



HEALTHCARE
COSTING
FOR **VALUE**
INSTITUTE



PLICS toolkit for community services

March 2018



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Foreword

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Costing has a major role to play in supporting the delivery of sustainable services across the NHS. It should underpin decision-making, ensuring local decisions are informed by a clear understanding of current costs and the likely costs of new ways of working.

Good cost and activity data at the patient level can help health economies to understand variations in care between different patients, helping to optimise service delivery. The development of new models of care, with an emphasis on keeping people out of acute hospitals, requires robust cost and activity information on community services so that the impact of changes to services can be measured.

The implementation of patient-level information and costing systems (PLICS) is at an early stage in community services, but there is evidence that some trusts are using PLICS data in creative ways to generate some powerful information.

The HFMA Healthcare Costing for Value Institute has developed this PLICS toolkit to support members turn the data generated by PLICS into useful intelligence. It is hoped that by sharing the toolkit examples with other staff within their organisation, members can sell the benefits of PLICS to those who are currently less well engaged.

We hope that you will find our PLICS toolkit for community services will help you start to explore how you can maximise the value of PLICS data within your organisation, and across systems.

Section A: Introduction

Why is PLICS important?

In the current financial climate of the NHS, patient- level cost and information (PLICS) can play a vital role in improving the efficiency and effectiveness of how patient care is delivered. PLICS is not solely about cost information. It brings together information about the resources consumed by individual patients and combines this with the cost of this resource. This type of blended financial information is new for many organisations and is incredibly powerful.

PLICS allows organisations to identify variation between different groups of patients, or between clinical teams. When PLICS is analysed alongside other performance, quality and outcome information it becomes even more powerful in understanding the delivery and performance of services and driving value.

PLICS also facilitates much more meaningful and constructive discussions between finance professionals and clinical and operational teams. This benefit should not be underestimated. PLICS promotes discussions which centre on individual patients. It also provides financial information that better reflects how services operate, which makes it easier for clinical and managerial staff to interact with it, and to better assess the impact of service change. This is vital to promote trust and confidence in the data and in allowing it to support services to provide the best possible care to each patient.

It is widely acknowledged that PLICS data will take time to improve and stabilise. It relies on several data feeds, and knowledge of many services. However, unless organisations actively engage with PLICS the roll out phase will become far lengthier. Given the increasing pressure on organisations to improve financial positions, PLICS data surely cannot be ignored.

PLICS can be used to help

- identify clinical variation
- improve patient care
- deliver efficiencies
- improve clinical ownership of resource decisions
- support more sophisticated benchmarking
- provide evidence for service redesign

PLICS provides intelligence to support decision making about delivering sustainable high-quality care

PLICS promotes discussions which centre on individual patients. It also provides financial information that illustrates the reality of how services operate. This makes it easier for clinical and managerial staff to work together and better assess the impact that making changes will have.

What are the aims of the toolkit?

By providing examples of how PLICS data can be turned into useful information, the toolkit aims to:

- sell the benefits of PLICS to those trusts/ boards/ clinicians who are less well engaged
- support members to turn the data generated by PLICS into powerful intelligence.

Once clinical and other staff see the power of the information generated, it is hoped that they will be supportive of the implementation of PLICS within their organisation.

We have used a range of different sets of information and style of presentation for clinical and non-clinical audiences.

As well as providing members with a printed version of the toolkit, we are also making available a set of PowerPoint slides of the charts, which can be found on our website. The slides are intended as a resource for members to show to other parts of their organisation and start a conversation about what analysis their own organisation would find useful.

Section C provides a commentary on each chart. This commentary is also included in notes under each chart in the slide pack.

What is the scope of the toolkit?

This toolkit is aimed specifically at trusts who have community services, excluding mental health services. We consulted with our members in a variety of ways to scope the toolkit. This included including undertaking individual interviews, and sharing a first draft for members' comments and suggestions for improvement.

The data provided in the charts is for illustrative purposes only but is based on examples trusts have shared with us.

The charts have been re-created by the HFMA to ensure that the toolkit is generic and applicable to all NHS community service providers and costing software suppliers.

“We were pleased to find real examples of community services using PLICS data to generate powerful information to support local decision making”

Looking to the future

The emphasis in this toolkit was to keep it simple, as trusts are only just starting to explore how to embed PLICS for community services within their organisation. Looking ahead, there will be many other ways of using the data. A few examples are listed below.

- Health systems are starting to explore how they can measure costs and value across patient pathways which often go across more than one organisation. By linking data from different services – acute, community, mental health, primary care and social care - whole care pathways can be mapped and measured.
- To fully understand costs, they need to be linked to patient outcomes. Linking outcomes, costs and activity at patient level allows health systems to identify the scope for improving value.
- The NHS RightCare programme provides a wealth of comparative data at CCG level to support local health economies improve the way care is delivered for their patients and populations. Community patient-level data can support this process with more granular information to support service redesign.

Acknowledgements

The Healthcare Costing for Value Institute would like to thank all the community service providers who have been involved in this project (see section D).

To download the PLICS toolkit for community services as a PowerPoint, please visit hfma.to/plics

Section B: Top tips

Recognising that the acute sector is more advanced in the implementation of PLICS, we have taken the 'top tips' from *PLICS toolkit for acute services – the basics* and added them here.

Members may also wish to refer to our case study² *Becoming a data driven organisation: engaging clinicians in reviewing and using data and information Southern Health NHS Foundation Trust*.

This section sets out the key lessons learned from those acute organisations who have successfully developed PLICS reports and rolled them out across their organisations:

Huge volumes of data

- Ensure that navigation through the reports is logical and the sequence in which users drill down into the data is considered (for example from directorate, going down to specialty then consultant etc.)
- Ensure that users are directed towards meaningful reports that provide an initial focus for investigation
- Be creative in finding uses for the data. For example, talk and listen to clinicians, operational managers and finance teams to find out what is important to them, what are the main problems and opportunities in your trust and how can PLICS data provide any insight into these

Presentation

- Keep reports and dashboards uncluttered and visually appealing
- Ensure that reports and dashboards are free of jargon and labels and titles are understood by users
- Wherever possible use graphical or pictorial presentation, particularly in clinical views as trends are easier to identify
- Consider a different set of reports / dashboards for different types of users. These could be linked to their log-in or bookmarked within the reporting system

Training

- Provide training on how to interrogate and interface with the PLICS reporting for all users
- Ensure reports are easy to understand and navigate by road testing them with users
- Consider producing user guides to help users navigate the information efficiently and accurately. A quiz can also be a fun and effective way of engaging with users as part of the training process
- Consider developing a PLICS intranet site. This could be used to store user guides (to help users navigate the information and to prompt them to use the information efficiently and accurately), costing developments planned and when they will go live

Time trends

- Consideration should be given as to how information will be presented over different time periods. After the initial roll out, most organisations update their PLICS data either monthly or quarterly

Engagement

- Ensure the executive team is on board early to help promote participation in PLICS and ensure appropriate allocation of resources to it
- Ensure the presentation of PLICS reports is precise and clear. Clinicians have a huge number of competing priorities and limited time available
- Engage with people from other disciplines as much as possible. The benefits of PLICS can only be maximised if people use it
- Training and clinical engagement is an iterative process that will require regular follow-up and reinforcement to be successful
- Keep developing reports. As the organisation starts to use PLICS, there will be an increased appetite for the information and interest in improving the reports

² <https://www.hfma.org.uk/our-networks/healthcare-costing-for-value-institute/case-studies>

Section C: Commentary on the charts

The charts are included in the appendix and are also available here hfma.to/plics as a PowerPoint pack.

Costing at the patient level provides organisations with the flexibility to group costs and activity data in different ways for different purposes – for example, by patient, clinician, team, service line or pathway.

This flexibility of reporting means the outputs can easily adapt to different requirements – from mapping the pathway of individual patients to generating service line reports.

We have developed a series of charts to demonstrate the power of the data, based on examples provided by community providers. The charts use a range of different sets of information and styles of presentation for clinical and non-clinical audiences.

We encourage you to share some or all of the charts with other people in your trust to start a conversation about what information they would find helpful using your trust's own PLICS data.

Focus on the individual service user

PLICS data allows discussions between clinical teams and finance professionals to focus on individual patients. This is a powerful way to start conversations about how resources are used within a trust. Is the current delivery of services maximising patient outcomes at the lowest possible cost?

(A) One patient's pathway over a year in community services

This chart shows all the community services one frail elderly patient came into contact with over a twelve-month period, and the associated costs. Rather than looking at the activity and costs of individual services, this approach puts the patient at the centre and allows trusts to start to explore whether there might be a more effective way of supporting individual patients.

(B) A physiotherapy intervention with outcomes

One of the key challenges for health services is the collection and measurement of outcomes. This chart shows information for a patient who has been referred to a physiotherapy service with back pain. Along with the number of treatments received by that individual, the patient's self-reported pain level, before and after treatment, and the satisfaction score are both included on the chart.

Comparing patient pathways

PLICS can enable the pathways of patients with similar diagnoses or care needs to be compared. This is more difficult in community services, than in the acute sector, where the coding of diagnosis and interventions is more advanced, but there are still some opportunities, especially where pathways are clearly defined.

(C) Comparing patient pathways in community services

This chart shows the different care experiences and costs of three patients who have experienced a stroke. At this community provider, there is a defined pathway for stroke patients who transfer from an acute hospital to community services. Despite the defined pathway being in place, the chart illustrates that there is still variation in the care received by patients, and the detail held in PLICS provides an opportunity to explore why that is the case.

Comparing service delivery between teams or localities

Comparing how similar services are delivered between teams or localities within one trust may highlight variation in service models. PLICS data can support discussions around which service models make the best use of resources – with the focus on high quality patient care.

(D) and (E) Comparing how teams with the same skill mix utilise their staff

These two charts compare the number and proportion of face to face contacts carried out by different types of staff in two community teams.

In spite of the two teams having the same number of staff and a similar skill mix configuration, there is a significant difference in the way the teams utilised their staffing to care for patients. There may be a variety of reasons for this: geographic factors, complexity of case mix, specific training for some groups etc, but having this information enables the models of service delivery to be more closely investigated.

Although this information came from PLICS, there is no cost data included; presenting activity data alone in this way may help to engage clinical teams in reviewing the quality of the data they are responsible for recording.

(F) Comparing average durations of community team contacts

PLICS information for the same teams as in charts D and E has been used to compare the average duration of contacts. Team A has an average longer duration of contacts than Team B, but a greater proportion of Team A's contacts are undertaken by more qualified staff. This information provides an opportunity to investigate the differences in the way each team delivers care to the patients on their caseload.

(G) Comparing contacts across community team members

This chart shows the number of contacts per whole time member of staff across a year, using staffing establishment data. The dots represent individual people in Team A or B. Again, there will be a variety of reasons why staff will be at different points on this graph, but the data provides a starting point to understand how staff are deployed.

(H) Looking at differences in case mix between district nursing teams

It has historically been difficult to understand the case mix of district nursing teams, as robust information on patients' needs has not been routinely collected.

One trust has undertaken some categorisation of the community care received by their patients, identifying whether teams were providing core or specialist nursing care. This chart shows that there were some stark differences in case mix between the teams in this service. There are a number of reasons why these differences may have occurred; differences in coding or categorisation, specialisms within some teams, or the needs of local populations.

Not all providers are currently collecting data at this level. However, having the facility to collect more detailed information on staff activity and patient needs will result in richer intelligence with which to better understand the utilisation of services by patients, and therefore better manage the organisation's resources.

(I) Comparing costs of treatment between community teams

One trust collects information on interventions carried out by members of the community team, and this is fed into PLICS to generate cost information. Chart H shows the average costs of four different treatments based on staff contact time and any relevant costs of materials or drugs.

Demonstrating the flexibility of PLICS

Many community providers are at an early stage of implementing PLICS, and ensuring the robustness of the activity data which is used for costing. However, there are some trusts which are starting to use PLICS intelligence to help them tackle service redesign, and quality improvements.

(J) Who uses the organisation's resources?

This community service provider used their PLICS system to identify the costs of activity for all their patients. The cost data showed that a very small number of people (12% of all patients) were linked to the use of 78% of this recorded and costed activity, and this is illustrated in this chart. Further analysis of this cohort would allow the local healthcare system to explore whether the needs of this patient group are being met in the most effective way.

(K) High cost patients

Identifying high cost patients and looking at their care pathways may provide information about the effectiveness of service delivery. This chart shows the data from one trust, where 3 out of 5 of their highest cost patients have a diabetes diagnosis. Whilst they may also have other long-term conditions, which could also impact on their need for care, this information may indicate that the model of care delivery for people with diabetes should be reviewed.

Section D: Acknowledgements

The HFMA would like to thank the following people who have contributed to this toolkit.

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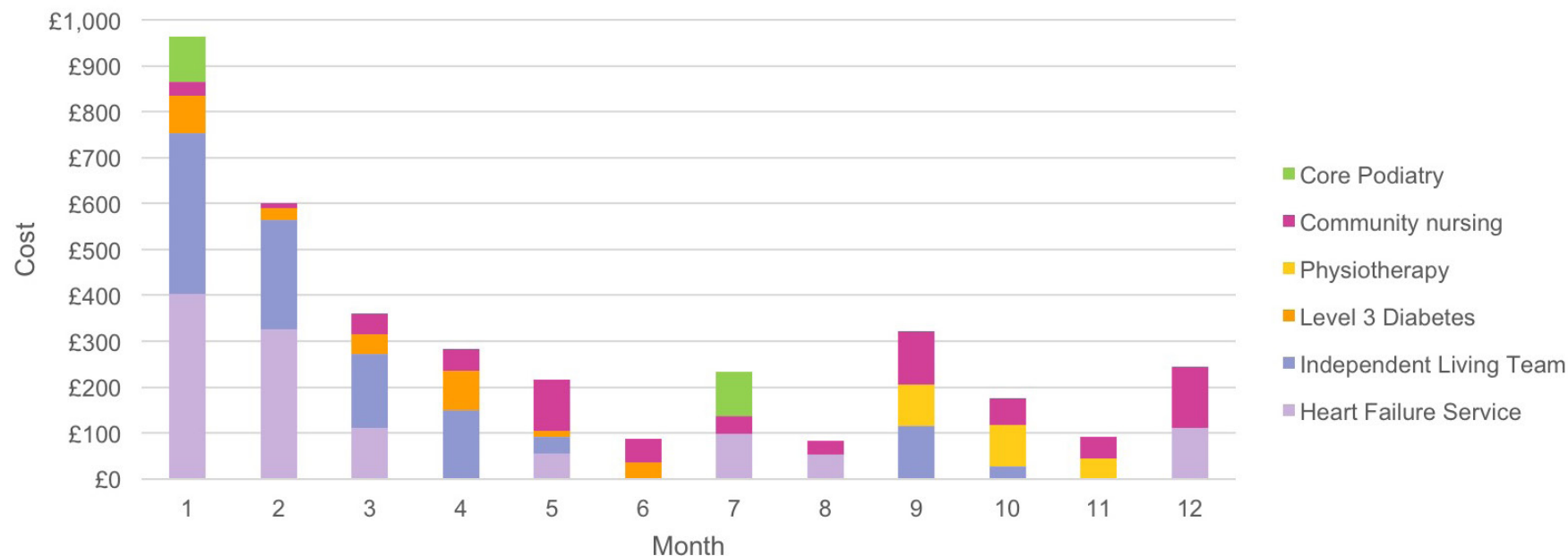
Appendix: **Charts**

Focus on the individual patient

(A) One patient's pathway over a year in community services

Services used by a frail elderly patient and the associated costs

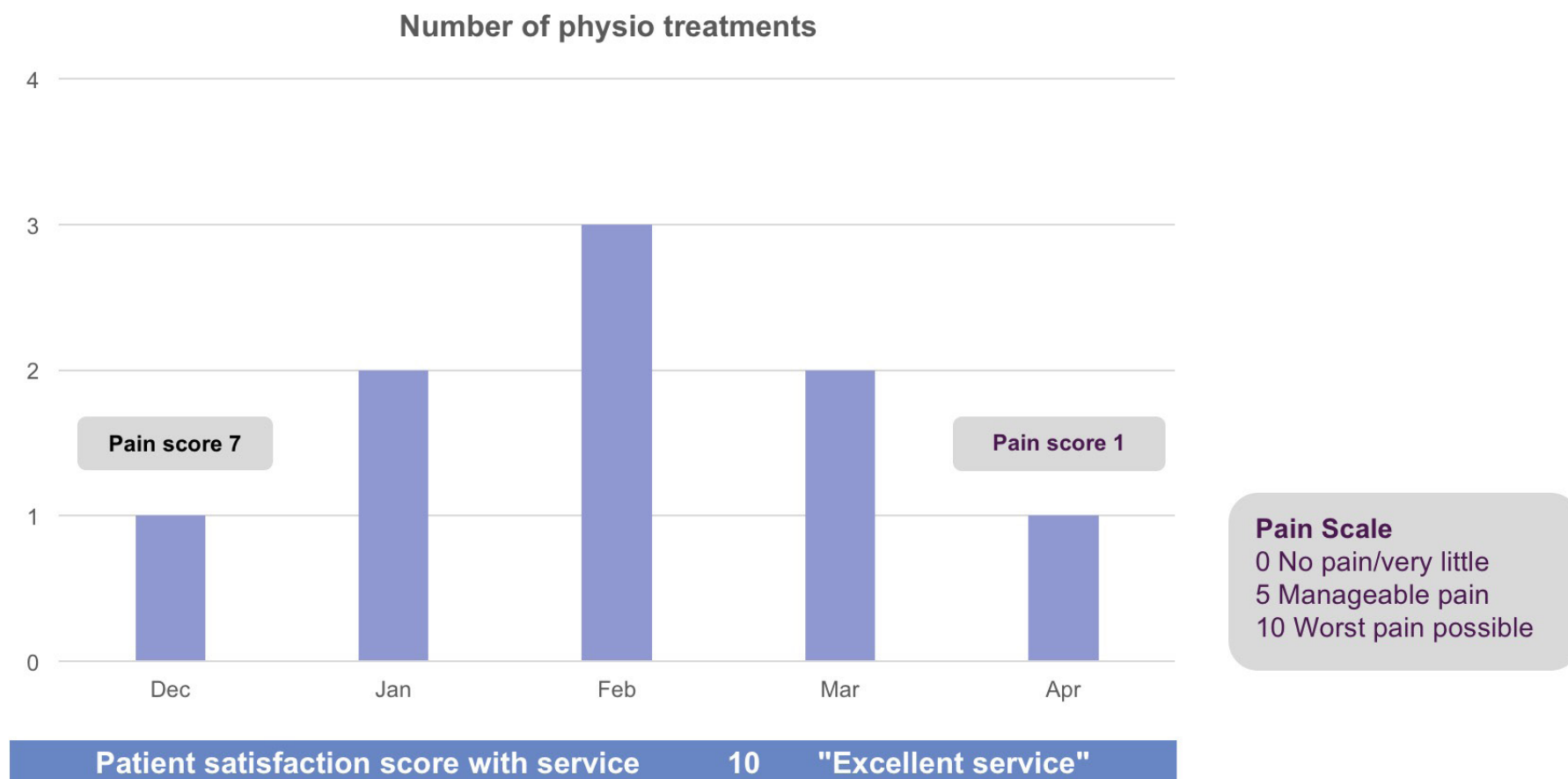
The profile and cost of a patient's use of community services



Total cost of care for the year for the patient - £7,316

(B) A physiotherapy intervention with outcomes

Referral for back pain



Comparing patient pathways

(C) Comparing patient pathways in community services

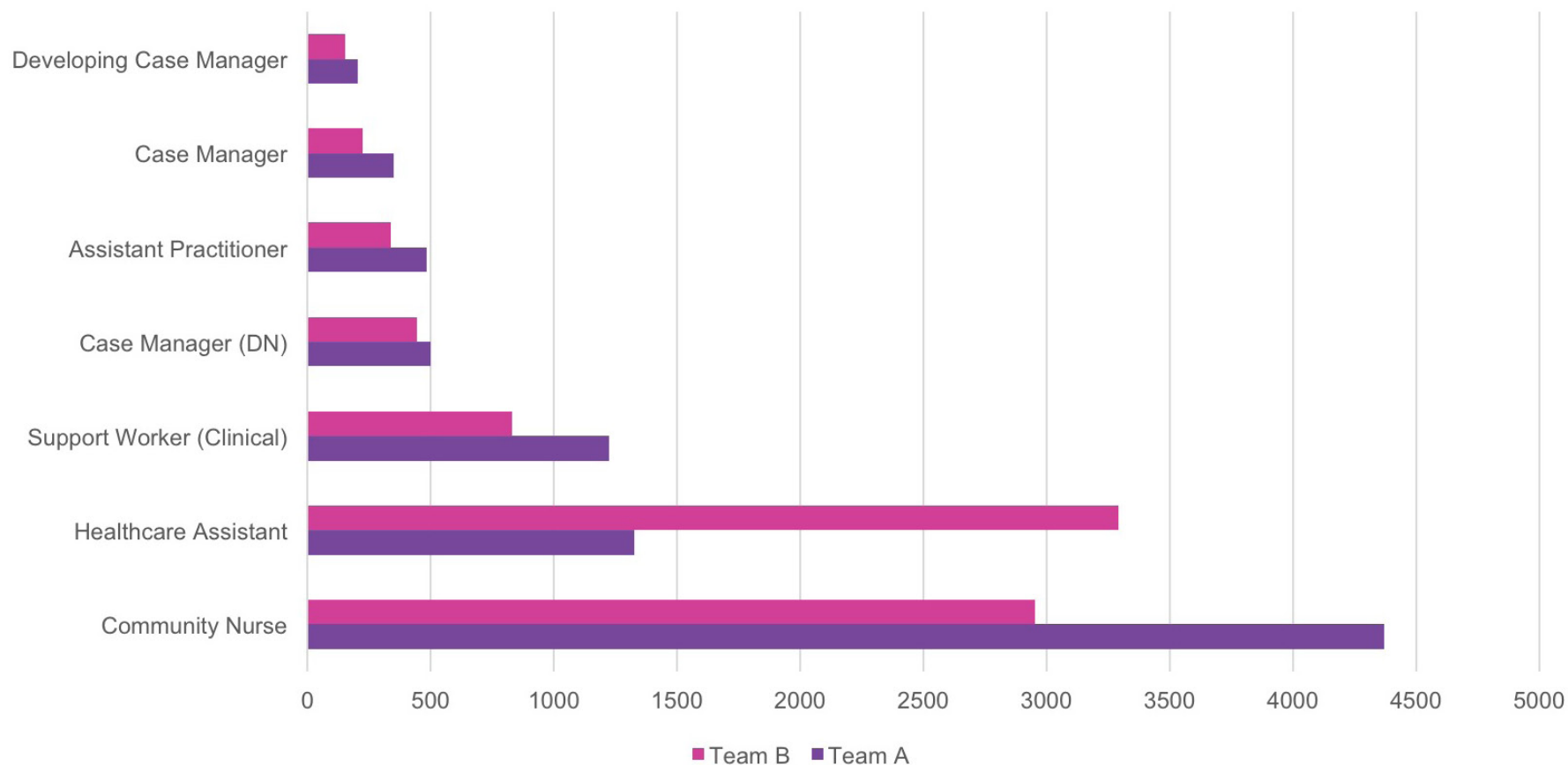
Comparison of patients admitted to a community hospital who were coded as HRG AA22A (Non-Transient Stroke or Cerebrovascular Accident, Nervous System Infections or Encephalopathy, with CC)



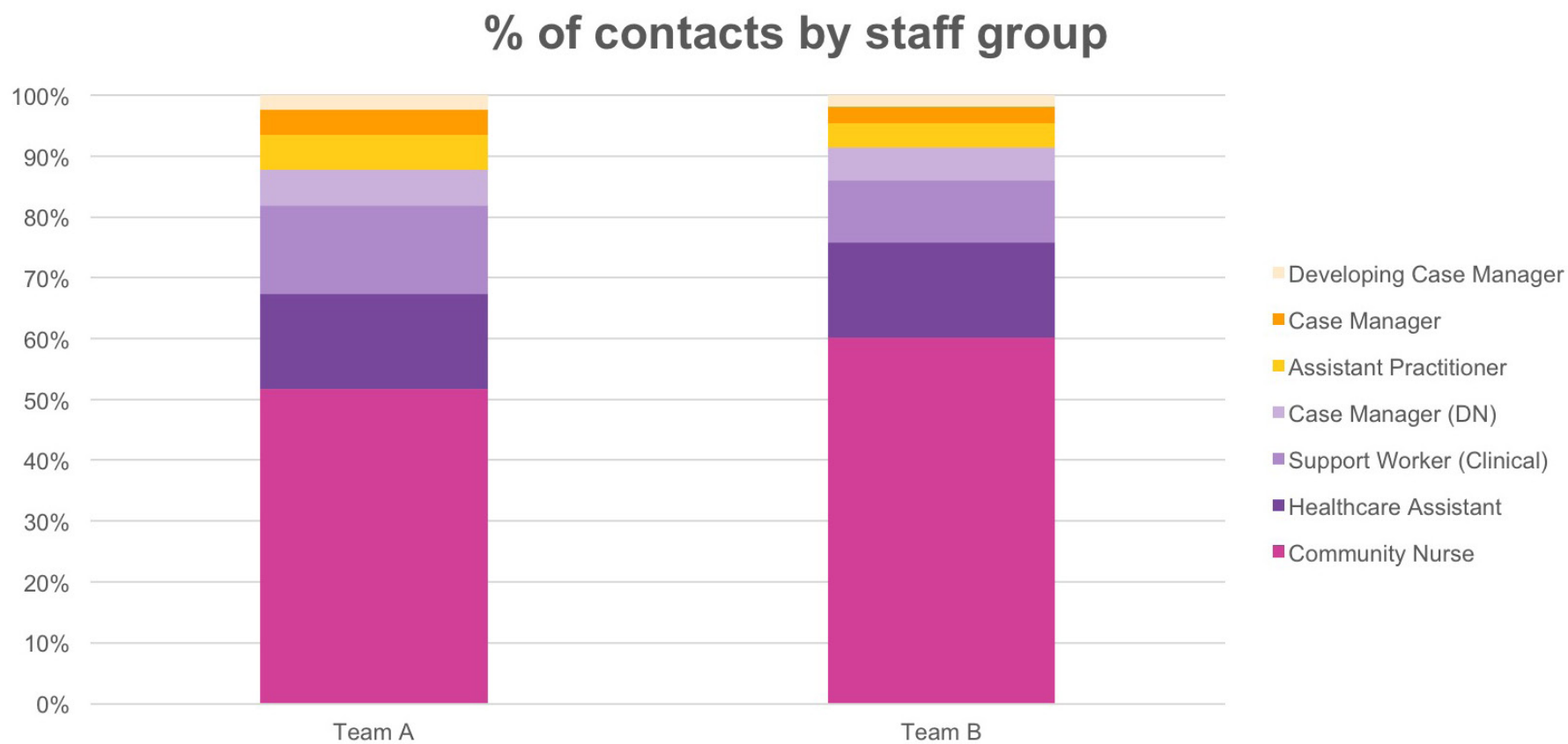
Comparing service delivery between teams or localities

(D) Comparing how teams with the same skill mix utilise their staff

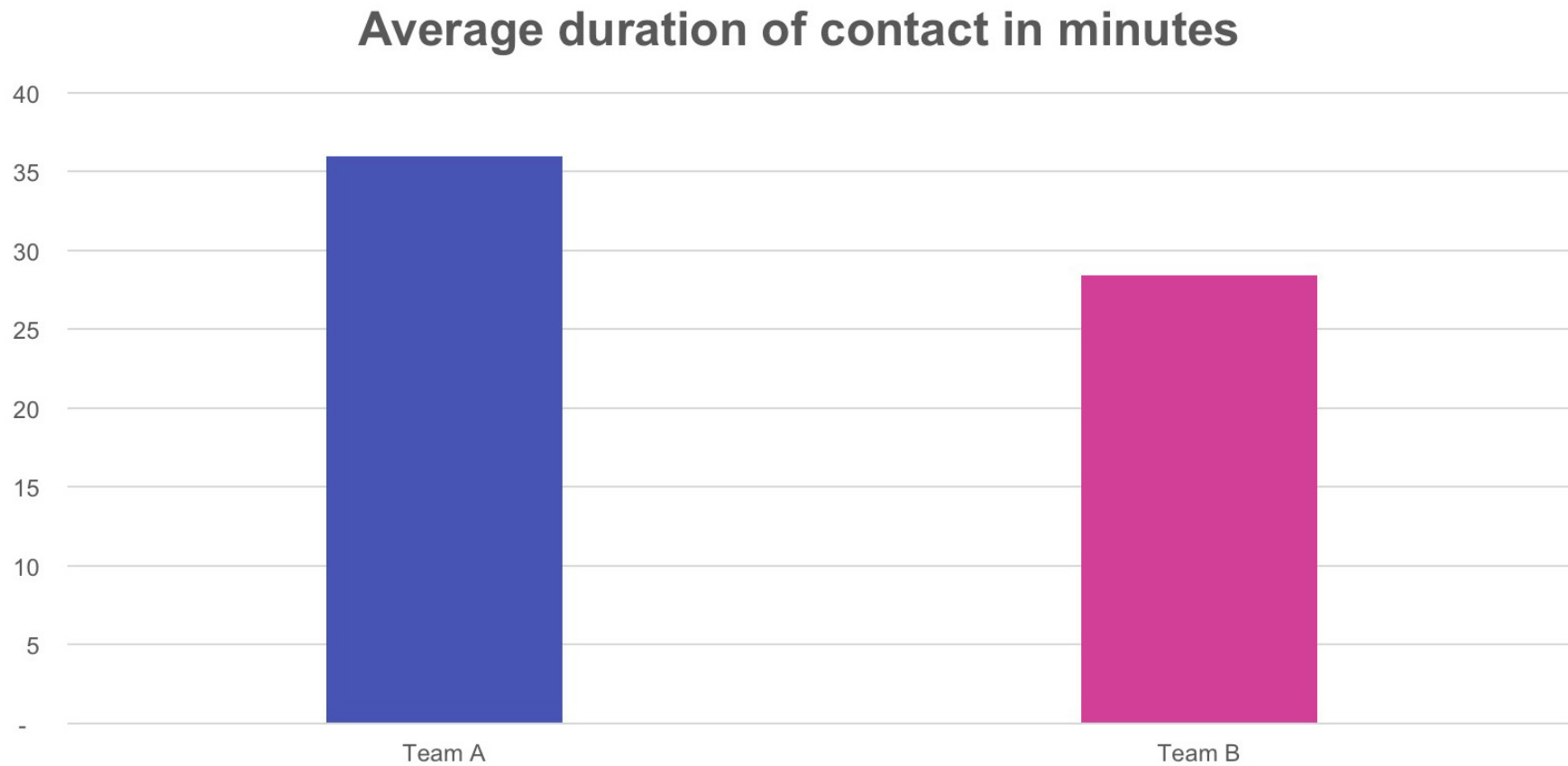
Number of contacts by staff group



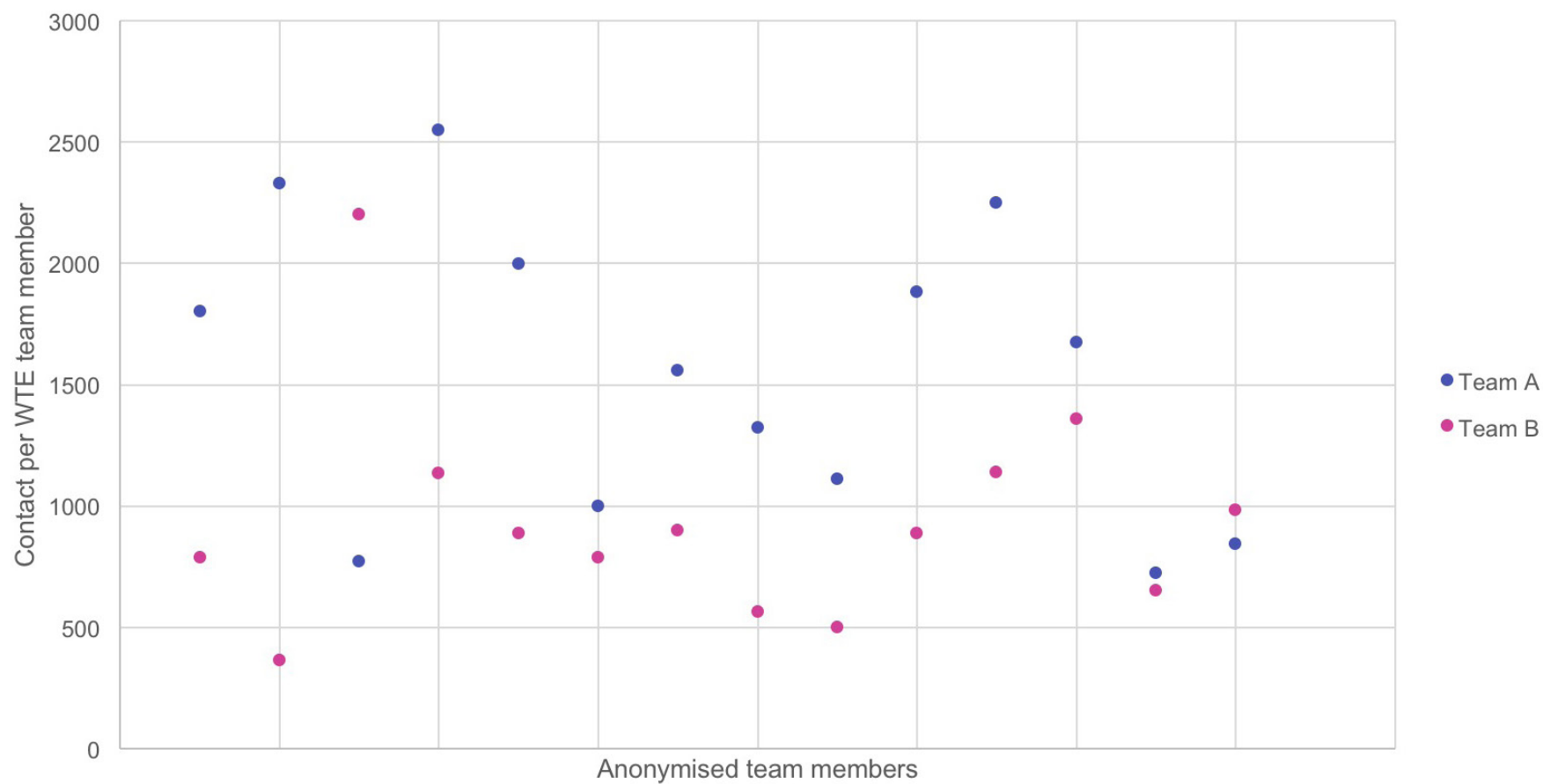
(E) Comparing how teams with the same skill mix utilise their staff



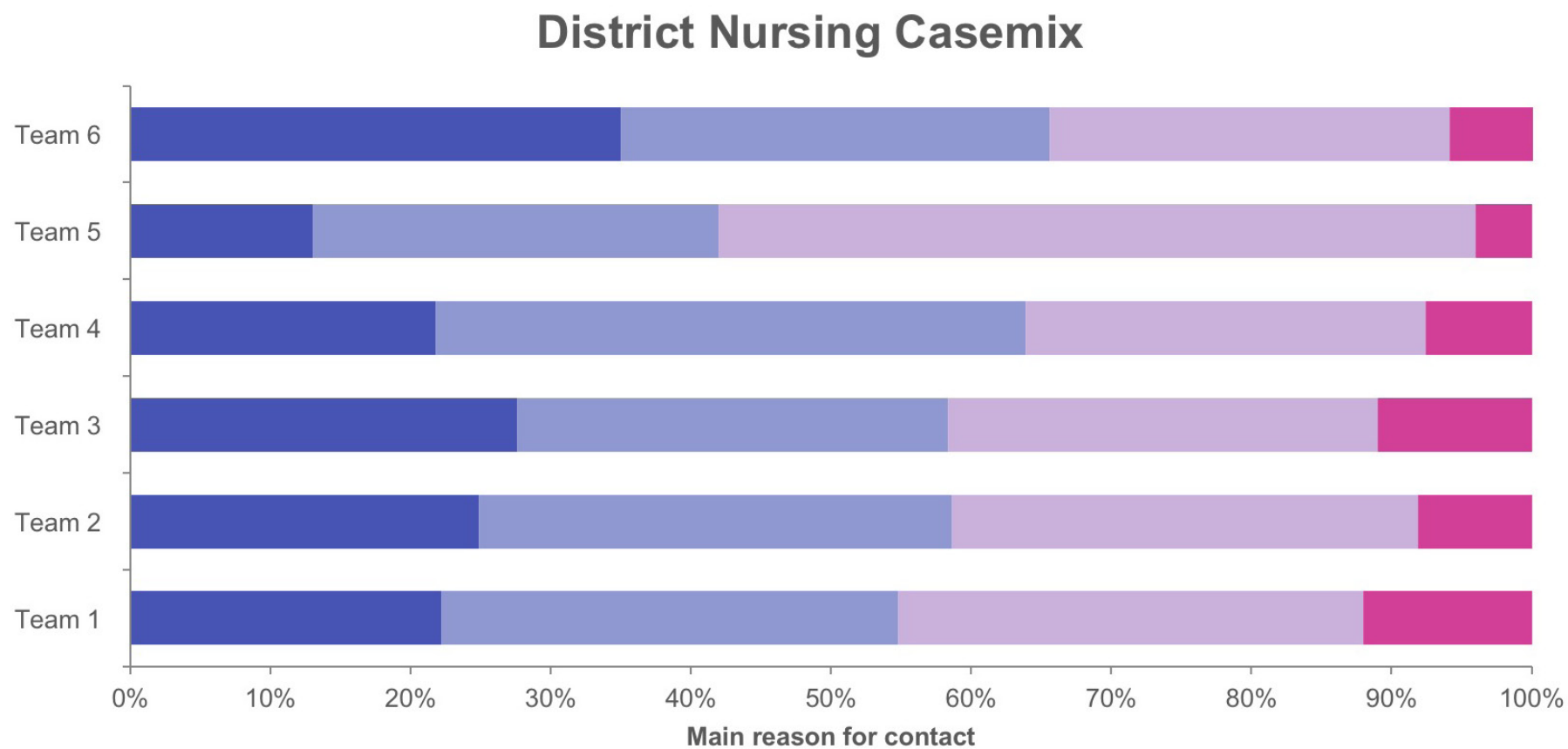
(F) Comparing average durations of community team contacts



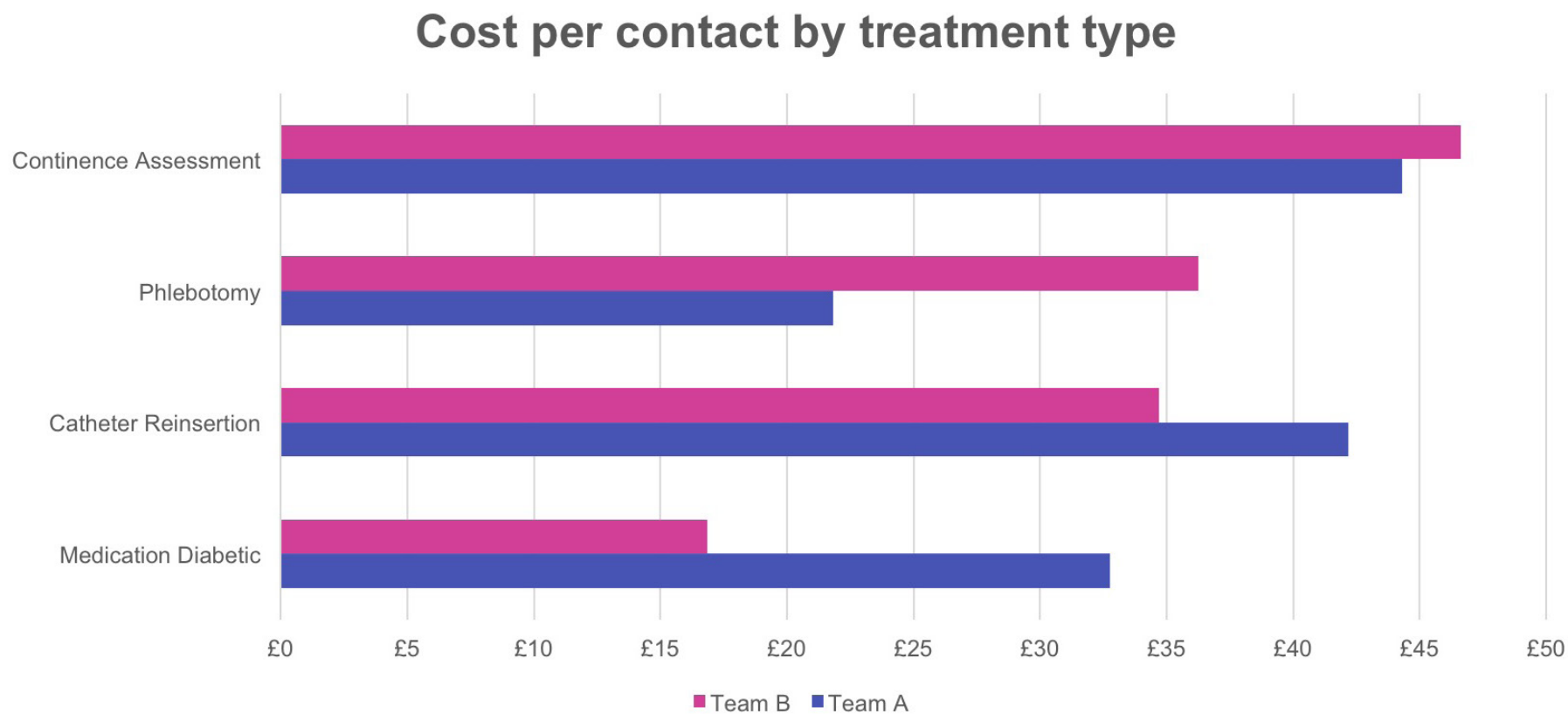
(G) Comparing contacts across community team members



(H) Looking at differences in case mix between district nursing teams



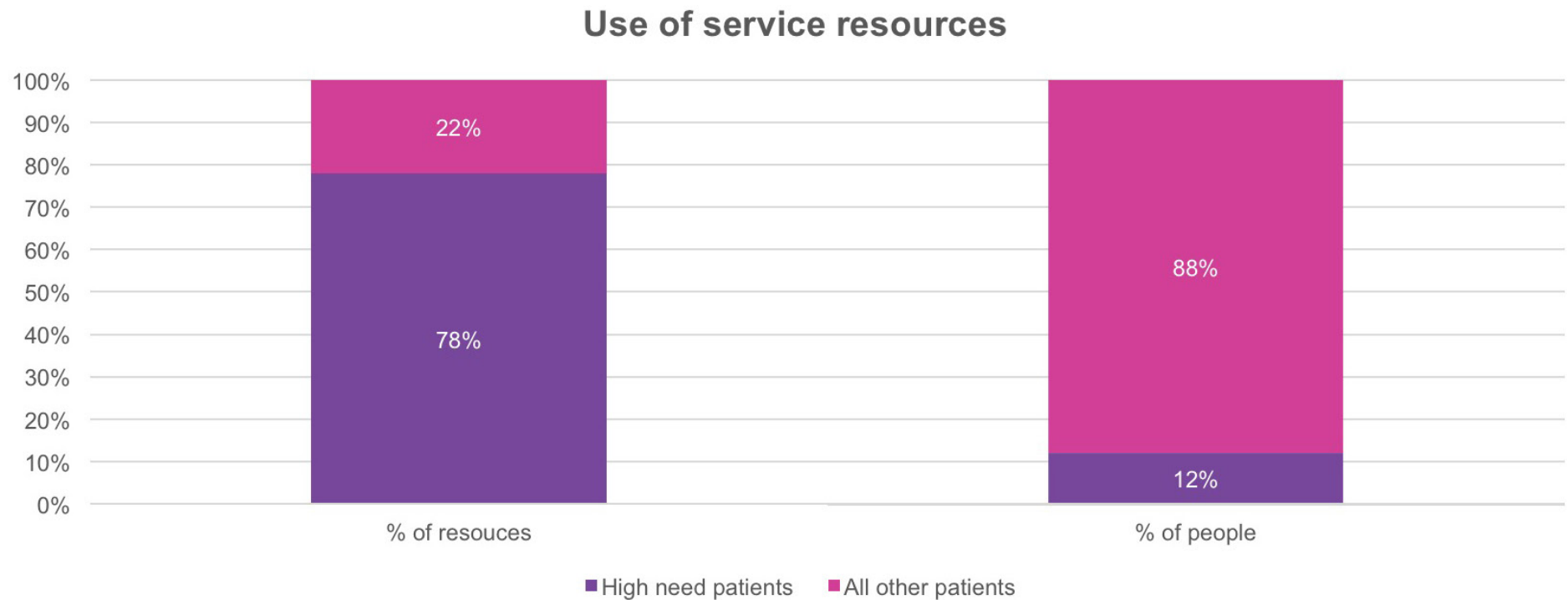
(I) Comparing costs of treatment between community teams



Demonstrating the flexibility of PLICS

(J) Who uses the organisation's resources?

PLICS can show how costs are distributed across patients using the provider's services



(K) High cost patients

The 5 patients incurring the highest costs over a year across all the provider's services

Patient ID	Primary reason for care	Number of services used	Total annual cost
AN2236	Diabetes	11	£75,232
BH3654	Stroke	6	£68,251
BH2231	Diabetes	6	£67,121
VA0985	Respiratory	19	£55,132
DC0745	Diabetes	5	£54,880



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