International comparisons of selected service lines in seven health systems

ANNEX 11 – CASE STUDIES: GP POSTS IN THE NETHERLANDS

Evidence Report
October 27th, 2014
# GP Posts in the Netherlands – why this case study?

## Why this case study?

- Rates of A&E attendance are lower in the Netherlands compared to England:
  - 278 per 1,000 population per year in England, compared to 119 per 1,000 in the Netherlands
- In the Netherlands, urgent care is available out-of-hours through GP Posts organised through regional GP co-operatives. Though GP out-of-hours care is available in the NHS in England, and GP-led Urgent Care Centres and/or GPs based in A&E exist in many places, this had not the same impact on A&E admissions here

## Potential impact on costs

- The cost of a GP Post attendance in the Netherlands is less than the cost of an A&E attendance:
  - EUR257 compared to EUR92
  - Lower costs are due to lower overheads\(^1\), and lower rates of investigations and diagnostic tests and fewer referrals and follow-up appointments
- GP out-of-hours care is funded on a capitation basis, which may be better suited to cost-containment than an activity-based funding model

## Issues of comparability

- Payment for health insurance in the Netherlands is not comparable to the NHS in England:
  - In the Netherlands, patients are required to pay a compulsory deductible (or “excess”) if they use any health service (including A&E) with the exception of GP-provided care. This provides an incentive to see a GP rather than go to A&E
  - GPs in the Netherlands cannot “opt out” of out-of-hours care. If they are not part of a HDS/GP Post co-operative (1-2% of GPs are not) they must provide OOH care themselves

## Potential impact on quality

- It is not possible to make a direct comparison of the quality of GP Post care to similar care provided in the NHS but studies of the care provided by GP Posts in the Netherlands have found it to be of good quality

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1 Lower “setting” costs and lower GP salaries compared to Emergency Medicine consultants
Description and executive summary

- Over the last ten years, GPs in the Netherlands have formed “GP Posts” - consortia to collectively cover out of hours care
  - GP posts are physical locations, staffed by GPs, open in the evening and at night, on weekends and bank holidays
  - Patients with an urgent care need are triaged over the phone and, if necessary, are seen in the post or visited by the GP
  - Almost all GPs in the Netherlands (98-99%) are part of a GP post
  - There are 124 posts in total, each covering a population of around 130k – but individual sizes vary

- Co-location of a GP post with the hospital A&E is common
  - Many GP post are relocating to hospital premises, where they benefit from shared resources and infrastructure
  - The A&E benefits as a proportion of patients will be seen at the GP post instead of the A&E, reducing the workload
  - For the patient, co-location increases accessibility and integration of care

- There are a range of different colocation models, based on location of the GP post and the entity responsible for triage
  - **GP post outside the hospital**: GP post is near the hospital but both function as separate entities
  - **In the hospital, but separate from the A&E**: while the GP post is in the hospital, the two are separate physical departments
  - **Before the A&E**: the GP post can function as a first contact, triaging all emergency patients and referring urgent cases to A&E
  - **Together with A&E**: care is delivered as one department, staffed by A&E doctors and GPs
  - **Replacing A&E**: where a hospital does not have a hospital run A&E, the GP post can fill in that function

- The GP posts tariffs are based on a capitation formula which takes into account the rural setting of the post

- The main issue the GP post model faces is patient confusion around which services are available when and how to access them
  - A&E: available 24/7, open access
  - GP post: available during out-of-hours only, telephone access initially with a visit if seen as necessary
  - GP: available during office hours only, telephone or open access

- There exist a number of important system-level factors that drive or enable the model of GP posts providing emergency care
  - **Patient expectations**: In the Netherlands, patients with emergency care needs are more likely to consult a GP, and 40% of patients arriving at the A&E are referred by their GP, compared to 5% in England
  - **Financial incentives for patients**: While A&E attendances fall under the compulsory deductible, all GP care is excluded, thus providing a financial incentive for patients to use GP posts instead of the hospital
  - **Financial incentives for providers**: The Minister of Health, Wellbeing and Sport has announced starter subsidies to encourage cooperation between GP posts and A&Es, however it is unclear to what degree this has been implemented
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GPs in the Netherlands provide out of hours care through GP posts

- General practitioners (GPs) are responsible for the provision of out of hours (OOH) care to their registered patients
- To provide OOH coverage, almost all GP practices are organised in HDSs (GP service structures)
  - An HDS on average consists of 150 GPs, ranging from 10 to 900\(^1\)
  - There currently are around 53 HDSs\(^1\)
  - Around 1-2\% of GPs are not part of a HDS and organise OOH care themselves\(^1\)
- OOH care is delivered by the GPs in the HDS through GP posts\(^1\)
  - Each HDS has one or more GP posts
  - These locations provide OOH care for the patients registered with the HDS’ GPs
  - The GPs all cover shifts at the GP post

**Practical information on GP posts**

- GP posts provide out of hours care\(^2\)
  - 5pm – 8am on weekdays
  - 5pm Friday – 8am Monday on weekends
  - 8am – 8am on bank holidays
- Patients need to call the GP post for a telephone triage, based on which they may get an appointment or a home visit\(^2\)
- Around half of all patients get an appointment and visits the GP post at their purpose-built offices
- A clearly marked car with chauffeur is available for (emergency) home visits\(^3\)
  - The car carries medical equipment like respirators and defibrillators
  - Blue warning lights can be used in case of an emergency
  - The chauffeur is usually trained to assist the GP if necessary
- GP posts are primarily staffed by the HDS’ GPs, and 80\% have triage nurses\(^4\)

**Diagram**

- Government\(^5\)
- 16 million people
- 53 HDS, with on average 150 GPs and a population of 300k
- 124 GP posts serving a population of 130k

**Sources:**
GP posts play an important role in out-of-hours emergency care

Triage over the phone
- Telephone consultation with a doctor’s assistant/triage nurse
  - 49% of patients go to the GP post
  - 10% of patients receive a home visit
  - 41% of patients are dealt with by phone

Triage at the hospital
- 38% of hospitals require all patients to be triaged by GP
- At 35% of hospitals the patient chooses between A&E and GP; and 7% of hospitals do co-triage
- 6% of hospitals require patients to be triaged by A&E

GP post
- 7% of patients are referred from the GP post to A&E
- 93% of patients are managed in the GP Post
- 47% of patients who have been referred to A&E by a GP are discharged vs. 86% of self-referrers
- 54% of patients referred to A&E by a GP are admitted vs. 14% of self-referrers

A&E
- 41% of patients are dealt with by phone
- 14% of patients are discharged
- 10% of patients receive a home visit

Home**

Hospital admission

Note: remaining 14% of hospitals have no specific agreements

Self-referral to hospital with A&E and GP post

Patient requiring out of hours care*

* 5pm – 8am on weekdays
5pm Friday – 8am Monday
8am – 8am on bank holidays

** includes patients that were treated by GP/A&E, or referred to see their normal GP or an outpatient specialist later

GP posts have grown rapidly over the last ten years

- Until recently, GPs organised OOH care within their own practice
  - They were on call, or worked together with one or two other practices
  - An average GP in a practice with 4 practitioners would cover 1,500 hours per year for a small population

- Since 2001 GPs have rapidly started forming larger consortia to cover OOH care through GP posts
  - Before 2001 GP posts already existed, but in 2001 they were included in the Quality Law for Healthcare Institutions and got their own reimbursement scheme
  - In this new model, an average GP now works only 209 OOH hours a year, but covers a larger population

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**Number of GP posts in the Netherlands**

<table>
<thead>
<tr>
<th>Year</th>
<th>Posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>34</td>
</tr>
<tr>
<td>2001</td>
<td>75</td>
</tr>
<tr>
<td>2002</td>
<td>109</td>
</tr>
<tr>
<td>2003</td>
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<td>2009</td>
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<tr>
<td>2010</td>
<td>125</td>
</tr>
<tr>
<td>2011</td>
<td>124</td>
</tr>
</tbody>
</table>

Co-location of the GP post with an A&E is encouraged, and in 2010 most hospitals had a GP post in their hospital or nearby

- Co-location of a GP post with an A&E provides benefits to both parties:
  - Shared resources and infrastructure
  - Improved patient pathway for both GP visitors and A&E self-referrers
  - Better integration of care

- The number of GP posts co-located with a hospital A&E increased from 61 in 2007 to 85 in 2010, with another 10 planning to relocate

- While this trend is encouraged by the Ministry, patient organisations and the GPs association, there are no laws or standards involved

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The Netherlands has significantly lower rates of A&E attendances than the other health systems reviewed.

Number of A&E visits per 1,000 population, 2012/13

<table>
<thead>
<tr>
<th>Country</th>
<th>Visits per 1,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>119</td>
</tr>
<tr>
<td>Victoria</td>
<td>273</td>
</tr>
<tr>
<td>England</td>
<td>278</td>
</tr>
<tr>
<td>Ontario</td>
<td>437</td>
</tr>
<tr>
<td>Arkansas</td>
<td>474</td>
</tr>
</tbody>
</table>

1 Or latest available data
2 Type 1 and type 2 A&E departments only (excluding walk-in centres and minor injuries units)

SOURCE: HSCIC, Performance.health.vic.gov.au, Nationaal Kompas Volksgezondheid, Hospital Emergency Department Audit MoH Ontario, Kaiser Family Foundation State Health Facts
In the Netherlands, replacing A&E with GP care is a cost-effective model

A large proportion of self-referred A&E visits could be treated by GPs...

Of the self-referrers in the Netherlands presenting to A&E, 40% are of low urgency and/or complexity,

- Low urgency and/or low complexity: 40%
- Urgent and complex care: 50%
- Medical transport or referral: 10%

... which is significantly cheaper

For patients with a low urgency/complexity care need, attending the A&E is almost twice as expensive as a GP Post visit

Reasons for lower costs at GP Posts (as identified in cost comparison study):
- Lower overheads
- Lower rates of investigations and diagnostic tests
- Lower rates of onward referral (to be seen by specialist)
- Lower rates of follow-up appointments
- Case mix may partially explain differences

1 Lower “setting” costs and lower salaries for GPs compared to Emergency Medicine specialists
2 Note that the study (Giesbers et al, cited below) compared low urgency/complexity cases only

At any time, a large proportion of patients in the Netherlands requiring A&E care will go through the GP

A&E referral methods\textsuperscript{1,2}

Percentage of patients in the Netherlands and England

Studies have shown that GP posts deliver high quality care and patient safety

- GP job satisfaction and work life balance improved\(^1\)
  - Average time on-call during OOH for a GP was reduced from ~19 hours per week before GP posts to an average of 4 hours per week\(^1\)

- Overall, patients are satisfied with OOH care received through GP posts\(^1\)
  - Patients are highly satisfied with the medical care provided as well as communication\(^1\)
  - However patients who received a telephone consultation from a nurse were less satisfied than patients who received a face-to-face consultation\(^1\)

- Rate of patient safety incidents in GP posts is 2.4\(^\%\)\(^1\)
  - Most incidents concerned patients receiving inadequate or suboptimal treatment (e.g. no treatment, the wrong treatment, or delayed treatment), and most did not result in patient harm\(^1\)
  - In NHS medium sized acute hospitals the rate of patient safety incidents is 6.7\(^\%\)\(^2\)

- GP posts have provided good access to care
  - The average waiting time is 30 minutes\(^1\)
  - Nearly 90\% of all patients needing a home visit were visited within 1 hour\(^1\)
  - In case of life-threatening conditions, 70\% of patients were reached by the GP post within the time target of 15 minutes\(^1\)

- Triage nurses estimated the level of urgency correctly in 69\% of contacts\(^1\)
  - In 19\%, urgency was underestimated
  - In 12\%, urgency was overestimated

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There are different models of collaboration between GP post and A&E

The most basic level of co-location is when a GP post is located on the hospital premises.

GP posts situated within the hospital building can follow four models:

- **Separate from the A&E:** while the GP post is in the hospital, the two are separate physical departments.
- **Before the A&E:** the GP post can function as a first contact, triaging all emergency patients and referring urgent cases to A&E.
- **Together with A&E:** care is delivered as one department, staffed by A&E doctors and GPs.
- **Replacing A&E:** where a hospital does not have an A&E, the GP post can provide an urgent care service.

**Models of co-located GP posts in the Netherlands, 2010**

- **100% = 128 GP Posts**
- **Separate from A&E:** 20.3%
- **On hospital site but separate building:** 20.3%
- **Co-location possible but not planned:** 5.5%
- **Co-location planned:** 7.8%
- **With A&E:** 3.1%
- **Replacing A&E:** 7.0%
- **Before A&E:** 15.6%

1 Co-location not possible as no hospital with A&E department in the locality

SOURCE: Scientific Institute of Quality of Healthcare: Samenwerking huisartsenposten en spoedeisende hulp - Inventarisatie van huidige situatie, 2010
The budget for a GP post is calculated based on population size, rural setting, volume expectations and quality incentives.

- Care delivered out of hours by GPs through an HDS is paid differently than normal GP care
  - Normal GP care is a combination of a capitated payment for registered patients as well as a fee-for-activity
- OOH care is paid through capitated budgets based on the catchment population of the HDS, consisting of:
  - **Basis contribution of EUR 11** (GBP 9) per person
  - **Rural subsidy of EUR 2.78** (GBP 2.20) per person living in a rural area, defined as outside a town with more than 70,000 people
  - **Volume related contribution of maximum EUR 2.28** (GBP 1.80) per person, based on expected volumes per person
    - The maximum contribution is set at an HDS with more than 27 consults per 100 persons
- This calculated budget is set at 90% of budget, another 20% is given based on quality agreements between the HDS and the insurers
- Based on this budget and the expected activity, a tariff is set and GP post get paid their budget by ‘completing’ their activity. In case activity exceeds the expected levels, the GP post can claim up to 12% extra

<table>
<thead>
<tr>
<th>Percentage of total budget</th>
<th>Basis contribution</th>
<th>Rural subsidies</th>
<th>Volume related contribution</th>
<th>Total set budget</th>
<th>Quality incentives</th>
<th>Potential total budget</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>90</td>
<td>20</td>
<td>12</td>
<td>110</td>
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<td>90</td>
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<td>110</td>
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</table>

**SOURCE:** VP Huisartsen & KPMG Plexus: De basisspoedzorg: hoe het anders kan, Nov 2012
The consultation tariff varies nationally, and favours rural areas

By dividing the budget by the number of expected consults, a tariff is established for face-to-face consults
- Telephone consults are set at EUR25 for every GP post

Since the budget depends on a large number of factors (see previous slide), the average tariff for a GP post is variable

Rural GP posts receive on average higher tariffs

SOURCE: Nationale Atlas Volksgezondheid
The main challenge the model faces is around getting patients to the right care setting, at the right time

- Since GP posts only operate during out of hours, in practice there are three different models for emergency care:
  - A&E: available 24/7, open access
  - GP post: available OOH only, telephone access
  - GP: available during office hours only, telephone or open access

- A large proportion of patients self-referring to either GP posts or A&E could have received care through another route
  - Self-referring A&E attendees could have gone to GP, or GP post if OOH (ca. 40%)
  - GP post attendees could have waited until office hours to see a GP (ca. 50%)

- One suggested solution to this problem could be to create a general urgent care service
  - The urgent care service would replace the GP posts but provide service day and night
  - It would work closely with the A&E to provide integrated care

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There are a number of system-level factors that drive or enable the GP Post model of urgent care

Supply side factors

**Regulatory framework**

- GPs are required to provide out-of-hours care. GP Posts have emerged as the preferred organisational model to deliver this contractual requirement (prior to their introduction, GPs worked many more hours “on call”).

**Financial incentives for providers**

- The Ministry of Health, Wellbeing and Sport has promised to make funds available (“starter subsidies”) in 2012 and 2013 to encourage collaborations between GP Posts and hospitals

Demand side factors

**Financial and non-financial incentives for patients**

- Patients have a minimum EUR360 (ca. GBP300) compulsory deductible per year
- While A&E attendances fall under this deductible, all GP care is excluded, thus providing an incentive to use GP posts instead of the hospital
- The Ministry of Health, Welfare and Sport (MoHWS) is looking to develop other incentives to curb A&E attendances, after a EUR50 contribution for self-referrers was rejected

IT systems can make a significant contribution to the effective functioning of GP posts

IT systems play an important role for GP post in enabling integrated care. While the use of technology is currently still limited in the Netherlands, there are some interesting initiatives.

ZorgDomein, used by more than 75% of GPs for digital referrals, has developed a similar system for GP posts:

- The system is similar to choose-and-book, with GPs being able to decide with the patient which institution to refer to and make a direct appointment
- When referring to the A&E, the A&E receives all the information from the GP post required to deliver the right care

The Association of Health Centres Amsterdam is working to provide GP posts access to GP records:

- The main issue around OOH care at a GP post is the lack of information on patient history
- There are several reasons why it is difficult to provide GP posts access to GP patient information
  - At the GP post, the patients is unlikely to be seen by their normal GP, which means that all GPs in the GP post would need to be granted access to patient information
  - The GP post is at a different location than the normal GP practice, so IT systems are needed to access the data
  - All GPs would need to use the same systems to enable easy sharing of data
- The initiative at the Association of Health Centres Amsterdam is still in very early stages, but aims to provide GPs at GP posts with the complete records of the patient attending
  - The Association is well placed to start this project, as it has a large number of GPs working together to implement the right IT systems and governance