

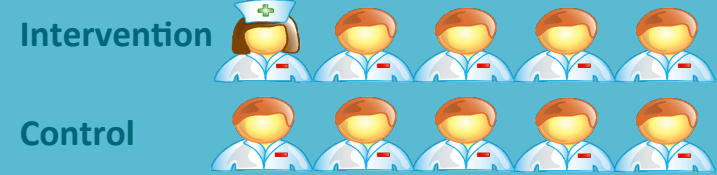
# The (cost-)effectiveness of Nurse Practitioners providing out of hours primary care

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## Design

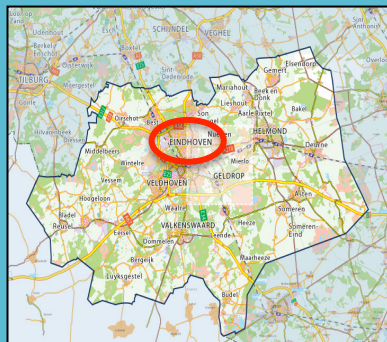
**Objective:** To assess the effects of substitution of care from GPs to NPs in an out of hours primary care setting.

Quasi-experimental study



**Period:** April 2011 to July 2012 (65 weekends)  
10am to 5pm Saturday and Sunday  
5 week blocks rotation Saturday and Sunday

**Setting:** GP Cooperative (GPC) South East of the Netherlands, providing out of hours primary care for 304,000 people during evening, nights, weekend and holidays. GPC is located near emergency department of a hospital



## Findings

Number of patient contacts

	Intervention	Control
GP	5,053	6,025
NP	987	x
Total	6,040	6,025

ICPC diagnosis: 70% of all NP consultations concerned, complaints:

Skin: 31.2%  
Musculoskeletal 22.2%  
Airways 16.3%

6.9% of all NP patient contacts included a consultation of the GP

Prescription (n=5,206):

abs(%)	Intervention	Control
GP *	2,172 (43.0%)	2,668 (44.1%)
NP	366 (37.1%)	x
Total	42.5%	44.1%

Referral Emergency Department (n=1,319)

abs(%)	Intervention	Control
GP *	569 (11.3%)	700 (11.6%)
NP	50 (5.1%)	x
Total	10.2%	11.6%

NS

Productivity

Contacts/hour	Intervention	Control
GP	3.5	3.2
NP #	3.0	x
Total	3.3	3.2

NS

Average time per contact:

15 minutes (GP) }  
18 minutes (NP) }

\* p<0.01; corrected age, gender, ICPC diagnosis

# P<0.01; Corrected for: holidays, Saturday/Sunday, number of professions, number of patients, and type of profession (NP/GP)

## Conclusion

NPs provided equal safe care compared with GPs. In theory, 3 GPs could be replaced by 3NPs in a team of 5 professionals.

Substitution ratio

