

1 HAJDÚ-BIHAR:
• Berettyóújfalu
• Hencida • Komádi
• Magyarhomorog
• Mezőpeterd

2 BORSOD-ABAUJ-ZEMPLEÉN:
• Borsodnádasd
• Arló
• Járdánháza
• Borsodszentgyörgy

3 HEVES:
• Heves
• Átány
• Kömlő
• Tiszanána

4 JÁSZ- NAGYKUN - SZOLNOK:
• Jászapáti
• Jász Kisér
• Jászivány

MI RÉSZT VESZÜNK BENNE!

Effects of GP clusters' operations in light of national health insurance data

Péter Elek (ELTE, SE EMK) and Norbert Kiss (BCE, SE EMK)



- Question: the effect of GP clusters on
 - the number of primary care visits;
 - the number of referrals to specialist outpatient care by specialty;
 - the number of visits to specialist outpatient care by specialty;
 - the expenditures on specialist outpatient and inpatient care and on pharmaceuticals
- Data source: practice-level administrative data from the National Health Insurance Fund Administration (NHIFA)
- Only short term effects are estimated
- Heterogenous effects across specialties

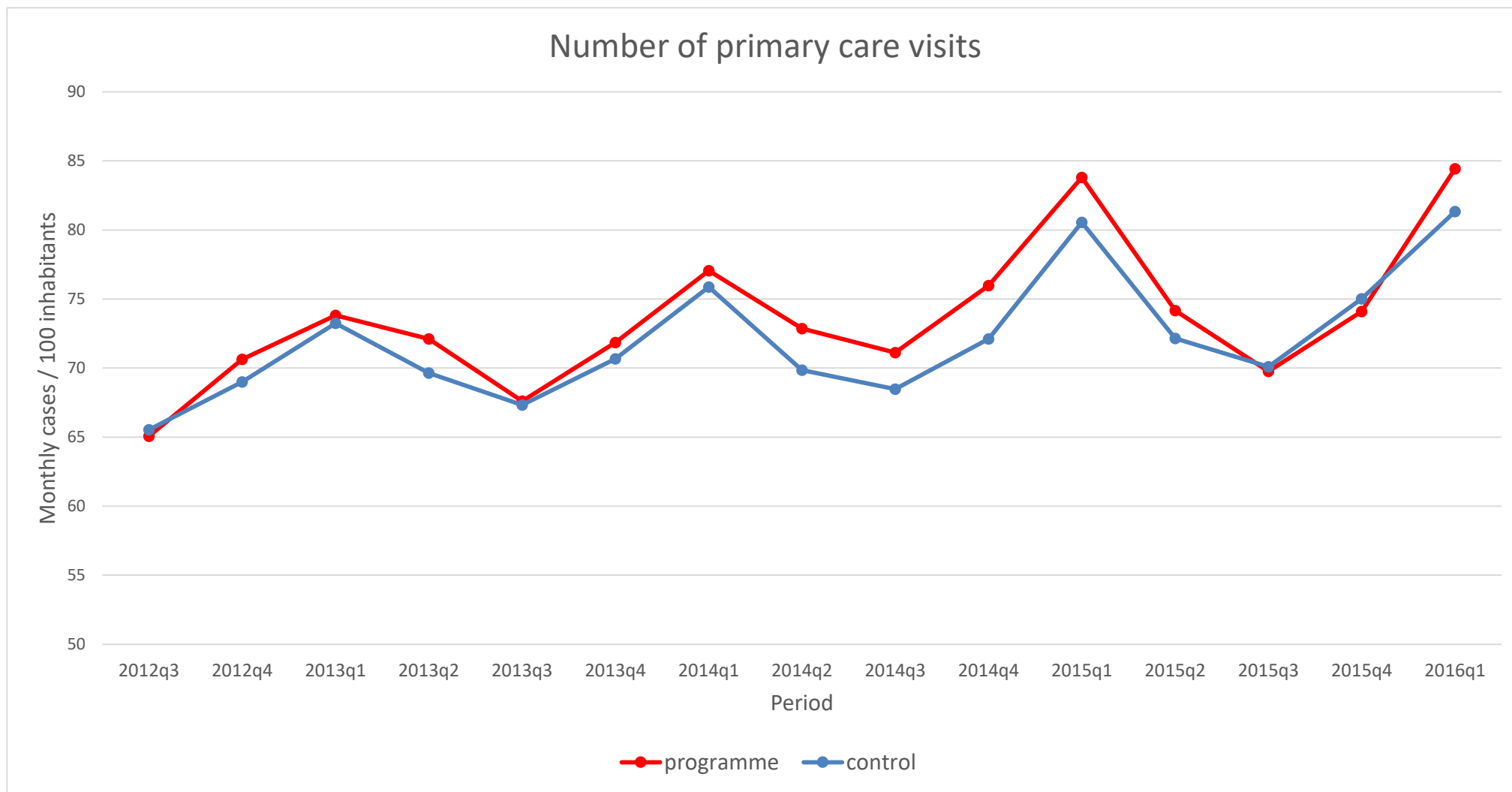


Modelling framework

- Comparison of 21 (adult and mixed) programme practices with a control group
- Control group: 114 practices, which were similar to programme practices across:
 - demographic
 - socio-economic and
 - public health characteristics
- Control group was chosen with propensity score matching (out of the 6500 GP practices in Hungary)
- Panel regression estimates on practice-level data



Primary care visits



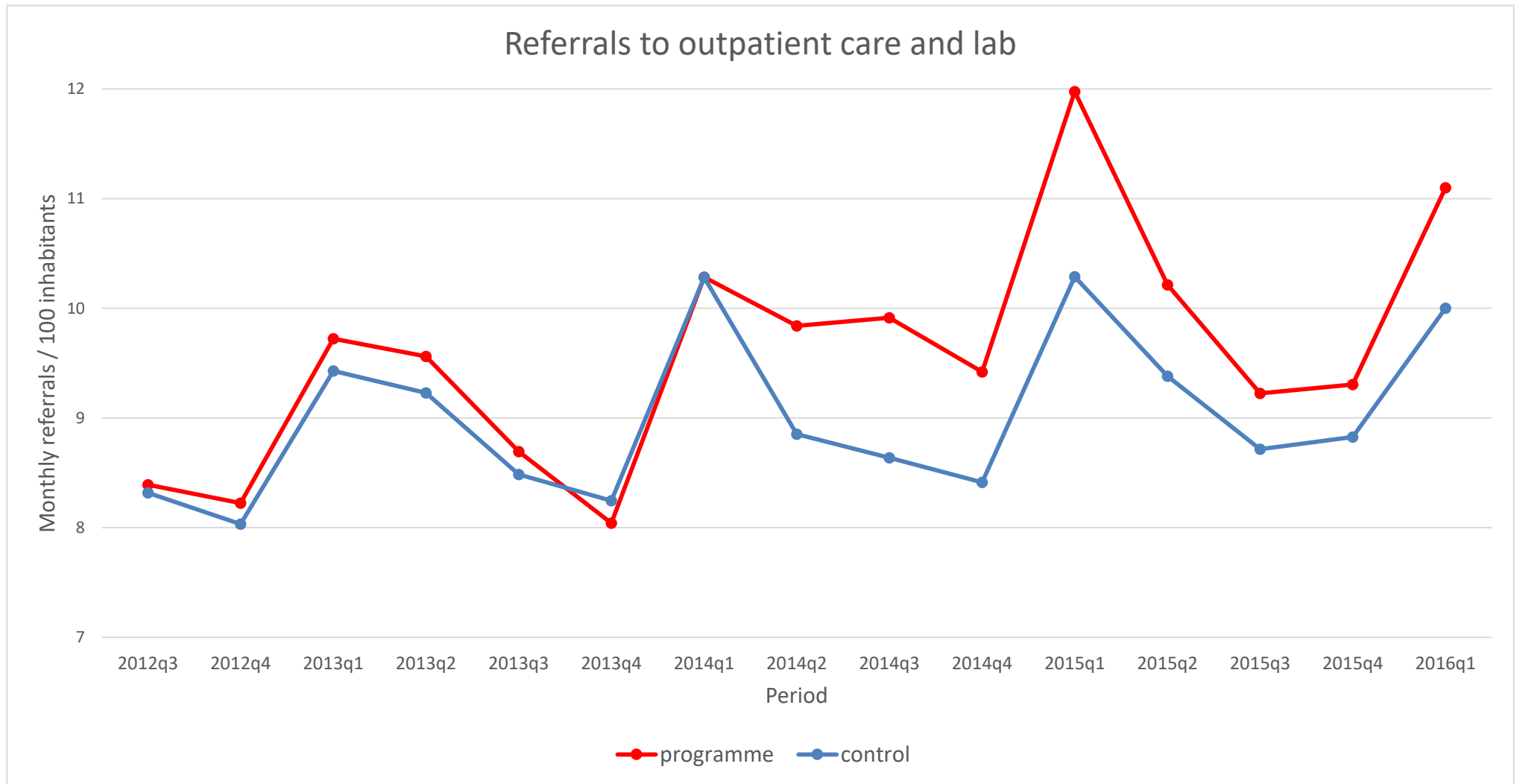
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Referrals to specialist outpatient care and lab diagnostics



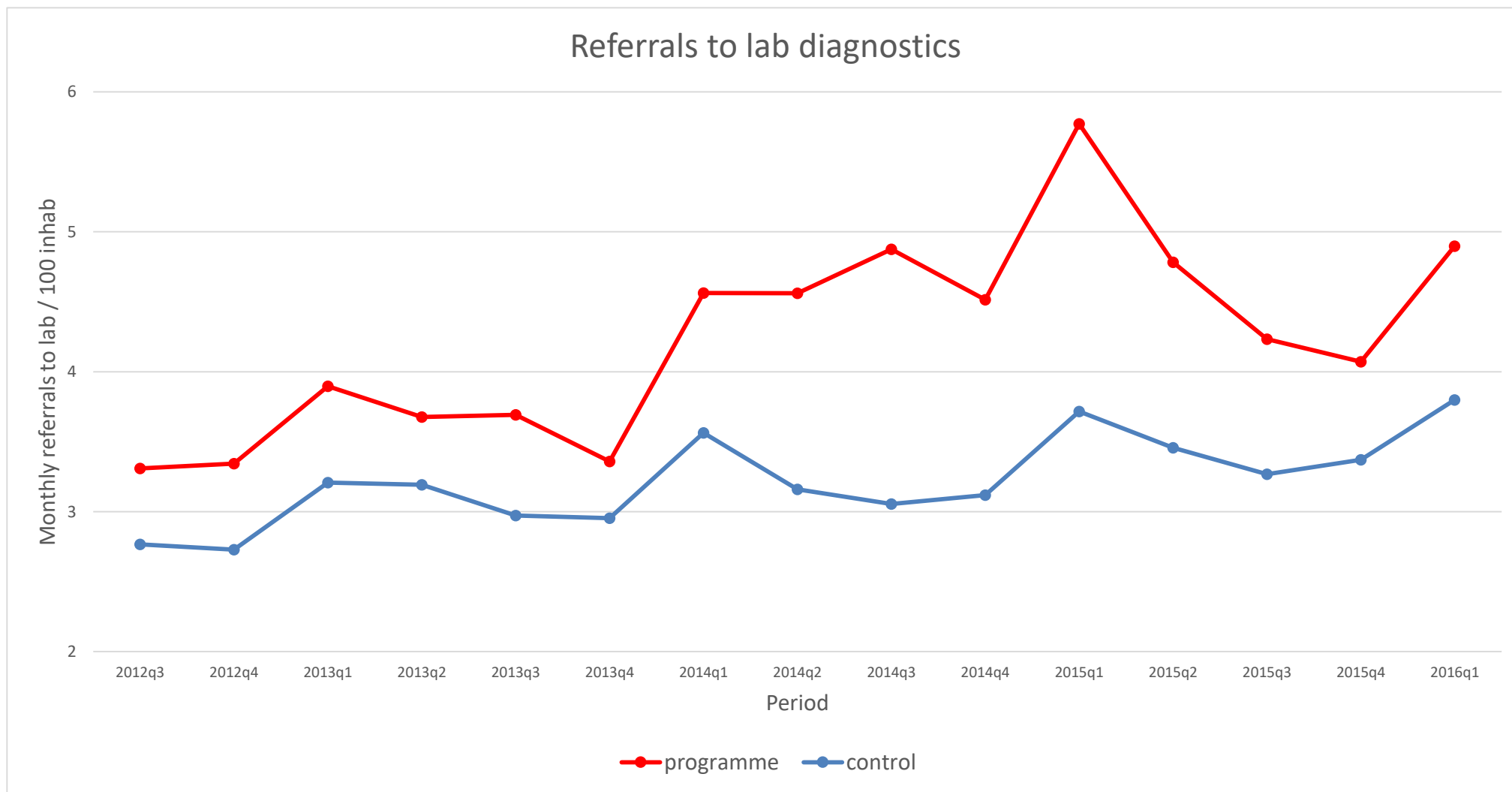
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Referrals to lab diagnostics



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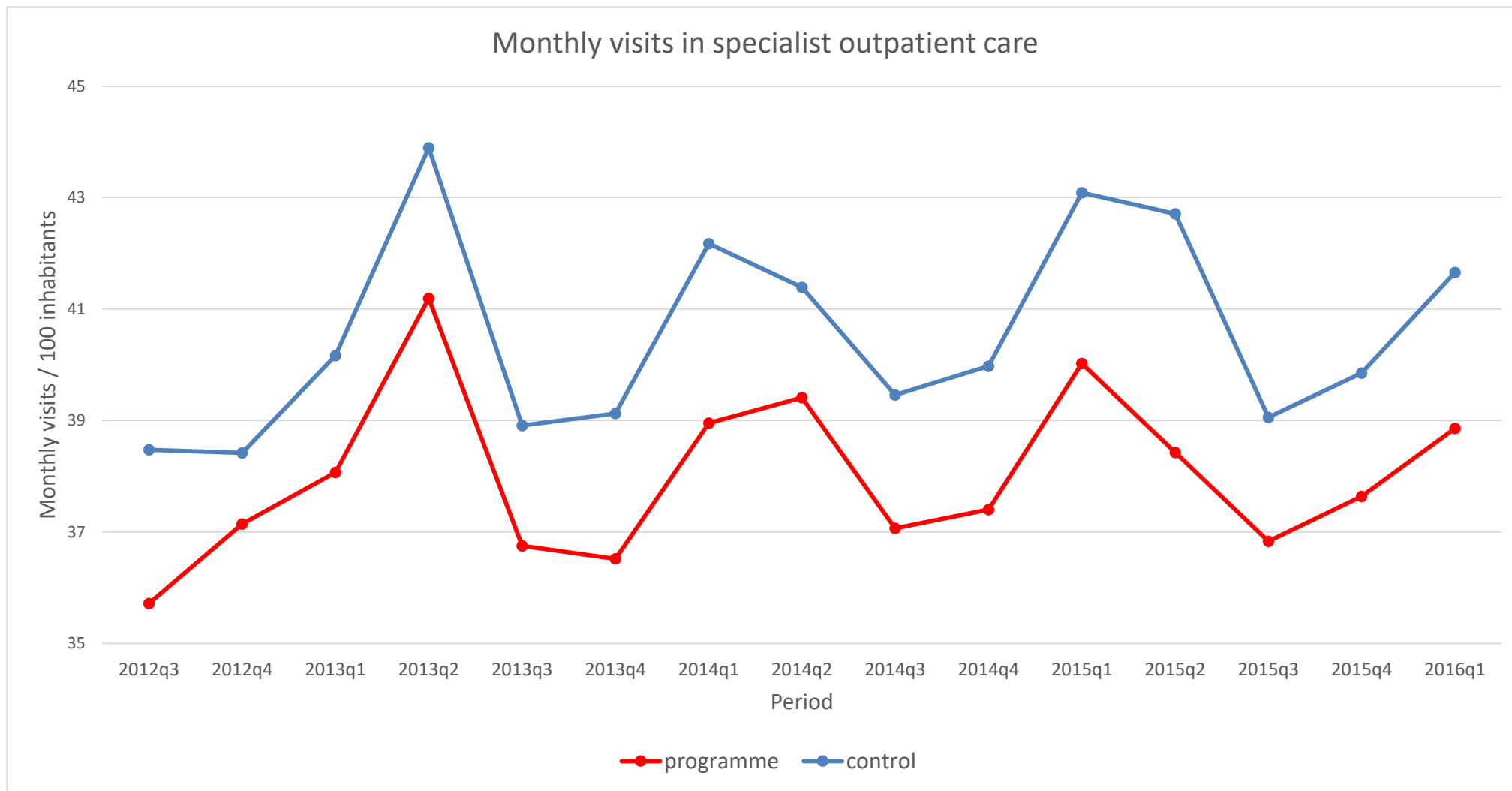


Regression results on referrals: positive lab effects, substitution effects in related specialties

Dependent variable	Monthly effect per100 inhabitants (with significance and S.E)	Effect in per cent
Patient visits at GP	2.27* (1.30)	3%
Referrals to outpatient care and lab	0.60 (0.43)	7%
-- to laboratory diagnostics	0.85*** (0.30)	8%
-- to dietetics	-0.034 (0.028)	-22%
-- to physiotherapy	-0.11** (0.057)	-17%
-- to health psychology	-0.031** (0.015)	-19%



Visits to specialist outpatient care (excluding lab diagnostics)



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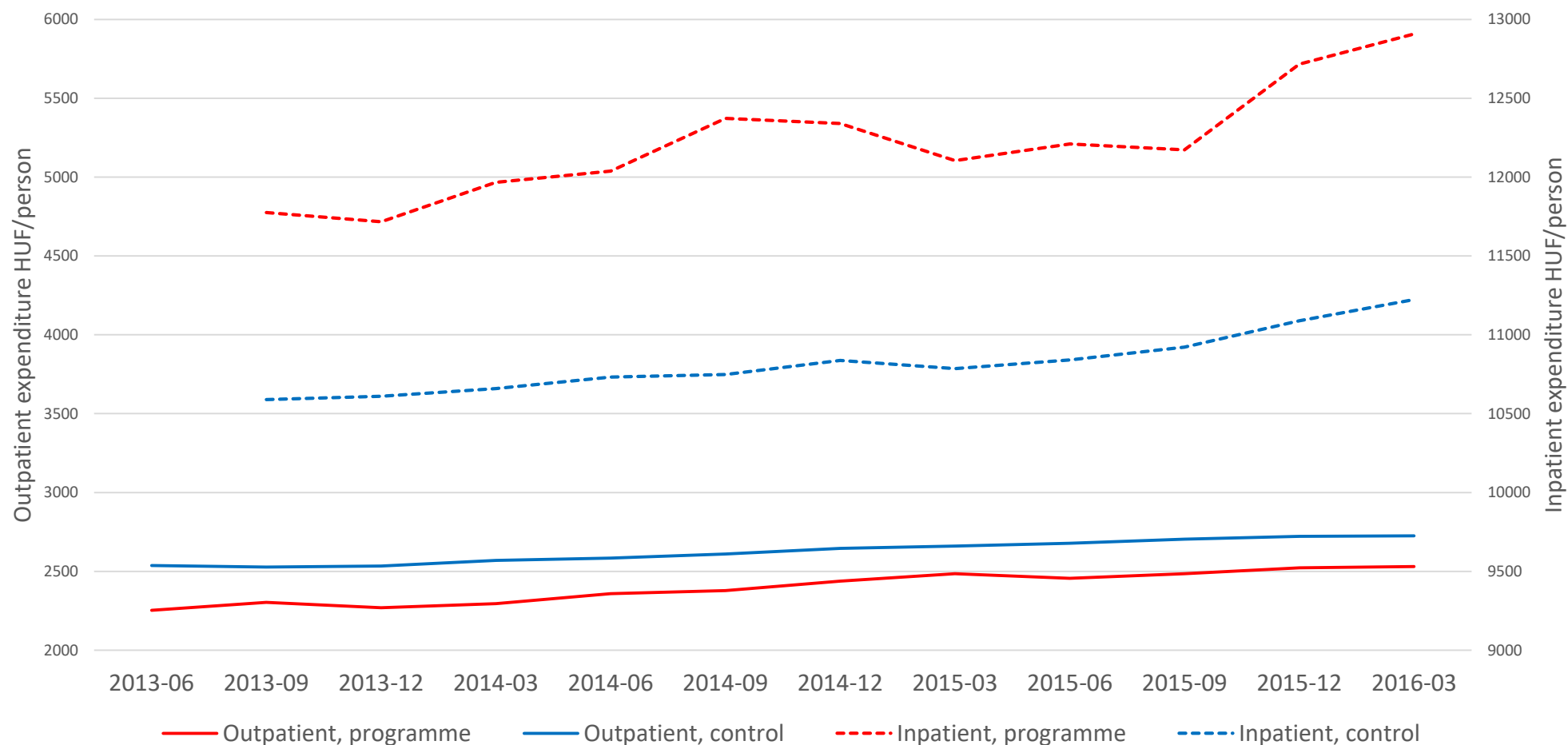
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Specialist outpatient and inpatient expenditures

Expenditures on specialist outpatient and inpatient care (moving averages)



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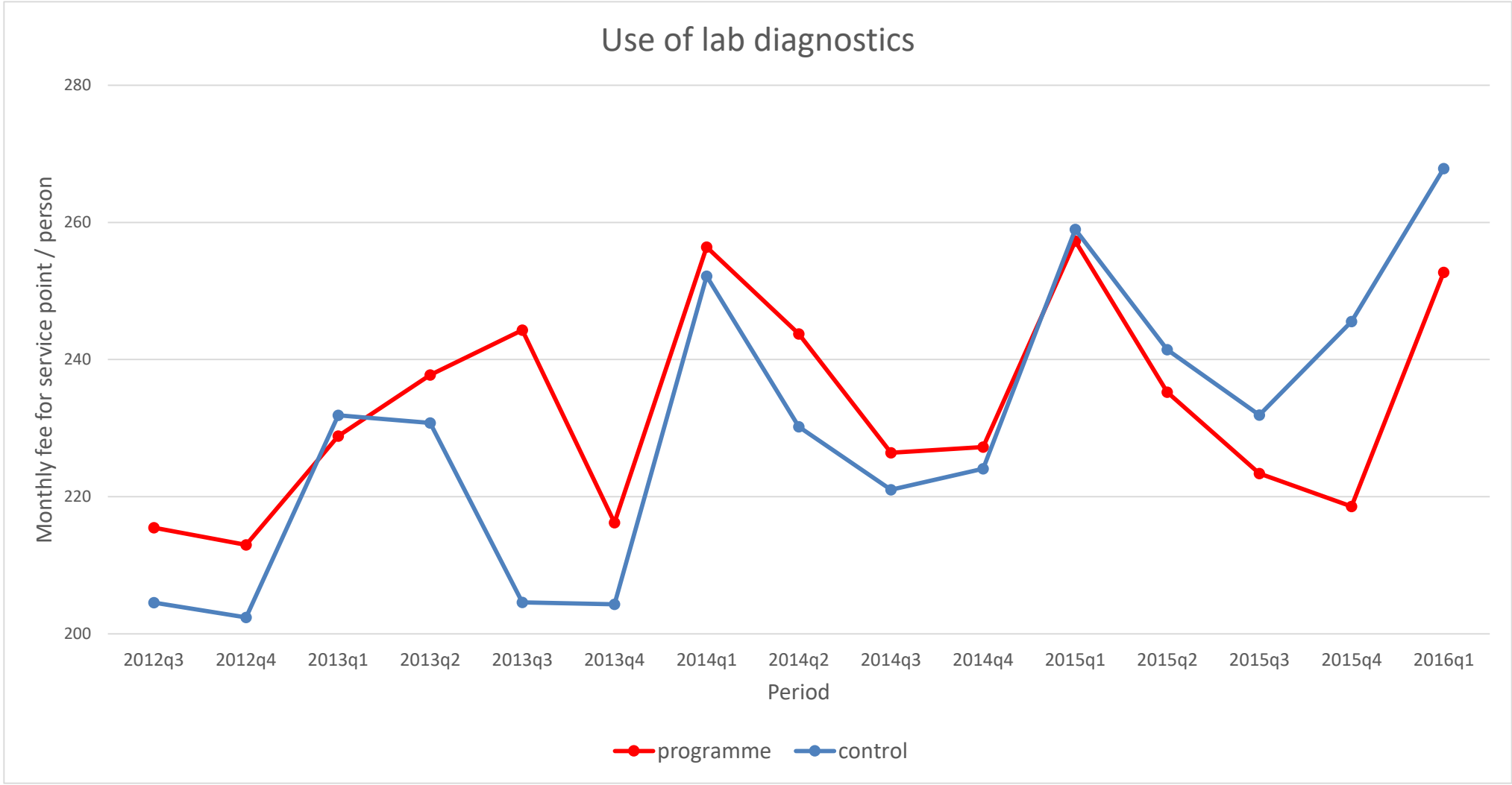
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Expenditures on lab diagnostics

Use of lab diagnostics



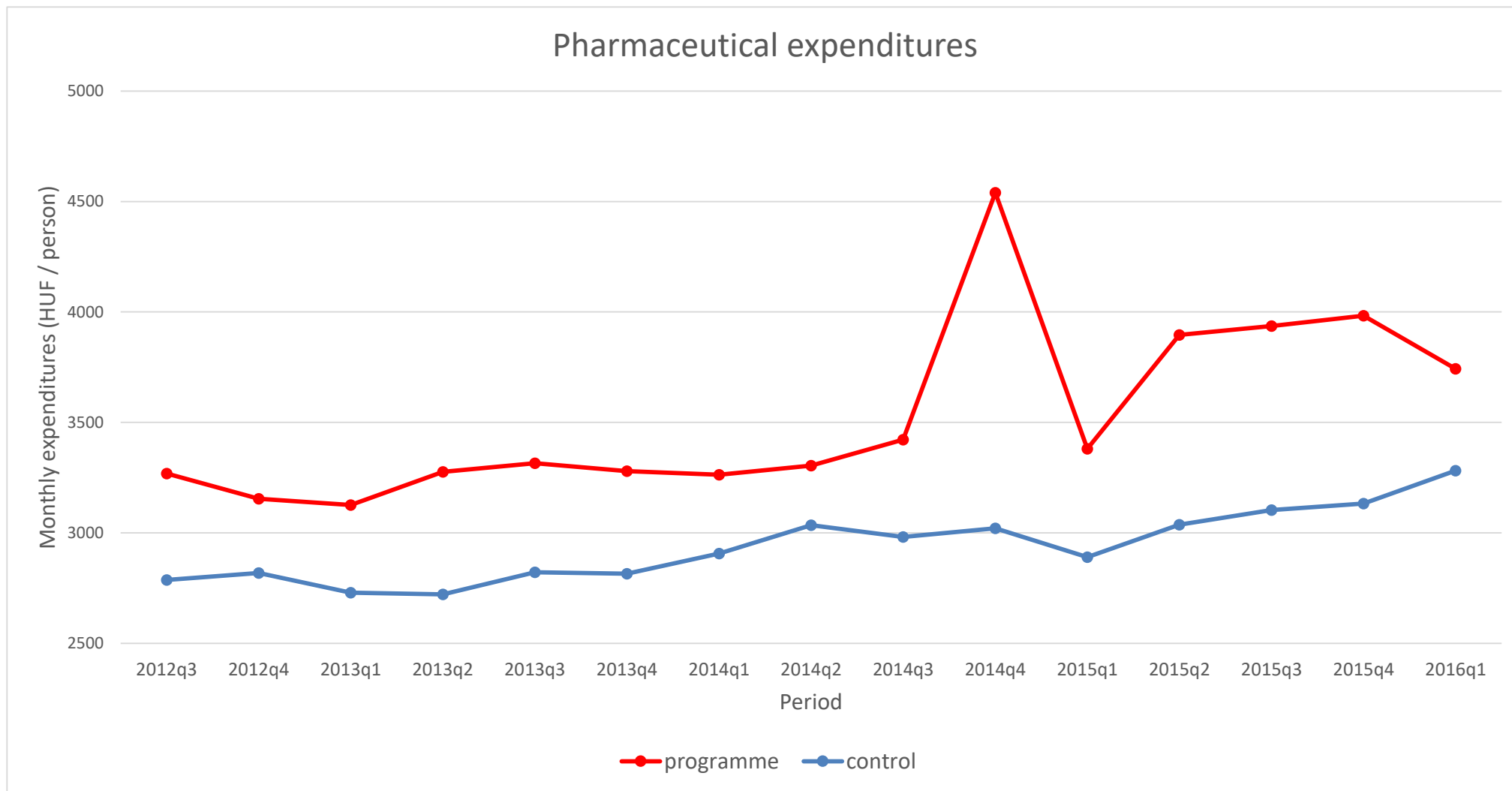
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Pharmaceutical expenditures



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Regression results on expenditures: insignificant effects

Dependent variable: expenditure on	Effect in per cent	Standard error
Outpatient care	2.4%	(1.8%)
Laboratory diagnostics	-3.0%	(3.2%)
Inpatient care	2.2%	(3.1%)
Pharmaceuticals	1.7%	(2.5%)



Discussion and conclusions

- As expected, the programme generated additional GP visits and laboratory referrals
- Referrals to programme-related specialties of outpatient care decreased
- The programme did not generate substantial extra burden on specialist outpatient care, inpatient care and pharmaceuticals