A study into the local costs of the FNP programme in England Summary Report

November 2012

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Summary & key findings

The key findings from this study

- The average total cost of delivering an established FNP team (year 2 onwards) is **£3,083** per case per annum, varying between **£2,469** and **£3,648**
- This is consistent with previous findings and is based on a typical team of four family nurses (caseload 100), a full-time supervisor and a part-time administrator. The cost reduces to an average of **£2,664** per case per annum for a team of eight FNs (varying between **£2,136** and **£3,129**)
- The average cost rises to £3,275 per case in year 1 due to additional set-up costs such as equipment, IT, and office supplies
- On average, staff-related costs (including travel) represent the majority (approximately 73%) of the total costs of a typical FNP team
- Non-staff costs are dominated by overheads charges, premises costs, IT charges and the cost of equipment and office supplies
- Travel costs (for client visits and to attend national training) account for only 3% of staff-related expenditure and, as expected, rural sites have the highest travel costs. They are also more likely to make use of car leasing schemes, however, tend to have lower overheads and premises costs
- There is also variation in the size of the geographical area covered by teams, and differences in the way teams are organised locally, both of which drive variation in costs
- There is quite a marked variation in the costs teams incurred for Psychology services, due to different arrangements with host or partner organisations
- We could not identify any specific economies of scale amongst providers with more than one team, however, they did tend to have a slightly lower than average total cost
- In the future, we can expect staffing costs to rise in line with NHS pay terms and conditions, along with increases in some non-staff costs, in particular premises, technology and travel

Executive summary

The aim of this study was to establish the full range of current, local level costs (both direct and indirect), of delivering the Family Nurse Partnership programme in England. Within this, we were looking to understand how those costs are broken down across different cost categories and the extent to which there is variation in particular costs across different teams. Our aim was also to determine the annual cost of delivering a typical FNP team and an FNP place at the local level.

Overall findings

The study, which uses cost data from 44 FNP teams for the 2011/12 financial year (out of 67 teams that were contacted), has shown that the average cost of delivering FNP locally, to an expected caseload of 25 clients per full time family nurse, and based on a typical FNP team of four family nurses, one supervisor and a part-time (0.5) administrator, is **£308,323** per annum, or approximately **£3,083** per case on average for an established team. This is consistent with the previous figure of approximately £3,000 per case determined from earlier work by Birkbeck College[1], and which was based largely on expected staffing costs.

The total cost rises to an average of **£3,275** per case per annum in year 1, which is likely to be the result of additional set-up costs, however, further analysis is needed to understand the comparative profile of non-staff costs between new and established teams given the wide variation in reported figures (between £1,382 per case and £152 per case amongst sites in their first year).

More importantly, however, the total cost per case varies from approximately **£2,469** (lower quartile) to **£3,648** (upper quartile) per case, due to a combination of differences in staffing costs (including the mix of experience in the team, staff opting out of the NHS pension scheme, and high cost area supplements), and non-staff related costs (such as overheads and infrastructure costs).

[1]Barnes, J., Ball, M., Meadows, P., Belsky, J. (2009) *Nurse Family Partnership Programme: Implementation in England - Second Year in 10 Pilot Sites: the Infancy Period,* London, Department for Children, Schools and Families. https://www.education.gov.uk/publications/standard/publicationDetail/Page1/DCSF-RR166

Variation according to team size

As expected, the cost per case also changes according to the number of family nurses per supervisor in the team. The data shows that a team of eight family nurses, one supervisor and a full-time administrator can be expected to cost between **£2,136** (lower quartile) and **£3,129** (upper quartile) per case per annum in both staff related and non-staff related costs, with an average cost of around **£2,664.**

This means that the average staff related cost per case reduces by approximately 10% from a team of four family nurses compared with a team of eight, whilst average non-staff costs reduce by nearly 21%. This is because certain non-staff related expenditure is less sensitive to changes in the number of staff in a team.

The costs of delivering FNP locally

Staff- related costs such as wages, high cost area supplements (where they apply) and employer on-costs make up on average around 73% of the total costs of FNP teams nationally, with non-staff costs largely driven by overheads charges, equipment and premises costs. However, in many cases, teams were only able to provide estimated or notional values for premises and infrastructure costs (such as IT) because these are provided by their host organisation and not charged directly to the FNP team.

Staff related costs when adjusted for caseload did vary quite noticeably across the teams, but with no specific trend according to wave or region. Whilst the overall staffing costs for London teams was towards the higher end nationally, we found that those teams tended to employ family nurses on Agenda for Change pay points at or below the national average (probably due to the nature of the London workforce), and have lower staff related travel costs therefore offsetting the impact of the additional high cost area supplement. Across all teams, gross pay (including any high cost area or other supplements) and employer on costs, accounted for 97% of total staff related costs (including travel costs).

Sites that started in October 2011 (wave 5a) reported higher equipment, office supplies, IT, and premises costs, due to the additional investment required in these areas during year 1. All other non-staff costs were in line with those teams from earlier waves (teams in place for more than 1 year). Despite adjusting the data for both wave 5a and wave 5b sites to reflect a full year and to enable comparison with other sites, the low non-staff costs reported for wave 5b (sites that commenced in January 2012) suggests that much of their data is incomplete and it is too early for the full impact of set-up costs to be reflected in the data for these teams. Few sites were able to provide an estimate for the costs of local training (such as statutory and mandatory training), since this is generally provided by the host organisation and often forms part of an overheads charge.

Rurality has very little impact on staff related costs apart from travel costs, although rural sites did tend to have lower non-staff costs, driven by lower overheads charges and little or no premises costs for half of the rural sites that submitted data. This may be due to a greater tendency for rural sites to have access to premises free of charge, or to operate from a greater number of smaller premises. However, we found no definitive evidence of this, either in the data submitted or in our follow-up discussions with rural sites.

Travel costs

The cost of travel connected with delivering FNP services (generally to undertake client visits and to attend national training) is one of the few costs that might be expected to vary according to the actual caseload of an FNP team over the course of the year. As expected, travel costs in urban and semi-urban areas were noticeably less than for rural teams. Rural sites reported average travel costs of just over £90 per case, over twice that of urban and semi-urban teams. Rural sites also had a greater tendency to make use of lease cars for FNP staff, with these costs making up 28% of all travel costs in rural areas and 10% or less elsewhere. These figures are based on an expected caseload and have not been adjusted for actual caseloads during 2011/12.

Psychology costs

Although expenditure on Psychology services represents only a small proportion of the overall costs of delivering FNP, it forms an essential part of the service and teams are required to provide approximately four hours per month.

We found considerable variation in the costs reported for Psychology services (between £0 and £77 per case per annum). This is due to a combination of both the number of hours provided, and the way the service is commissioned by the team. At the upper end, teams reported paying an external provider around £150 - £200 per hour for four hours per month. Others receive the service from within their own organisation, or from a partner organisation (such as the local authority or CAMHS provider) with little or no cost attributable to the FNP budget. Some teams also reported funding less than the 4 hours per month (usually 3 or 3.5 hours).

Miscellaneous items

We asked sites to provide information on any other non-staff related costs they had incurred in 2011/12 that didn't fit within the cost categories identified in the data collection tool. Just under half reported a zero return. In many of the other sites, the miscellaneous costs were largely attributable to one or more of the other cost categories, such as office equipment, hospitality, books and stationery. Other items included:

- Recruitment costs
- Interpreting costs
- Vehicle insurance, and
- Removals and transport of equipment.

Variation in service delivery models

Although FNP operates according to a very well-defined service delivery model, we found evidence of a number of different variations in the way teams are organised, the way services are commissioned, and the approaches to delivering FNP services locally. Some of these variations are the result primarily of a drive to minimise cost, whereas others are designed to maximise the ability of the service to meet local needs and strict quality standards within the resources available. The combination of these variables is likely to drive the cost of any given team to a greater extent than where the team is located, how long the team has been established, and whether it covers a predominantly rural or urban population.

The most common variables we identified during the course of this study included:

- Rural teams do not necessarily cover a wide geographical area and may operate on a localised basis, therefore reducing travel costs and management costs (for example, supervision) compared with teams covering a wider area
- Some teams have adopted a very centralised model where they operate from a single base (often to improve the level of supervision and support, and to provide access to equipment), whereas others are more dispersed on a day to day basis, coming together periodically for team meetings, training and professional supervision. This may have a direct impact on the costs of premises (including storage space) and the amount of travel required, particularly for the supervisor
- Infrastructure costs, such as IT, mobile telephones and premises, are often 'hidden' because these may be funded by the host organisation and not attributable directly to the FNP budget

Looking to the future

In our discussions with FNP sites throughout the duration of this study, we identified a number of areas where costs might change in the future and those things that will put additional pressure on FNP budgets over the coming years. Given our findings, the most significant of these will be the continued growth in staffing costs, particularly as family nurses in newer teams move to higher pay points. However, there are other areas where growth might be expected although it is difficult to estimate at this stage how significant this will be:

- **Premises** – there is likely to be increasing pressure on FNP teams to fund the costs of the premises they occupy, particularly where they operate from children's centres or other non-NHS facilities
- **Travel** – whilst the cost of travel per case is unlikely to change to any great extent (other than with respect to changes in mileage allowances and the cost of leasing schemes) some teams may become more dispersed as they expand, resulting in greater distances and more frequent travel, both for client visits and supervision. Expansion may also allow greater centralisation around particular geographical patches therefore reducing the need to travel as far
- **Technology** – many teams currently operate with limited mobile technology (other than mobile telephones). Based on the learning and experience of other teams, however, there is likely to be growing pressure to equip staff with devices that enable more efficient ways of collecting and sharing data, communicating with clients, and providing access to support and information. This may increase non-staff costs in the short term.

Final comments

It is important to recognise that our analysis, where possible, includes both actual and notional costs for certain non-staff related cost items. This is so that the overall estimate is not understated. Whilst some teams do not actually incur charges for these items (for example, IT infrastructure charges), they do reflect a real cost of delivering FNP locally. In addition, our analysis is based on an expected caseload of 25 cases per full-time Family Nurse – it does not reflect the actual caseloads of the teams in 2011/12. This is because many of the costs associated with FNP are fixed according to the number of staff in the team. However, travel costs may be understated if actual caseloads are well below the expected size. Staffing costs may also be understated if the team was able to carry a vacancy during the year because of lower than expected caseloads.

It is hoped that these findings provide both new and expanding teams with a useful reference point for the costs they can expect to incur, both as an established team, and taking into account the likely set-up costs incurred in their first year. The expected rise in staffing costs, along with growing costs associated with premises, travel and technology, are also factors that should be taken into account as FNP expands nationally over the next few years.

Purpose of the study

The purpose of this work

Apteligen

Background

The Family Nurse Partnership (FNP) programme is an evidence based, early intervention and preventative programme for young first time mothers and their families. Family Nurses work with first time young mothers to improve pregnancy outcomes, child health and development, and the economic self-sufficiency of families. This helps to deliver improved child development, reduced reliance on welfare, reduced criminal behaviour of both child and parent, and better life chances. Family Nurses work with some of the most vulnerable, disadvantaged and deprived members of the community. FNP began in the UK in 2007 and more recently, the Government has made a commitment to increase the number of FNP places to 13,000 (at any one time) by 2015.

Purpose

The overall purpose of this study was to bring together for the first time a comprehensive dataset of local costs associated with delivering the FNP programme in England. The aim was to generate a better understanding of the main cost drivers locally so as to facilitate more effective planning for the expansion of the programme over the coming years. More specifically, the aims of this study were to determine:

- What it costs to run a typical FNP team (in 2011/12) of four full-time family nurses, a full-time supervisor and a part-time (0.5 WTE) administrator
- What the range of costs are
- The factors that influence those costs, and how and why they vary (the study looked at time since establishment, geographical location and coverage, and rurality
- The cost per case (FNP place) based on a typical caseload of 25 per WTE family nurse, and
- The likely implications for the future expansion of FNP over the next few years.

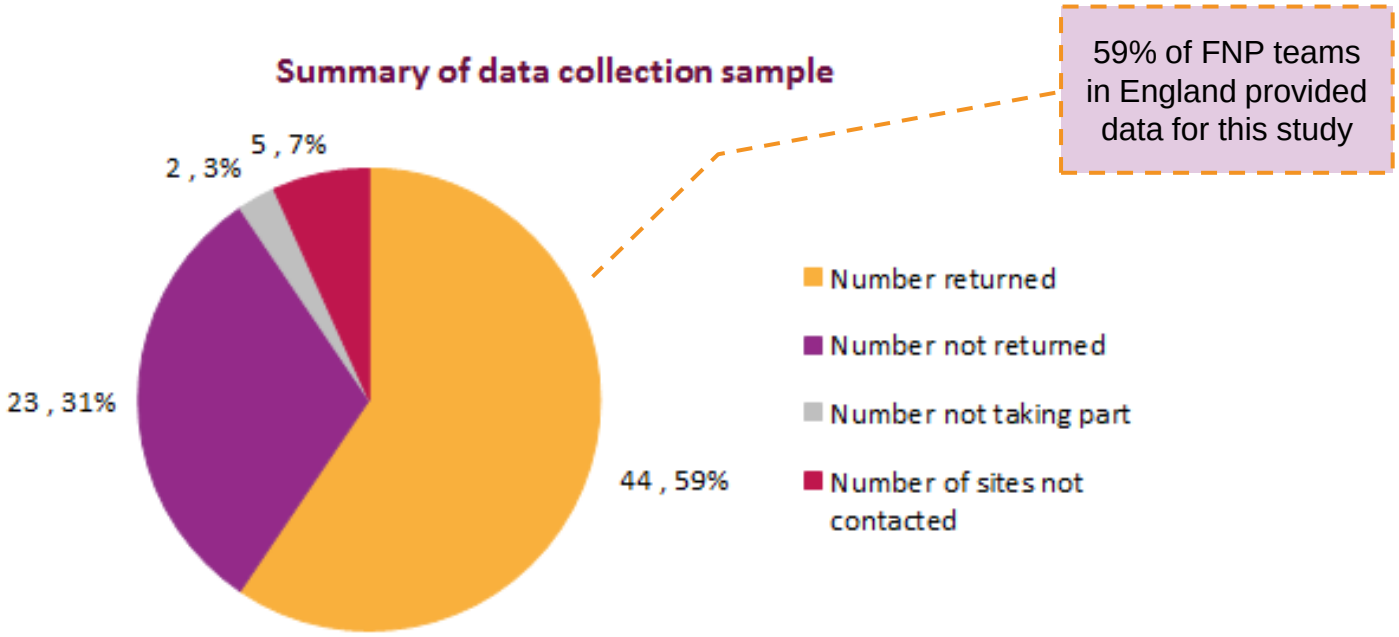
This report sets out a summary of the findings from this study and identifies those factors we believe are likely to be the main drivers of the current costs of delivering FNP locally in the future.

Sample & methods

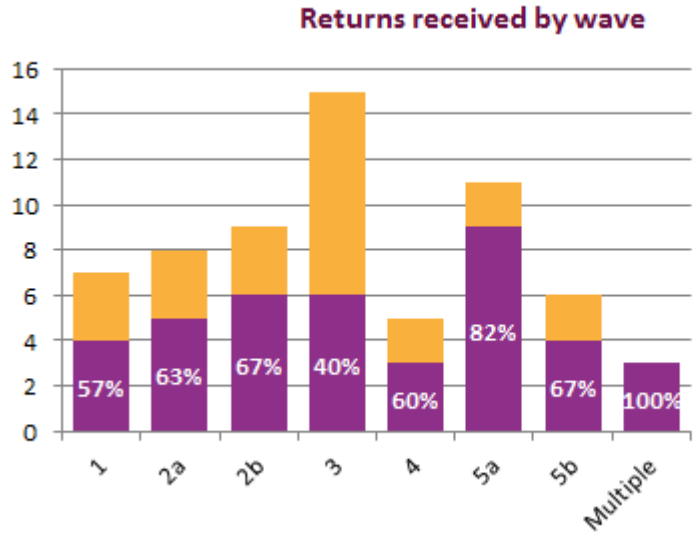
Study sample

Sample

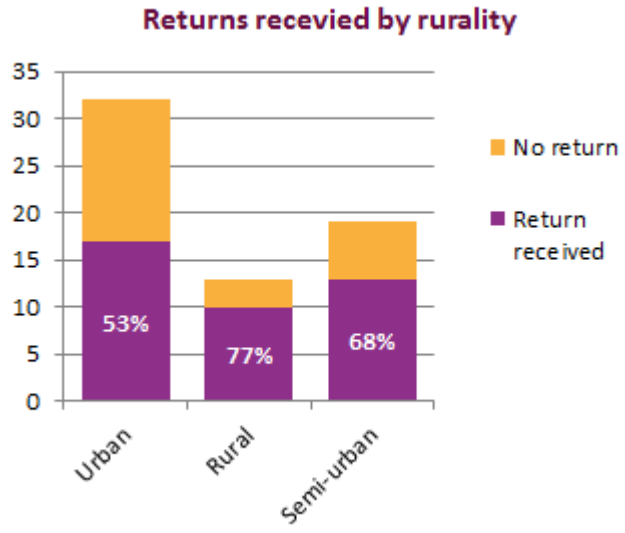
This study was carried out using cost data for the 2011/12 financial year received from 44 FNP teams out of a total of 74 in England. This represents 59% of all FNP teams and covers approximately two thirds of the total FNP caseload in that year. We were unable to make contact with 7% of teams (due to out of date or incorrect contact details) and two teams chose not to take part in the study. Time pressure was the most common reason given amongst the 31% of teams who were sent the data collection tool but who didn't provide a return.

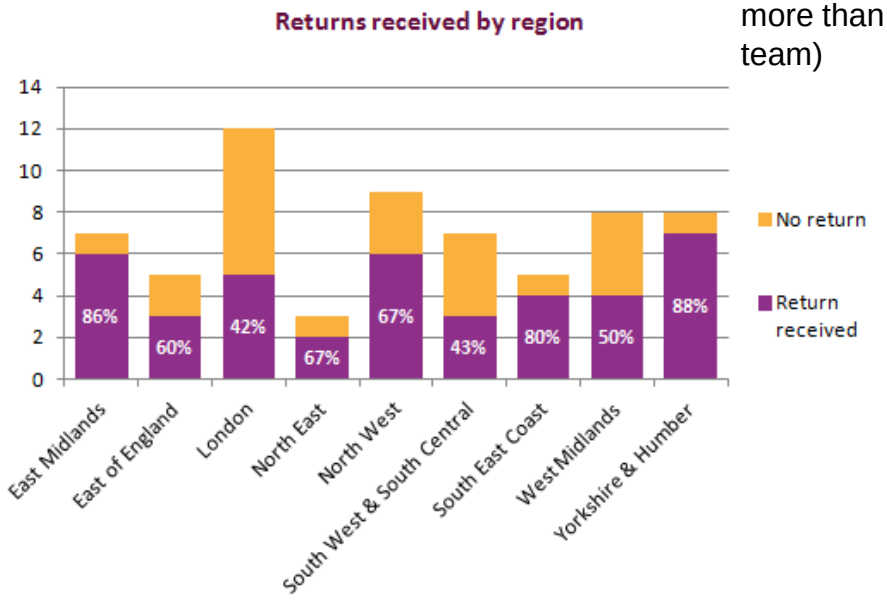


How representative is the sample?



(Note that 'multiple' refers to providers that submitted a single return for more than one team)





These charts show the breakdown of the study sample ('return received') by wave, rurality and region, as a proportion of the total number of sites in each category (shown by the percentage figure in each bar). Wave 3 was the least represented in our sample, along with London and the south central regions.

In all other cases we received at least a 50% response rate.

Data collection methods

Method of data collection

The data was collected on a voluntary basis using a standardised data collection tool consisting of 53 different data items, covering both staff-related and non-staff related costs attributable to the FNP team. The tool was developed and tested with the help of two FNP sites prior to going live. In most cases information was available from budget statements, general ledgers and payroll systems. Some items required estimation by teams where specific cost data was not recorded or not available, generally in relation to the costs associated with non-FNP local (statutory and mandatory) training, IT infrastructure and services costs, premises (generally in those cases where the FNP uses existing stock), and overheads.

The provider lead for each FNP team was sent the data collection tool with supporting guidance and completed returns were uploaded to a dedicated secure website for collection by the project team. Technical support was provided in writing with the tool, along with telephone and email support during the data collection period in order to improve the quality of data submitted.

Follow-up work

Each FNP site was given a period of approximately six weeks to complete their return. We also followed up 38 sites by email and telephone to clarify missing data items, correct errors, and to discuss the basis of certain aspects of their return (for example, the basis of estimating premises costs).

As a final step in helping us to understand and interpret the cost data, we undertook more in-depth interviews with a further seven FNP sites to discuss operational arrangements, delivery models, specific variations in cost data and accounting arrangements. These sites were chosen in order to provide a representation across different regions, type of FNP host provider and the population covered by the team.

The following two pages set out the individual data items we collected for this study.

Data items collected – staff related

Staff related costs (data attributable to individual employees):

- Actual gross pay (excluding overtime and other supplements)
- Overtime
- High cost area supplement
- Any other supplements
- Employer on-costs (PAYE tax, national insurance, and pension contributions)
- Travel to national FNP events
- Travel to carry-out client visits (mileage)
- Car leasing costs
- Any other travel costs
- Number of local and national training days attended

For each employee we also collected the following information to assist with our analysis:

- Role
- Length of service in FNP
- Salary band and pay point
- Start and end dates
- Contracted hours, and
- Leave days taken during the period

Data items collected – non-staff related

Non-staff related costs (data not attributable to individual employees):

- **Local training** – generally statutory and mandatory training
- **Premises** - capital charges, rent, rates and other capital-related costs
- **Equipment** - purchase costs, capital charges, rental or finance leasing
- **IT** – includes costs such as desktop PCs, mobile devices, networking, software and operating system licensing, data charges, and technical support
- **Office costs** – includes costs such as stationery, printing, consumables
- **Mobile telephone** - includes call charges and price plans
- **Psychology** – the costs associated with provision of psychology services to the team
- **Events** - the direct cost of any non-training / other events
- **Car leasing** – the direct cost of pool cars utilised by the FNP team, excluding costs attributable to staff
- **Hospitality** - the direct cost of any hospitality and catering
- **External support** – the direct cost of any external support such as project management consultancy
- **Miscellaneous** – any other non-pay costs not stated elsewhere
- **Indirect costs** – an estimated share of corporate overheads or other indirect costs

Sites were also asked about crèche costs but there were no sites that incurred any costs associated with this.

Data cleaning and assumptions

A data cleaning exercise was undertaken at the end of the collection period, which included identifying and correcting unexpected values, and adjusting the data where necessary to reflect a full year. Some non-staff costs (for example, one-off costs for equipment) were not uplifted. Caseload was calculated for each site based on 25 cases per WTE family nurse. This was pro-rated for staff not contracted to work a 37.5 hour week, and these figures are used to determine the cost per case analysis presented throughout the report. It is important to note the following additional assumptions used in our analysis:

Staff related cost data

- Sites unable to provide data have been excluded from our analysis
- Costs relating to staff employed for only part of the year (including staff in wave 5a and wave 5b teams) have been uplifted to a full year in order to make the data more comparable

Non-staff related cost data

- The analysis may understate some of the non-staff costs incurred by wave 5a and wave 5b teams. These are likely to be spent disproportionately throughout the year and we have therefore used the reported part-year figure for some data items
- When calculating variation in the cost per case, and in order to make the data more comparable, notional values for office premises, equipment costs, IT, Psychology and indirect costs have been added where no values were provided, based on the average of these costs in other returns
- This adjustment has not been made when presenting the breakdown of total costs in order to maintain a level of transparency in the data

Also note that sites have been allocated a random identification number for the purposes of presenting the analysis and findings throughout this report. We have also used upper quartile and lower quartile figures when quoting cost ranges. This is to reduce the impact of outliers that are a result of incomplete or erroneous data.

What we found

The costs of a typical FNP team in England

Our analysis of the cost data provided by a sample of 44 (out of 74) FNP teams in England shows that a typical FNP team, of four full-time family nurses, one full-time supervisor , and a 0.5 WTE administrator, costs on average **£308,323** per annum (based on 2011/12 prices). This is made up of **£223,645 (73%)** in staffing related costs (such as wages, on-costs and travel costs for client visits) and **£84,678 (27%)** in non-staff related costs (such as overheads, IT, equipment, and facilities costs).

These figures are based on an established team (a team in its second year or later), with a typical caseload of 25 clients per full-time family nurse and therefore a total caseload of 100 for a typical team. The total cost figures equate to **£3,083** per case per annum, and vary from **£2,469** to **£3,648** per case per annum. This is broken down further as follows:

- Between **£1,966** and **£2,587** per case per annum for staff related costs (£2,236 on average), and
- Between **£503** and **£1,061** per case per annum for non-staff related costs (£847 on average).

The average cost rises to £3,275 per case in year 1 as a result of additional set-up costs and slightly higher salary costs. Set-up costs include: purchase of equipment used to deliver FNP services (manuals, props, and materials), purchase of IT equipment and mobile phones, and office supplies. We have assumed that set-up costs are incurred only in year 1, however, there will be some expenditure in these cost areas for more established teams and the comparative profile of these costs requires further analysis.

Variation by typical team configurations

The following table shows how the cost per case for an established team varies according to three typical team configurations:

Team size	Staff-related costs (per case)			Non-staff related costs (per case)**			Total costs (per case)		
	Lower quartile	Average	Upper quartile	Lower quartile	Average	Upper quartile	Lower quartile	Average	Upper quartile
4 FNs, 1 Supervisor 0.5 admin	£1,966	**£2,236**	£2,587	£503	**£847**	£1,061	£2,469	**£3,083**	£3,648
6 FNs, 1 Supervisor 0.5 admin	£1,793	**£2,045**	£2,364	£425	**£711**	£879	£2,218	**£2,756**	£3,244
8 FNs, 1 Supervisor 1 admin	£1,733	**£1,993**	£2,308	£403	**£670**	£821	£2,136	**£2,664**	£3,129

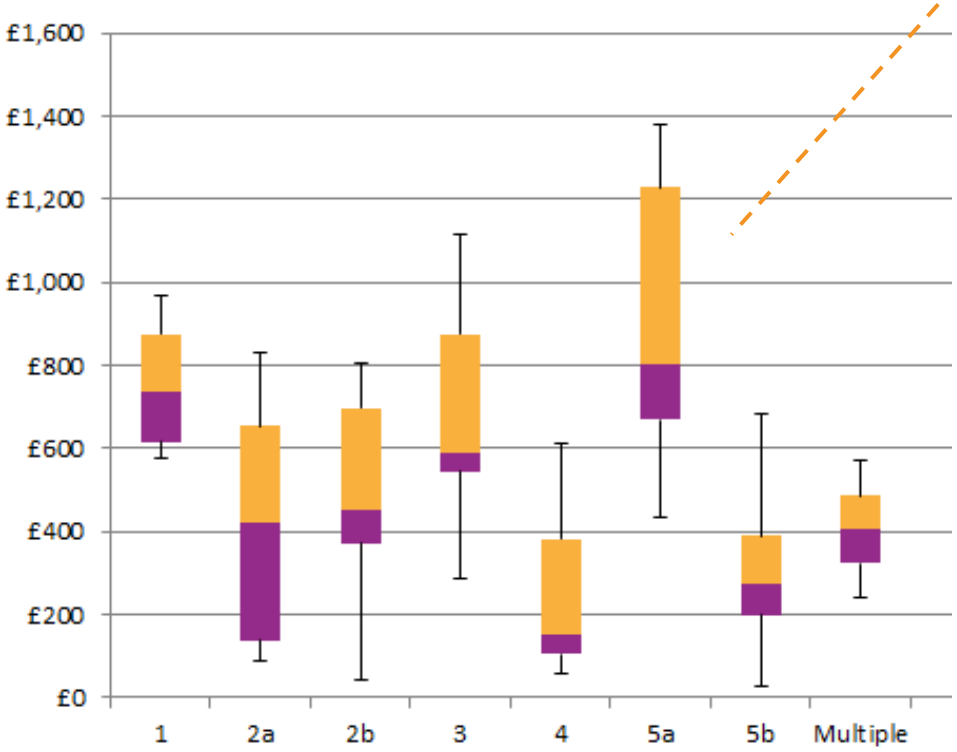
The figures show that the average staff related cost per case reduces by approximately 10% from a team of four family nurses compared with a team of eight. Average non-staff costs, however, reduce by nearly 21%, reflecting the fact that some non-staff costs are likely to be less sensitive to small changes in staff numbers and increase, for example, only when a team exceeds a certain size.

**Changes in non-staff related costs reflect the impact of additional staff and total caseloads on costs such as equipment and mobile phone charges.

Variation in cost per case by FNP wave

Our analysis of the average cost per case for each of the eight waves of FNP sites showed no specific overall trend in relation to staff related costs. There was, however, a noticeably higher average non-staff cost in wave 5a. This may reflect the costs associated with setting up the team in year 1 (purchase of FNP manuals, materials, IT equipment and mobile phones).

Non-staff related costs of FNP teams by wave – adjusted for typical caseload



High non-staff costs in wave 5a driven by set-up costs in year 1. It is likely that wave 5b sites had not yet incurred all set-up costs given that they were in place for only 3 months in 2011/12.

Understanding the box and whisker charts:

- The top and bottom of the 'whiskers' represent the highest and lowest values reported
- The top of the orange bar is the 75th percentile value
- The point where the orange and purple bars meet is the median value
- The bottom of the purple bar is the 25th percentile value.

Please see Appendix A for a more detailed explanation.

Variation in cost per case by rurality

Staff costs of FNP teams by rurality – adjusted for typical caseload

The data we collected shows little variation in median staff related costs by rurality

These two charts show the cost per case according to the predominant population of each FNP team. There is very little variation in staff related costs, although rural sites do show a much wider distribution between upper and lower quartiles, driven by higher travel costs (these are usually attributable to individual staff and therefore included within the staff related cost data). Rural sites also tend to have lower non-staff costs. This is due to very low overheads charges and premises costs in half of the rural sites that submitted data.

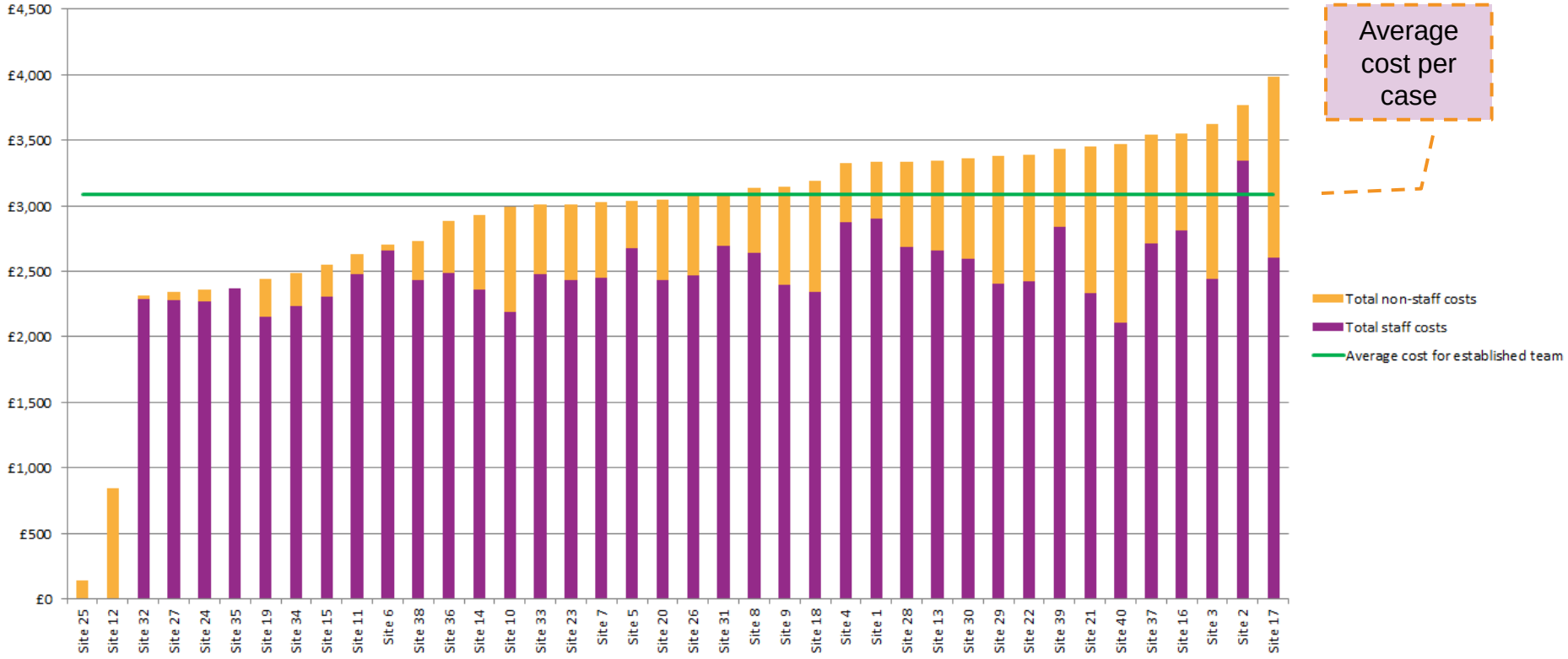
Rural sites tend to have lower non-staff costs, due largely to lower overheads in the reported data

Non-staff costs of FNP teams by rurality – adjusted for typical caseload

Total costs by FNP team – adjusted for expected caseload

The chart below shows the actual reported costs for each FNP team in our sample, adjusted for an expected caseload (25 clients per WTE Family Nurse). It is worth noting that:

- Two sites were unable to submit staff related cost data
- The site with the highest total costs has invested in future expansion
- Those FNP sites with multiple teams were all at or below the average cost per case
- There is a mix of sites (based on location, wave and rurality) both above and below the average cost per case and across the distribution

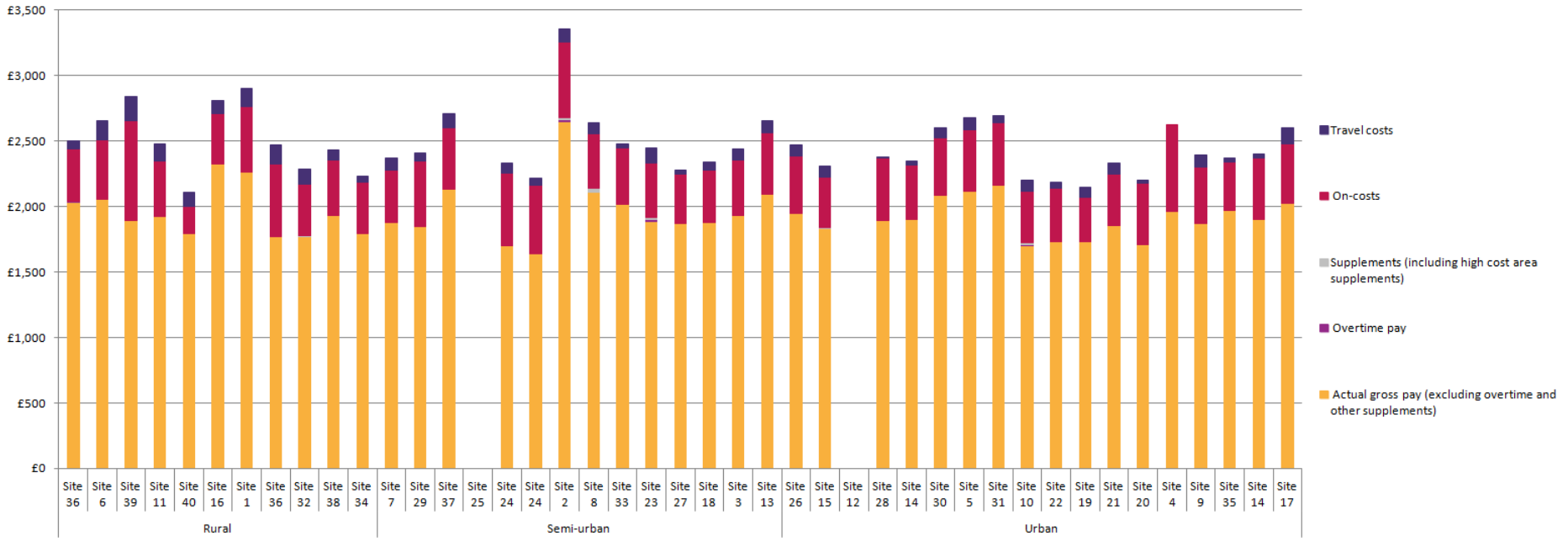


Breakdown of staff related costs for each FNP site

This chart shows a breakdown of staff related costs by FNP site. The data has been adjusted to reflect the expected caseload for each team. The data shows that:

- The majority of staff costs are related to gross pay, supplements and employer on-costs and these do vary quite noticeably from site to site (in accordance with the seniority and experience of the team)
- Very few sites pay overtime (this is usually managed through time off in lieu arrangements)
- Travel for client visits and to attend national FNP training events represents only 3% of total staff related costs.

Staff costs by site and rurality (adjusted for expected caseload)



Breakdown of non-staff related costs for each FNP site

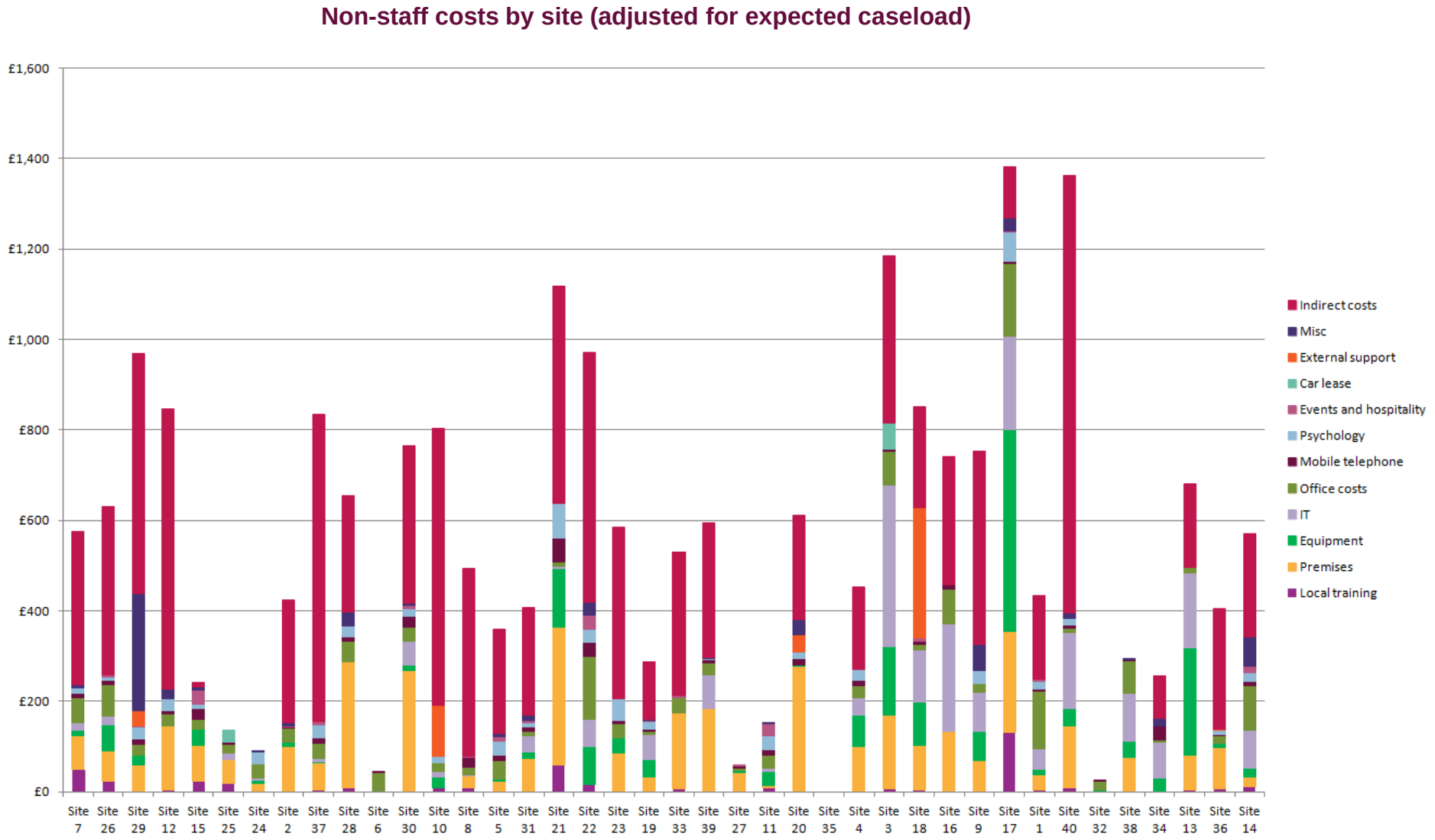
The chart on the next page shows a breakdown of non-staff related costs by FNP site. The data has been adjusted to reflect the expected caseload for each team.

The data shows that:

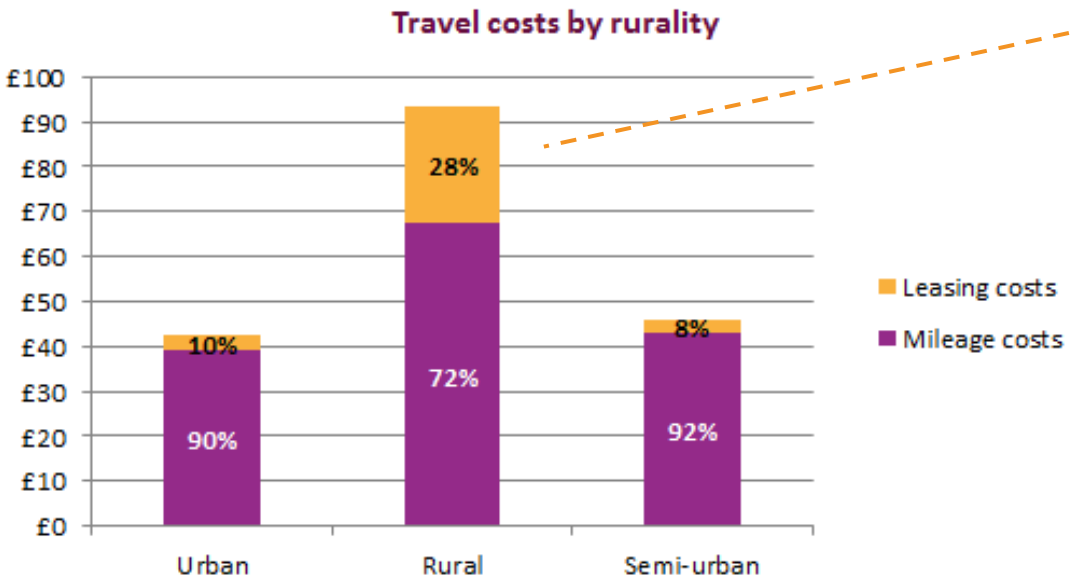
- Wave 5a sites tend to have higher equipment, IT and office costs, which form the majority of their set up costs in year 1
- Some sites were unable to provide or estimate the cost of overheads
- Psychology costs varied considerably, with some sites recording no charge for these services (the services may be provided by host or partner organisations)
- The value of overheads is usually provided as a proportion of the FNP budget, however, we found that budget values are often inconsistent with actual spend in year
- The more established sites tend to report higher costs associated with local training

When looking at the chart on the next page, it is useful to consider variation in the types of costs, both within individual teams (that is, within each coloured bar) and for particular cost categories across teams.

Breakdown of non-staff related costs for each FNP site



Travel costs by rural / urban

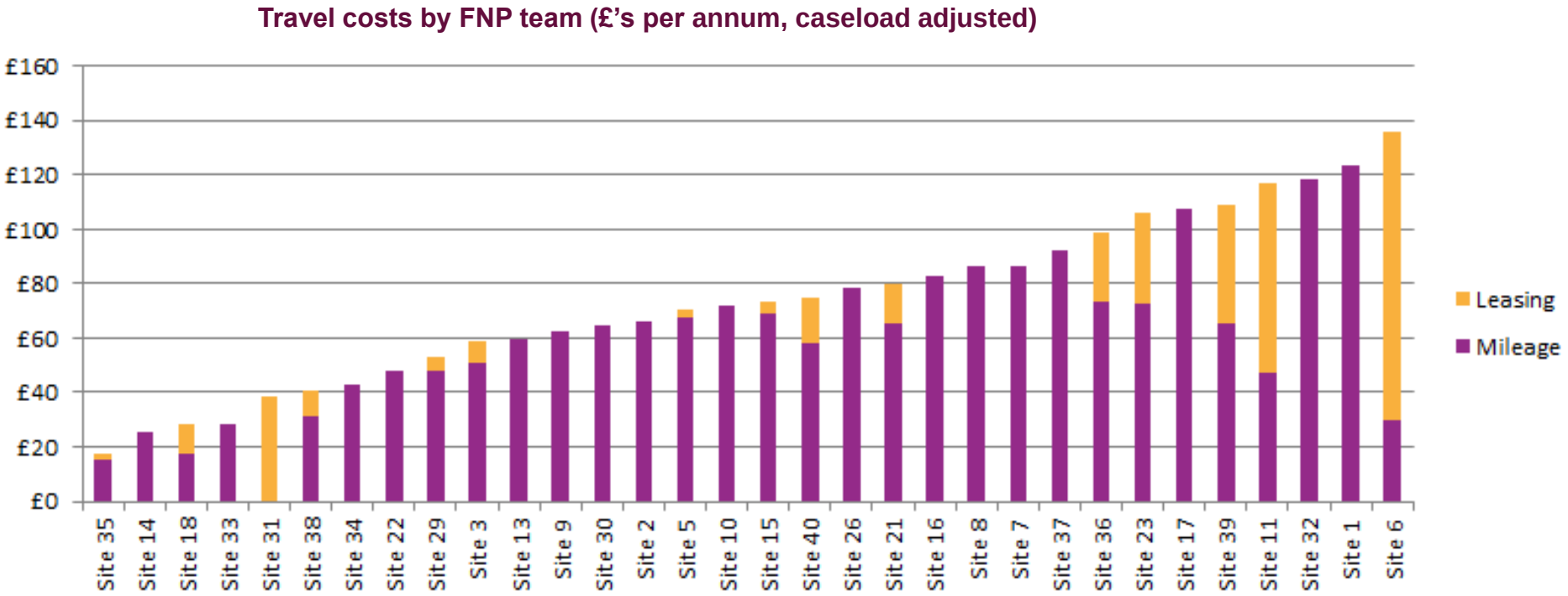


As expected, travel costs tend to be higher in those teams covering a rural area. Rural teams also spend more on car leasing schemes and as a proportion of their overall travel expenditure..

We have used the assumption that many of the costs associated with providing an FNP team are fixed – according to the number of staff employed by the team – and do not vary according to the actual caseload for each family nurse over the course of the year. This includes many of the non-staff costs, which are incurred on the basis of an expected caseload of 25 clients for each family nurse.

It might be expected, however, that travel costs would vary according to the number of client visits and the number of days that staff attend national training and other events. Those sites covering a predominantly rural population reported much higher travel costs (an average of just over £90 per case) compared with those in urban and semi-urban areas (around £40 on average per case).

Travel costs by FNP team

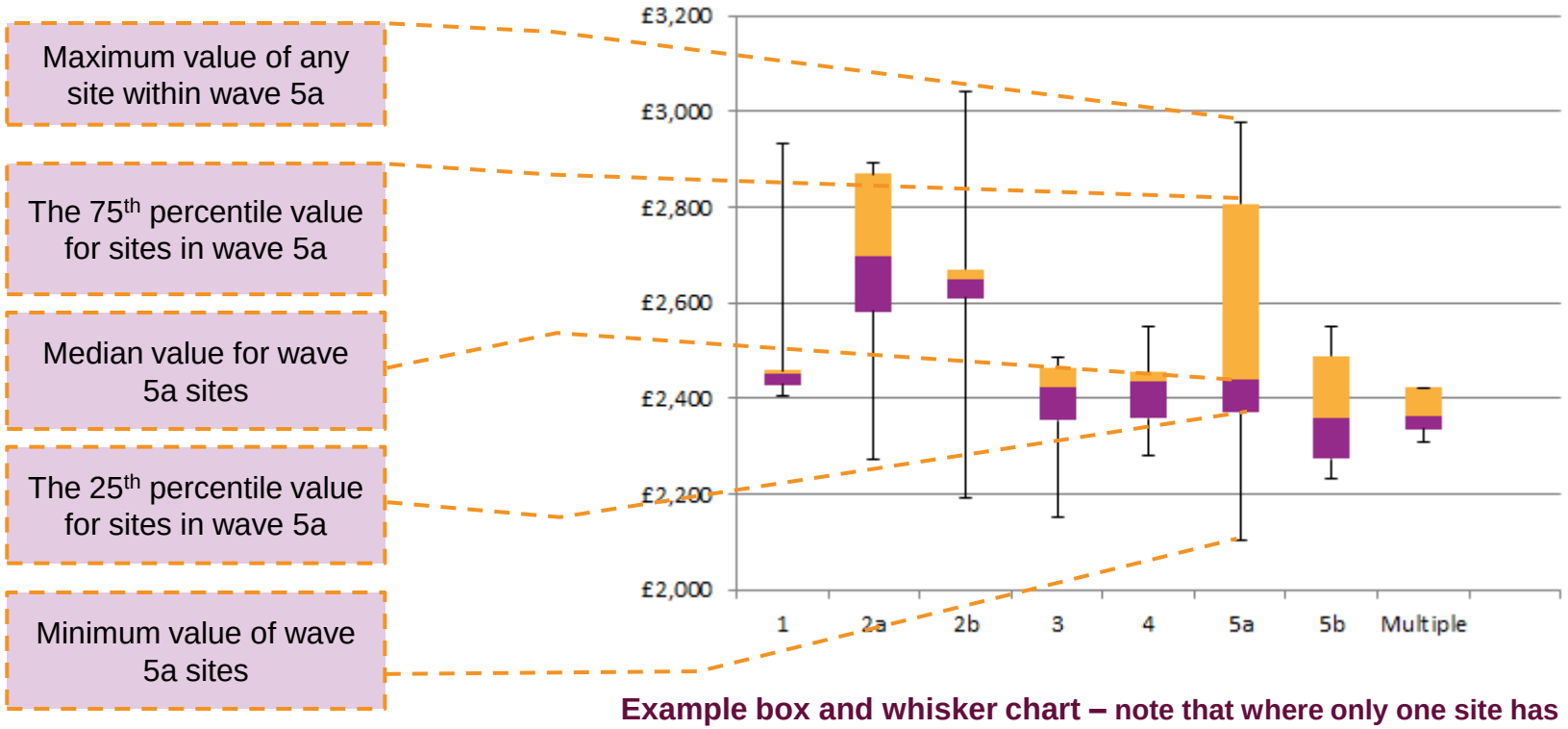


This chart shows the breakdown of travel costs by FNP team. Only a small number of teams make use of car leasing schemes, and with the exception of one urban team, this is generally those covering larger geographical areas. We found that organisational policy was the main determinant of whether or not to provide lease cars for family nurse teams.

Appendix

Interpreting box and whisker charts

The charts on the following four pages contain box and whisker plots for the staff and non-staff related data, against the different site characteristics. These charts show the extent of the variation in the costs. Where the line / bars cover a larger area, there is a greater level of variation in the ranges of values than those where these are only very short. The benefit of box and whisker plots is that it is possible to see the range of values provided. Outliers also have less of an influence on the interpretation of the data than when using an average figure alone.



Example box and whisker chart – note that where only one site has returned data in a particular classification, there is just one black mark to indicate the costs. This applies only in the data by region.

Contact details

www.apteligen.co.uk

Follow us on twitter

Scan the code for further information

Sam Mackay
Email: sam@apteligen.co.uk
Tel: 07866 463434

John Newman
Email: john@apteligen.co.uk
Tel: 07789 896022

Spitfire Studios
63 – 71 Collier Street
London
N1 9BE