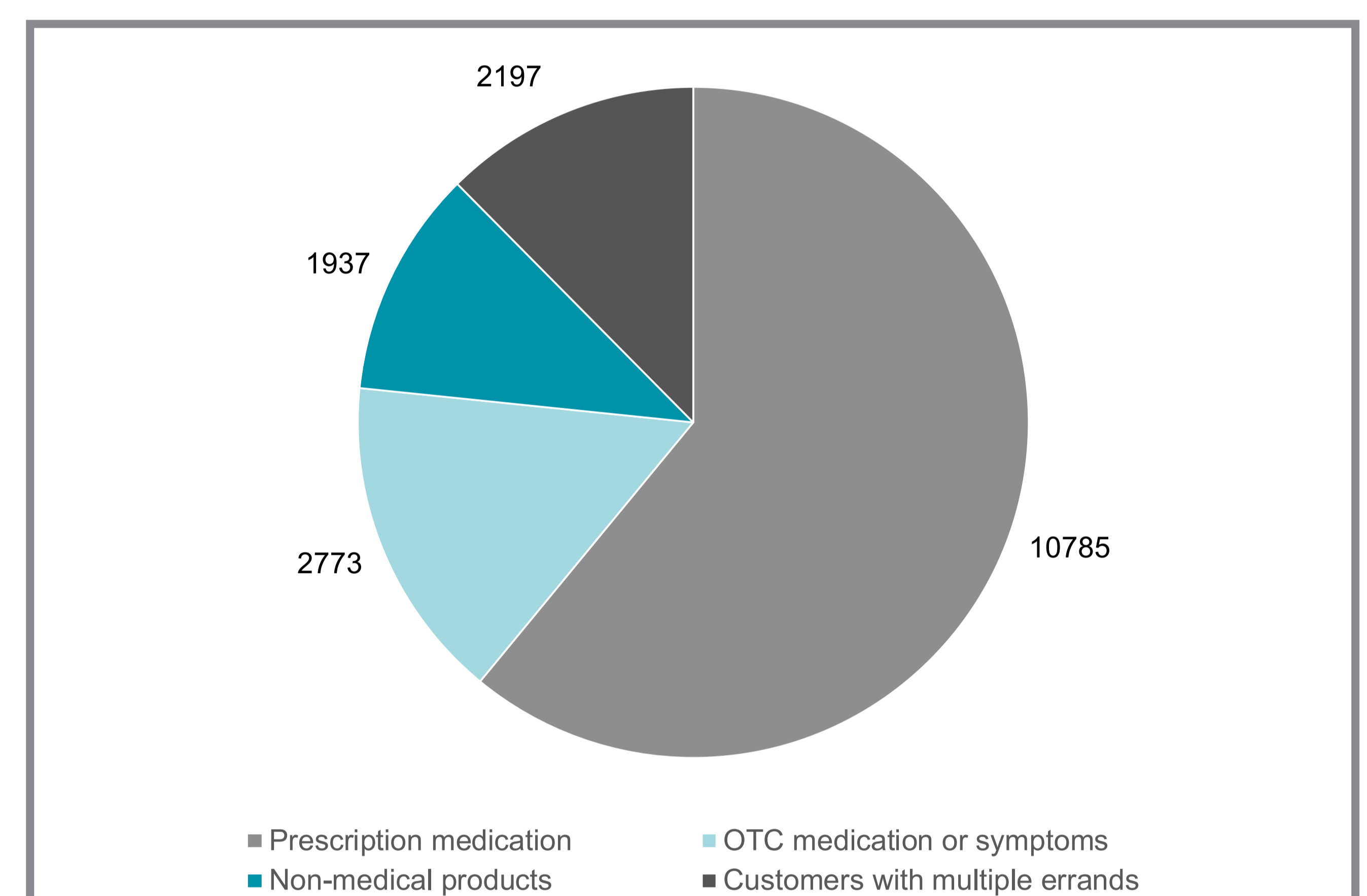


Figure 2: Categories of customers in the study

Results

- Data on a total of 17,692 customers was registered (Figure 2).
- DRPs were identified for 17.8% (n=1,917) of customers requesting prescription medication*, 57.8% of whom received counselling.
- 2.4% (n=262) got their medication after their prescription had been corrected; for 7.1% (n=761) the medication was not handed over due to DRPs.
- DRPs were identified for 12.7% (n=352) of customers requesting only OTC medication or presenting a symptom.
- 46.3% (n=163) requests were solved, 20.5% (n=72) were partly solved, 13.1% (n=46) were not solved and 20.2% (n=71) were registered as "don't know" or lacking.
- 25.2% of customers who received counselling saved a visit to their General Practitioner (GP).

	All customers who received counselling, (N=10,417) n (%)	Customers requesting prescription medication who received counselling, (N=6,050) n (%)	Customers requesting OTC medication or OTC-related symptoms who received counselling, (N=2,773) n (%)	Customers requesting only non-medical products who received counselling, (N=905) n (%)
Personal care	2,987 (28.7%)	1,414 (23.4%)	683 (24.6%)	308 (34.0%)
Adverse reactions	2,743 (26.3%)	1,870 (30.9%)	419 (15.1%)	33 (3.6%)
Effect of the drug/product	3,604 (34.6%)	1,754 (29.0%)	913 (32.9%)	250 (27.6%)
Interactions	448 (4.3%)	214 (3.5%)	126 (4.5%)	20 (2.2%)
Drug/product use	6,079 (58.4%)	3,410 (56.4%)	1,352 (48.8%)	612 (67.6%)
Compliance	1,830 (17.6%)	1,162 (19.2%)	256 (9.2%)	71 (7.8%)
Recommendation of a drug/product	771 (7.4%)	218 (3.6%)	256 (9.2%)	117 (12.9%)
Recommendation of another drug/product than the requested one	467 (4.5%)	104 (1.7%)	164 (5.9%)	76 (8.4%)
Recommendation of automated dose dispensing	14 (0.1%)	13 (0.2%)	0 (0%)	0 (0%)
Drug/product substitution	1,901 (18.2%)	1,525 (25.2%)	96 (3.5%)	16 (1.8%)
Refunding	680 (6.5%)	542 (9.0%)	36 (1.3%)	8 (0.9%)
Medication waste	69 (0.7%)	57 (0.9%)	7 (0.3%)	1 (0.1%)
The pharmaconomist contacted a GP	121 (1.2%)	103 (1.7%)	4 (0.1%)	1 (0.1%)
The pharmaconomist advised the customer to contact a GP	1,336 (12.8%)	841 (13.9%)	233 (8.4%)	51 (5.6%)
Total	23,050 (221.3%)**	13,227 (218.6%)**	4,545 (163.9%)**	1,564 (172.8%)**

Table 1: Counselling subjects used in counselling the total population and the three subgroups. The most frequent counselling subjects are highlighted (threshold value 15,0 %).

Conclusion

Pharmaconomists contribute to medication safety by counselling customers and handling DRPs.

"Drug/product use" was the most frequent subject used in counselling the total population and in all subgroups.

In counselling customers requesting prescription medication, the second most frequent subjects are "adverse reactions" and "effect of the drug". In counselling customers requesting OTC medication, presenting a symptom, or requesting non-medical products, the second most frequent subjects are "effect of the drug" and "personal care".

25.2% of the customers receive counselling that saves a visit to the GP.

*For more results related to drug-related problems, please see poster POS-CPS-042 /FIPSUB-1709: Pharmaconomists contribute to counselling and identifying drug-related problems at community pharmacies.

**The percentage is over 100% due to the fact that some customers received counselling on more than one subject.