National Mobile Health Worker Project

Final Report: Appendix B Phase 2 Analysis

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1. Phase 2 Site Evaluations

Full descriptions of the Project methodology, implementation, technical details are available in the National Mobile Health Worker Project Progress Report.

The following sections give the metric findings for each site.

Overall project findings have not been presented in this Final Report, as the analysis performed for the Progress Report highlighted the significant variations that were present across the sites and how the differing approaches affected the outcomes of the project. This means there could not be any meaningful analysis performed from combining the data across the project.

The same applies to looking at data across Services, however some basic raw data is presented for the Services, to highlight the areas that may be more relevant to each service type.

1. Phase 2 Site Evaluations

2. Services

The table below summarises the services covered at the Phase 2 sites. The highest 3 in each category are shown in **bold.**

Service Type	Number of users	Days of Data returned	Number of Contacts	Number of Journeys	Referrals Made	Admissions made	Number of No Access visits
Childrens & Family Services	**70**	320	1633	484	6	2	12
District Nursing & Community Matrons	**197**	**4986**	**30225**	**13839**	**2100**	**107**	**558**
Intermediate Care	14	93	323	201	54	5	2
MDT (Multi-disciplinary team)	4	93	161	341	0	0	4
Palliative Services	27	**896**	**1737**	**1922**	166	0	9
Physiotherapy	15	245	711	838	**263**	89	16
Podiatry	7	25	172	85	0	0	1
Rapid Response	**49**	318	943	1190	**362**	**116**	**25**
Respiratory Services	4	164	778	106	73	3	19
Specialist Nursing	11	156	779	759	237	1	16
Speech & Language Therapy	38	**614**	**1680**	**1897**	0	0	**145**

Table 1 Basic Data by Service

3. Avon IM&T Consortium

Site profile

Project Lead	Paul Titman
Clinical Leads	Service leads
Business Change Lead	None specific to this deployment – work was previously produced by Bill Knight for the initial deployment of devices
Devices funded	77
Services involved in Phase 2	Bristol Community Health – Rapid Response (15) N Somerset – Rapid Response (34) * N Somerset – Physio (7) N Somerset – Community Matron (3) N Somerset – MS OT (1) S Gloucester – DART (1) * S Gloucester – Physio (8) * S Gloucester – Podiatry (7) * * indicates team also had Phase 1 involvement
Go-live	Feb-May 2011
Data Collection periods	Baseline : 2 weeks before receiving devices 3mth post go-live : 20th June 2011 6mth post go-live : 12th September 2011 9mth post go-live : 14th November 2011 (all data collections for 2 weeks)

Table 2 Avon Phase 2 Site Profile

Project Overview

As in Phase 1 of the National Mobile Health Worker project the Avon IM&T Consortium (AIMTC) represents 3 distinct organisations: Bristol Community Health, South Gloucestershire Community Services and North Somerset Community Partnership.

AITMC had recognised early in the phase 1 project that in order to maximise the benefits, the majority of staff in a service needed to have mobile access, and so for Phase 2, a further 77 devices were deployed, with the aim of enhancing the phase one deployments.

The original process maps from phase 1 were utilised and formed the basis of transformation plans, and a RiO Optimisation Lead was responsible for utilisation of the electronic records, of which mobile access and use was just one component.

By the time the phase 2 devices were deployed, there was no longer a 'formal' project in place in Avon, and the devices became part of 'business as usual'. The Phase 2 deployment also coincided with the implementation of the Department of Health TCS programme, which resulted in significant changes to organisations and services. Both of these factors contributed to the difficulties for the local team to gather the data returns to submit to the National Project.

Alongside the nationally funded devices, additional devices were funded locally and deployed. The business case for these was supported by the early findings from the phase 1 project locally. Further equipment such as mobile printers were also provided locally if there was an identified need for them.

Avon have also looked at alternative devices to the Panasonic Toughbook, for staff who do not need the full range of functionality available to them, and are deploying Samsung netbooks to selected staff .

The local team acknowledged that some of users deployed to in phase 2 would not see full benefits from having the devices until all other teams they work alongside also have mobile access – this was particularly relevant to the Rapid Response services, however there were plans in place to roll out further devices to address this.

Connectivity remained an ongoing challenge, and Avon IMTC felt that the organisations would benefit greatly from Store and Forward functionality to use alongside connected working. In the absence of this, the local teams had devised workarounds to help with connectivity frustrations – these included collecting data offline in word documents or pre built templates, then cut and pasting this into the clinical application when connectivity was available.

Of the users deployed to in Phase 2, only the Rapid Response services had devices for all staff. Devices were available to all domiciliary team staff in Physiotherapy, podiatry and the MDT's (e.g. complete distinct teams within a service).

At a Glance – data returned

Clinicians	Number in project	Baseline returns	Benefit 1 returns	Benefit 2 returns	Benefit 3 returns
District Nursing & Community Matrons	1	1	0	1	0
Physiotherapy	15	15	8	7	6
Podiatry	7	4	1	1	0
MDT	2	0	0	0	0
Rapid Response	49	36	20	2	6
Total	**74***	**56**	**29**	**11**	**12**

* 3 unallocated devices
Table 3 Avon Overview of Returns used in analysis

Days data	Baseline returns	Benefit 1 returns	Benefit 2 returns	Benefit 3 returns	Total
District Nursing & Community Matrons	11	-	9	-	20
Physiotherapy	113	36	53	43	245
Podiatry	14	10	1	-	25
Rapid Response	146	139	8	25	318
Total	**284**	**185**	**71**	**68**	**608**

Table 4 Avon Overview of Number of Days of data returned

Metric analysis

Avon managed to return data from 73% of users at Baseline, however this fell to just 16% by Benefits 3. This may affect the reliability of the results.

Contacts:

A total of **1963** contacts were recorded in Avon over the **608** days that data was recorded.
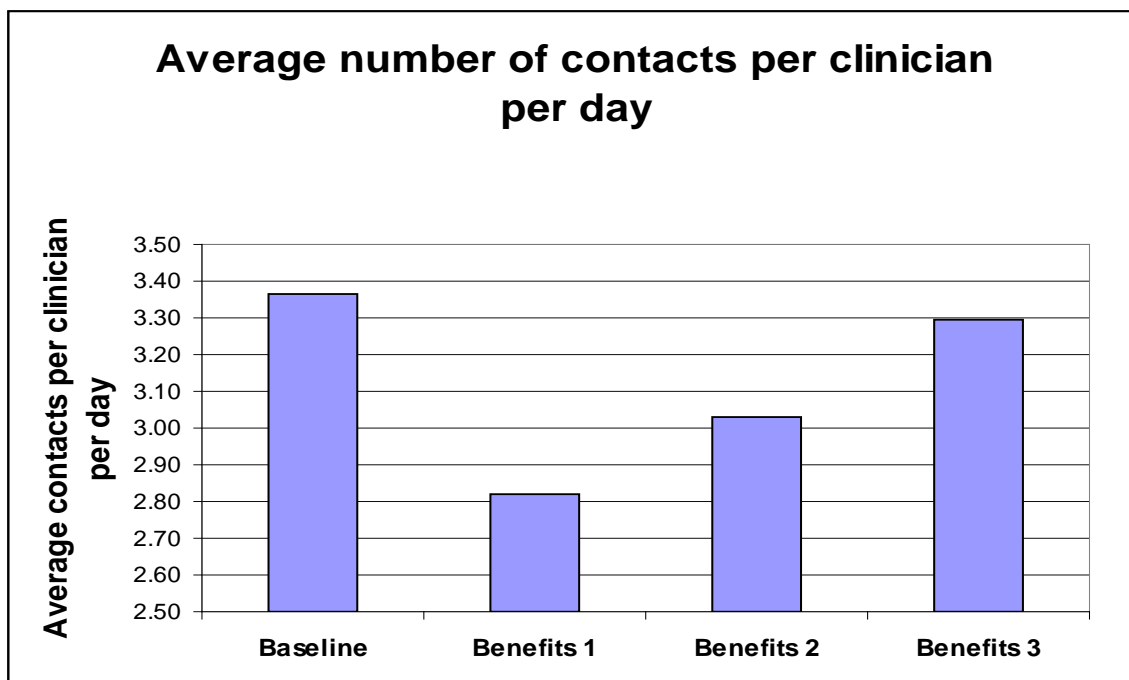
Figure 1 Avon Average contacts per clinician, per day

The average number of contacts per clinician per day decreased very slightly by **2%** from Baseline to Benefits 3, but has shown a consistent increase over the duration of the project.
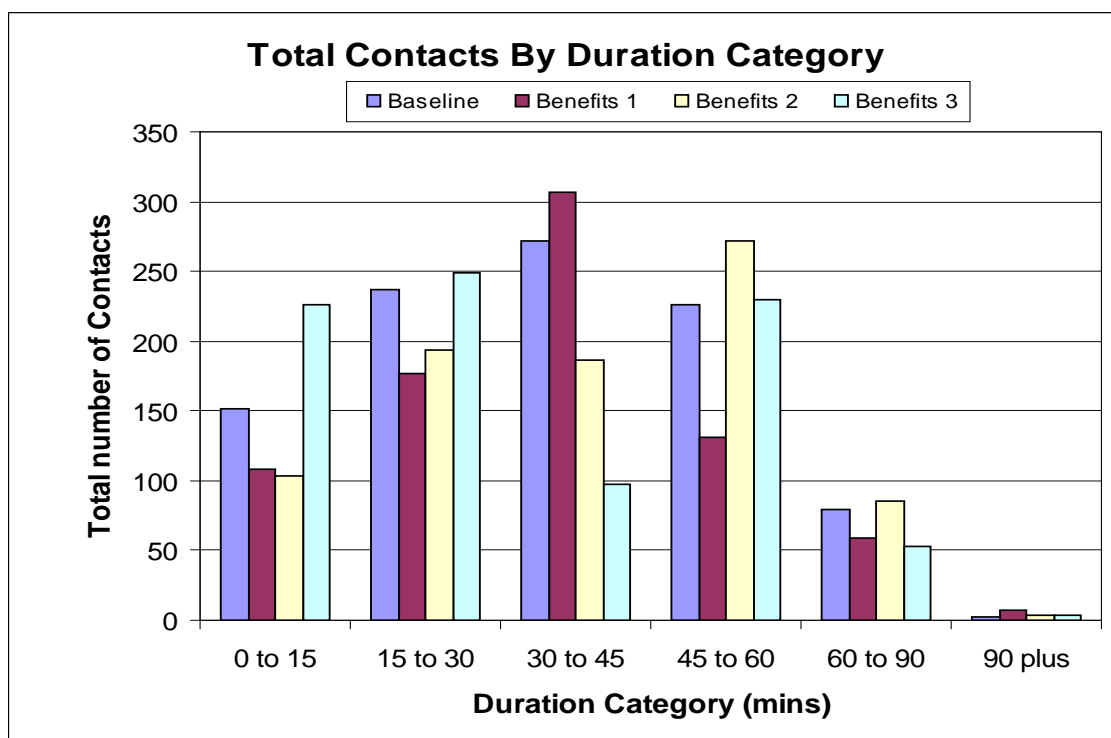
Figure 2 Avon Total contacts by duration

The data for number of contacts split by duration category shows a large decrease in activity in the time band 30-45mins and also a decrease in the time band 60-90 mins.

This has resulted in total time spent with patients decreasing by **21%**.
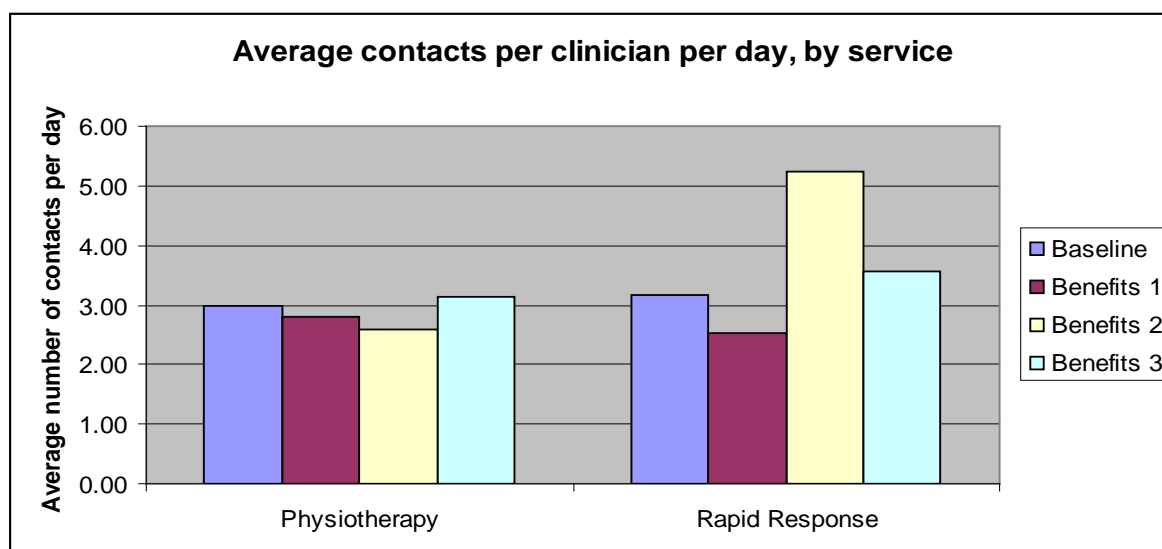
Figure 3 Avon Contacts split by Service

There were only complete returns for 2 Services – Physiotherapy and Rapid Response. Each service shows an increase in activity (**5%** and **12%** respectively) from Baseline to Benefits 3.

Rapid Response was the only service where all users had access to a mobile device, and this result highlights that greater benefits can be achieved where processes can be changed across a Service

Journeys:
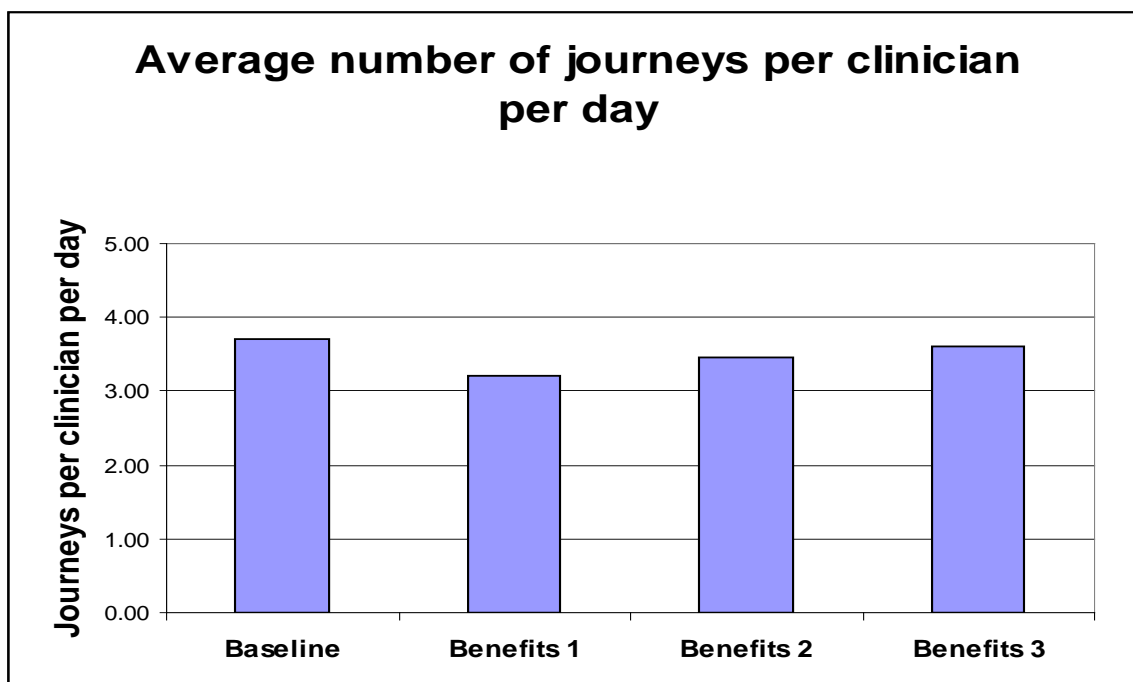
Figure 4 Avon Average journeys per clinician, per day

The average number of journeys per day decreased by **3%**.
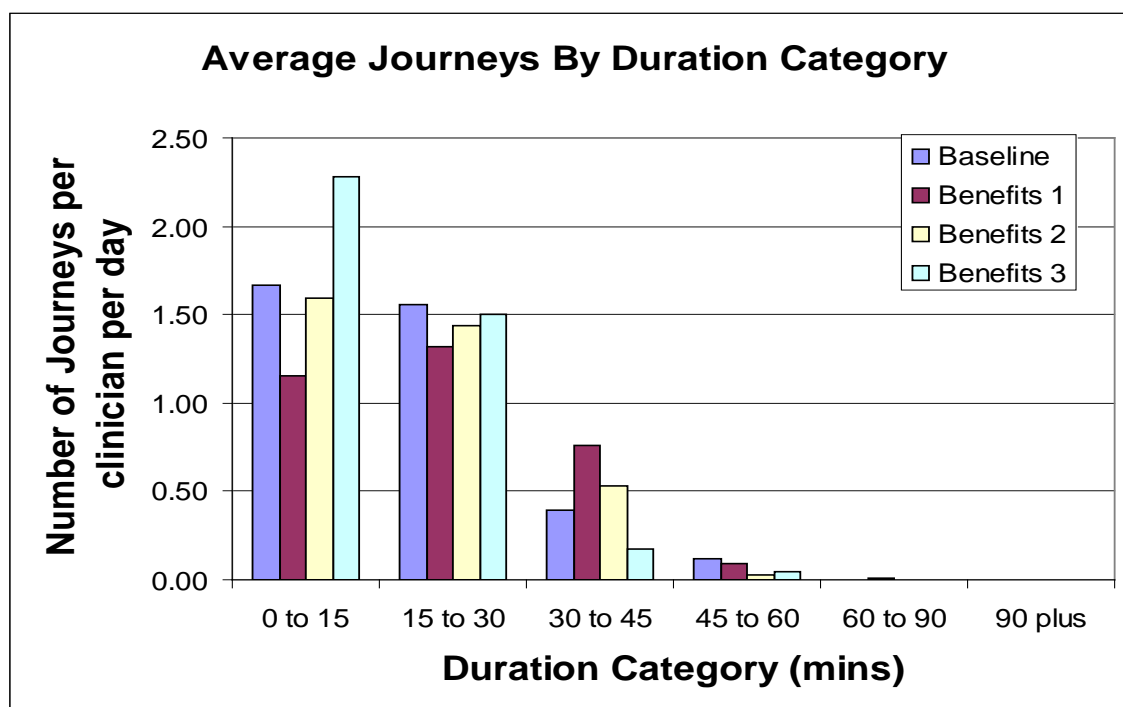
Figure 5 Avon Average journeys by duration category

The overall time spent on journeys decreased by **13%**, despite journeys under 15 minutes increasing. There was a drop in all journeys longer than 15 minutes.

When looking at journeys split by service, there is only data to support 2 Services – Physiotherapy and Rapid Response, both increasing from Baseline to Benefits 3 (**19%** and **5%** respectively).

Rapid response has demonstrated improved efficiency, as they have increased activity more than they have increased journeys.

No Access Visits:

Due to the small numbers involved, the figures are presented as an average across the combined benefits periods.
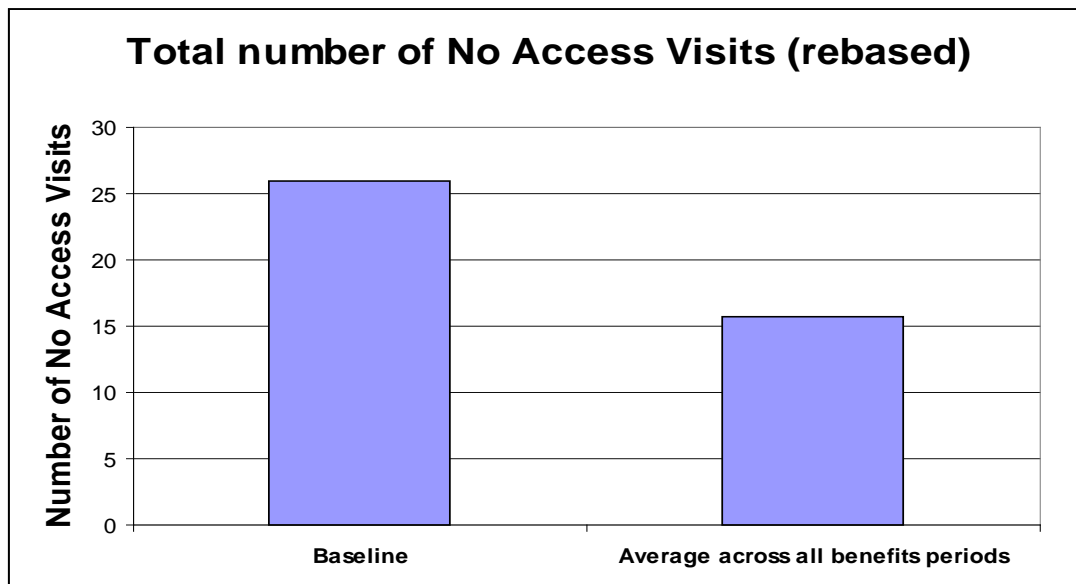
Figure 6 Avon No Access Visits

The average number of No Access visits across all benefits periods show a decrease of **38%** from Baseline.

Duplication of Data:
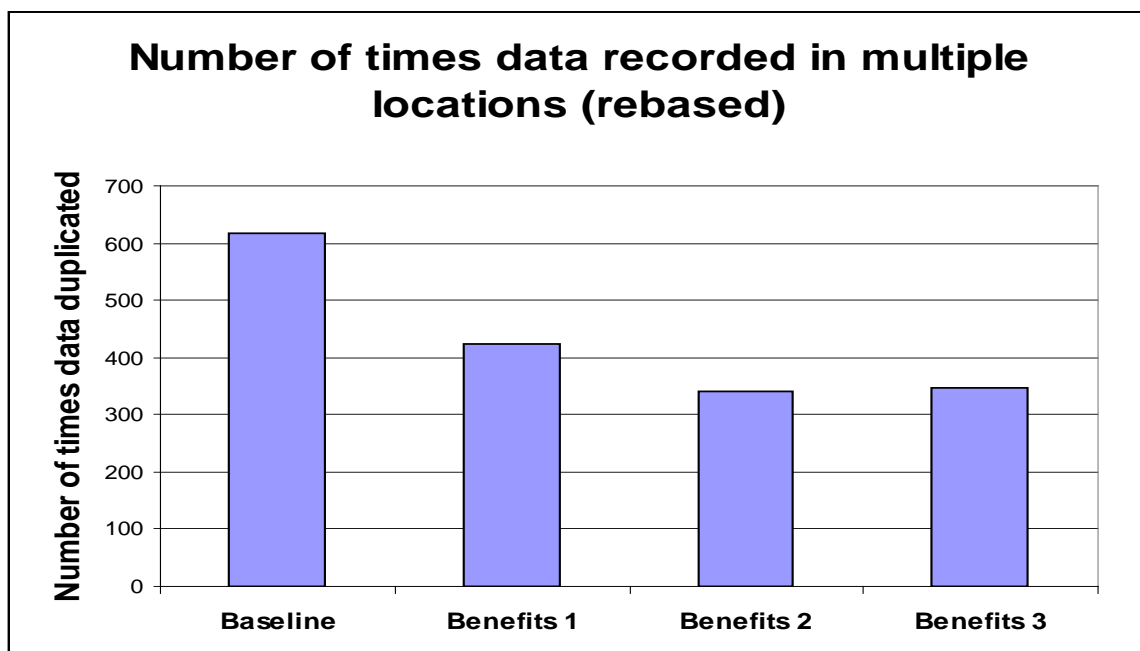
Figure 7 Avon Duplication of data

The data shows a decrease of **44%** from Baseline to Benefits 3.

10

This reflects the significant work of the local Optimisation Leads in maximising the use of the local electronic clinical record (RiO).

Referrals:

In total, **332** referrals were made across the benefits periods. Clinicians at Avon estimated that due to having mobile access to systems, they saved **8** potential referrals. This equates to a **2% saving** in referrals.

Admissions:

In total, **10** admissions were made across the benefits periods. Clinicians at Avon estimated that due to having mobile access to systems, they saved **3** potential admissions. This equates to a **23%** saving in admissions.

4. John Taylor Hospice CIC (Birmingham East and North – BEN)

Site profile

Project Lead	Nicky Tongue (Director of Clinical services)
Clinical Leads	Nicky Tongue
Business Change Lead	Nicky Tongue
Devices funded	21
Services involved in Phase 2	Hospice At Home (11) Bereavement service (2) Chaplain (1) Community Pharmacy (1) Community MDT (4, Some JTH Based) Community Team (13)* MDT (8)* * indicates also have phase 1 involvement
Go-live	February 2011
Data Collection periods	Baseline : April / May 2011 3mth post go-live : 9th May - 20th May 6mth post go-live : 1st August - 12th August 9mth post go-live : 31st October – 11th November (all data collections for 2 weeks)

Table 5 BEN site profile

Project Overview

John Taylor Hospice deployed to half of their community clinicians in phase one of the project and achieved significant benefits. The senior management team felt that these benefits could be extended if they provided mobile access to the remaining community staff at the organisation, therefore a further 21 devices were deployed as part of Phase 2. Of the 21 devices provided, three were retained for senior personnel and a medical consultant.

The Hospice worked hard to standardise assessments in the Pan BEN Project for Palliative Care Services, and these assessments were built into the clinical electronic record (Systmone), allowing the Hospice to begin to roll out the use of the full electronic patient record. Integral to the success of this deployment was the introduction of the mobile devices, allowing information to be recorded at the point of care.

Process maps were produced for the roll out of the full electronic record, of which use of the mobile device was a major factor. The local project team are committed to also introducing disconnected working for the staff, so that connectivity issues do not detract from the benefits of having mobile devices.

The local project team are supporting an ongoing user group for clinical staff, which will continue to support the ongoing project and document the benefits in the long term.

At a Glance – data returned

Clinicians	Number in project	Baseline returns	Benefit 1 returns	Benefit 2 returns	Benefit 3 returns
Palliative Services	19	17	13	14	10
Total	**19***	**17**	**13**	**14**	**10**

*2 Devices deployed to a Senior manager and Consultant

Table 6 BEN Overview of Returns used in analysis

Days data	Baseline returns	Benefit 1 returns	Benefit 2 returns	Benefit 3 returns	Total
Palliative Services	467	114	107	69	757
Total	**467**	**114**	**107**	**69**	**757**

Table 7 BEN Overview of Number of Days of data returned

The site managed to return data from a very high 89% of users at Baseline, which fell to 53% by Benefits 3.

Metric analysis

Contacts:

A total of 1351 contacts were recorded in BEN over the 757 days that data was recorded.
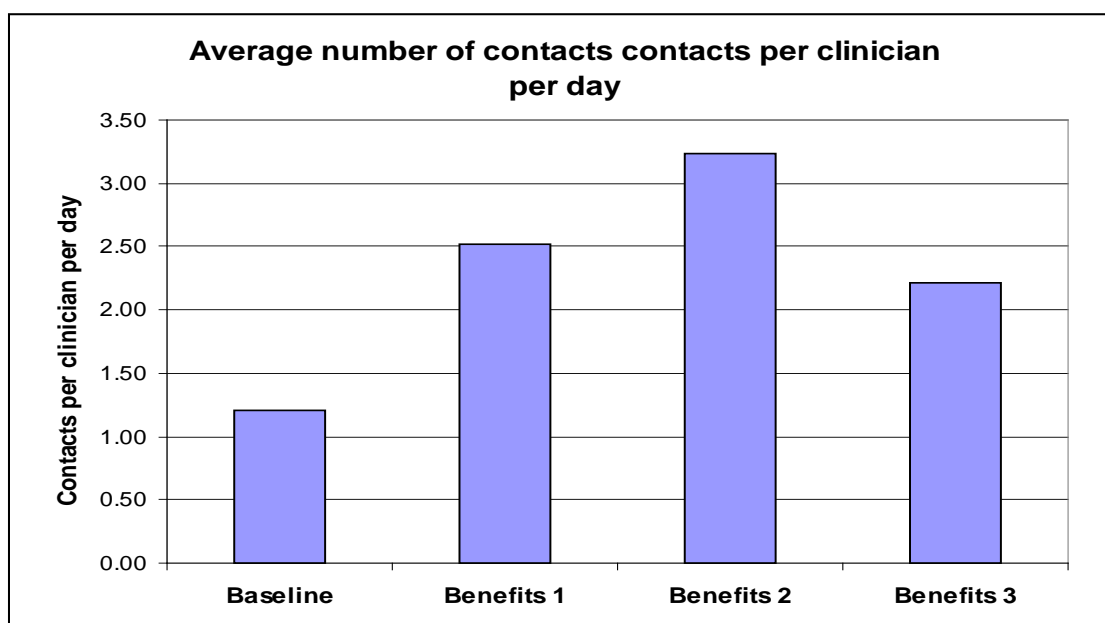
Figure 8 BEN Average contacts per clinician, per day

The average number of contacts from Baseline to Benefits 4 increased by **83%**
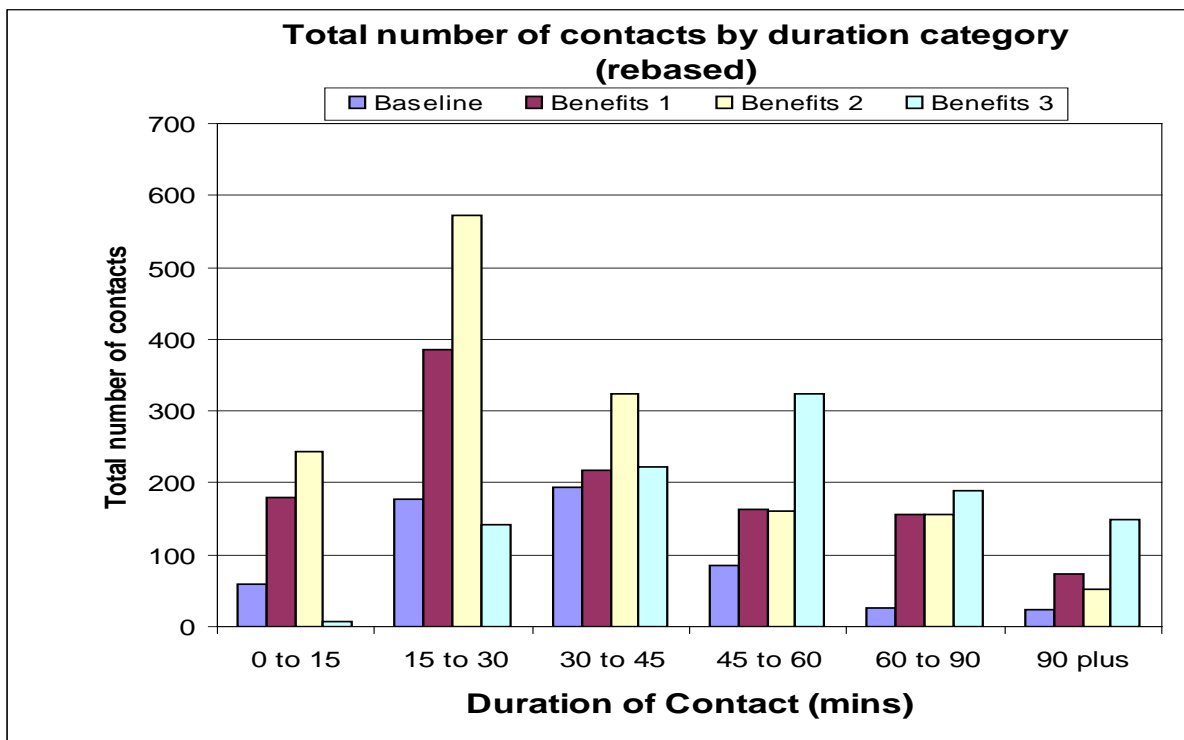
Figure 9 BEN Total contacts by duration

The data for the number of contacts split by duration shows a decrease in the two shorter durations followed by significant increases in contact duration for the longest time bands with a **548%** increase in contact duration in the 90+ time band

This means the total time spent with patients increased by **151%** from Baseline to Benefits 3.
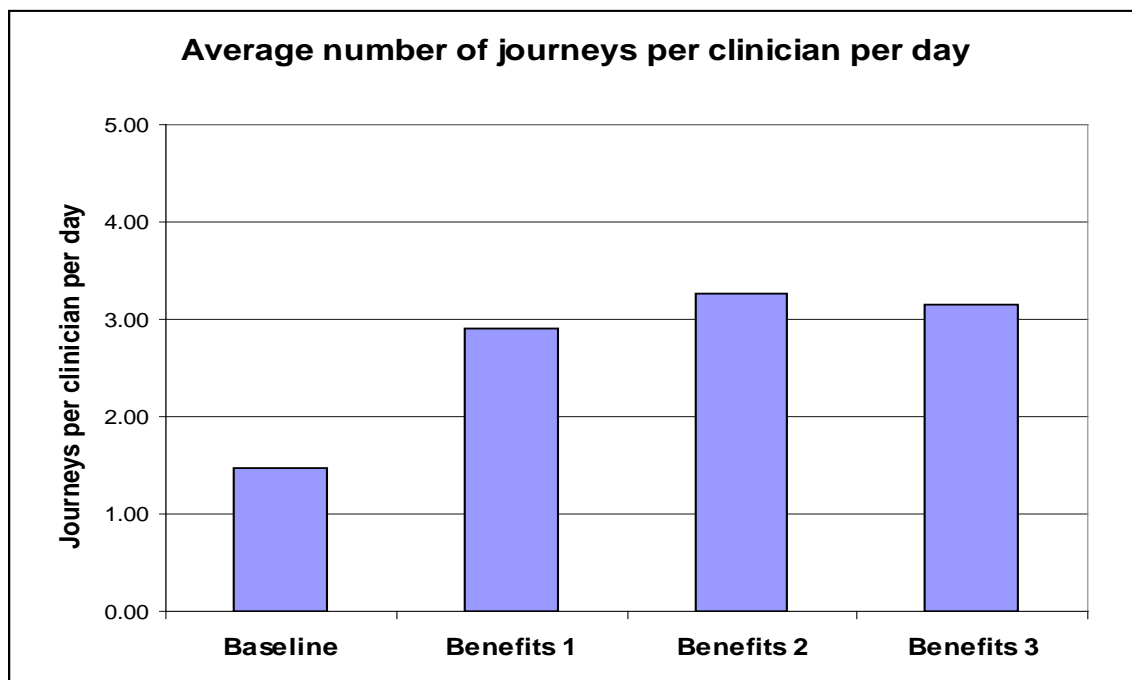
Journeys:

Figure 10 BEN Number of average journeys per clinician, per day

The average number of journeys per day increased by **114%** from Baseline to Benefits 3.
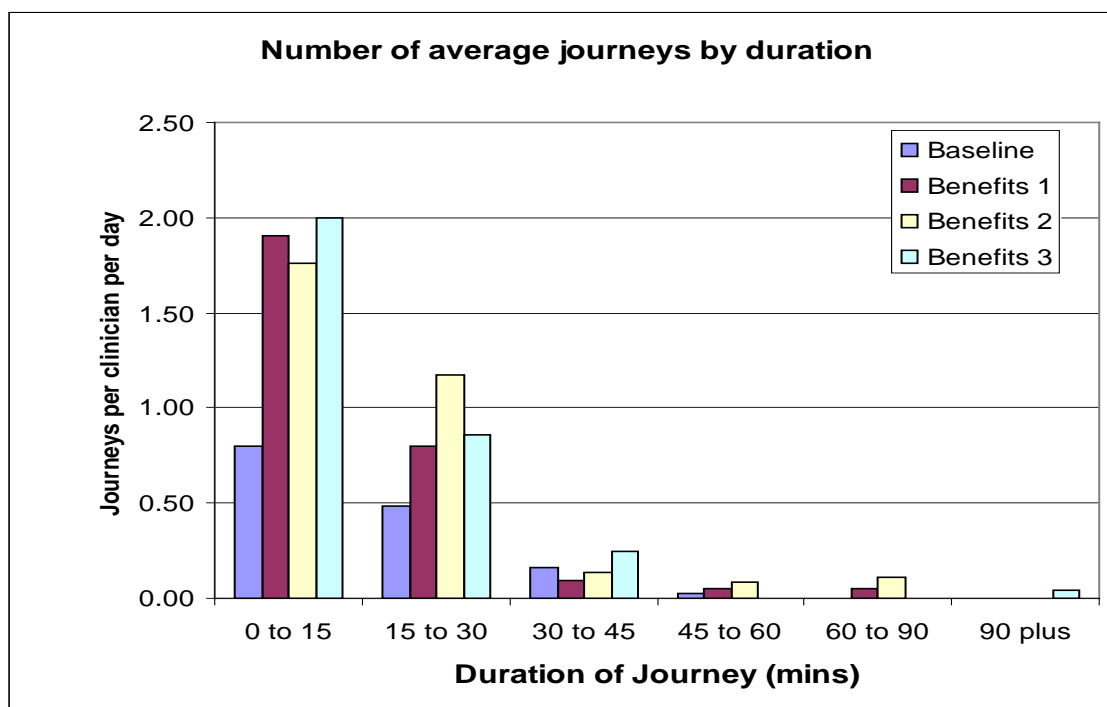
Figure 11 BEN Average number of Journeys by duration category

The data for number of journeys split across the duration categories show that only the number of very short journeys increased greatly with little change in the longer time bands, resulting in an increase in the total time spent travelling of **79%** from Baseline to Benefits 3.

No access visits:

The numbers for no access visits was very small across the data collection periods, and due to the small numbers involved, the figures are presented as an average across the combined benefits periods.
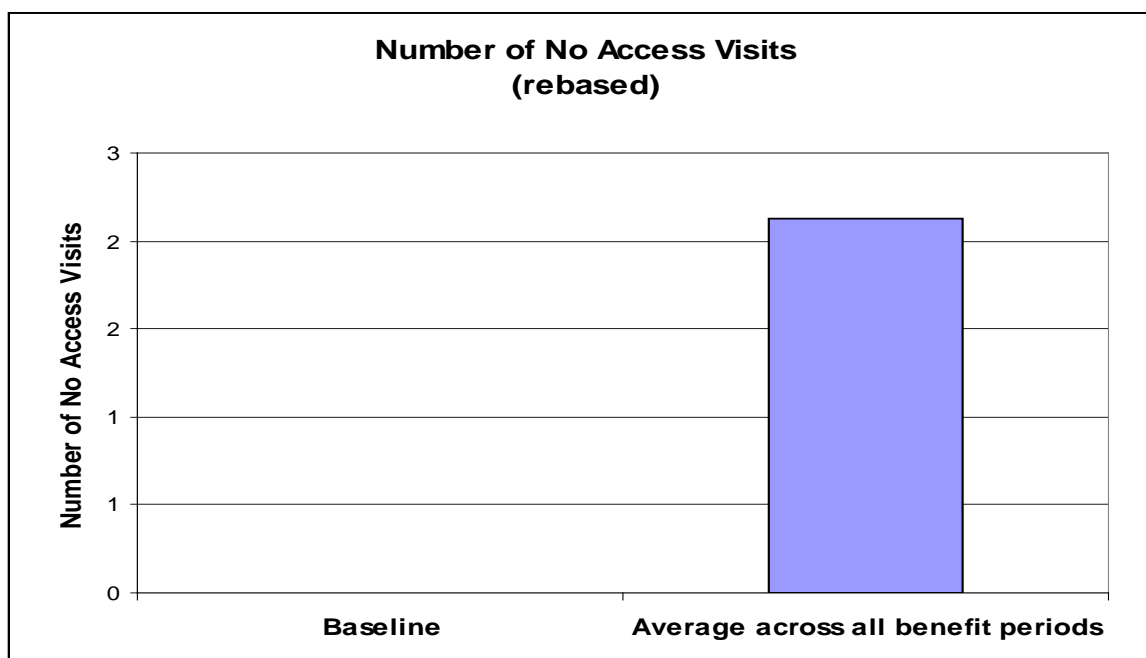
Figure 12 BEN No access visits

Although the data shows an increase in the number of No access visits, all no access visits were recorded in a single benefit period (Benefit 3) therefore it is not known how reliable this result is.

Duplication of Data:
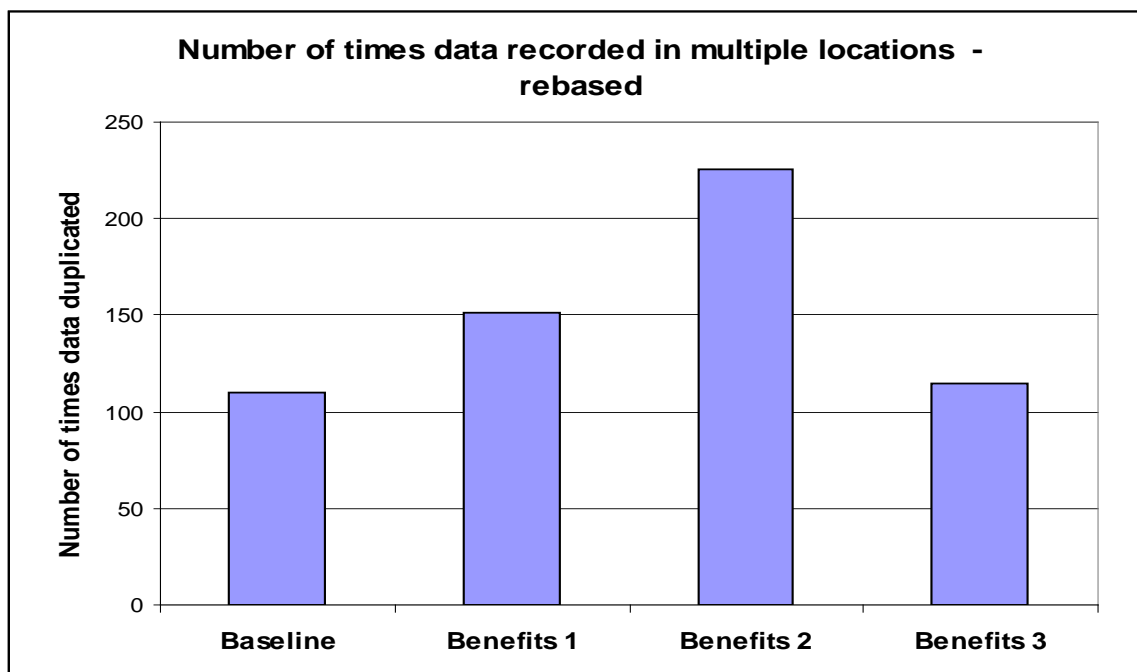
Figure 13 BEN Duplication of data

The data shows an increase from Baseline to Benefits 3 of **5%** for duplication for data

This probably represents the change locally to the organisation and the progress of the optimisation project for the use of electronic clinical records,

Referrals:

In total, **3** referrals were made across the benefits periods. No referrals were recorded as being saved due to having mobile access

Admissions:

No admissions were either made or saved during the project.

5. NHS Calderdale

Site profile

Project Lead	Steve Roscoe
Clinical Leads	Team leaders
Business Change Lead	None - included in 'business as usual'
Devices funded	100
Services involved in Phase 2	District Nurses (86)* Intermediate Care (14) * also involved in Phase 1
Go-live	BT Jan-Mar 2011 (In reality the deployment was ongoing, as there was a constant reallocation of devices)
Data Collection periods	Baseline : Jan 2011 3mth post go-live : Jun 2011 6mth post go-live : Sep 2011 9mth post go-live : 5th Dec 2011 (1 week only – other collections were for 2 weeks)

Table 8 Calderdale Phase 2 Site Profile

Project Overview

A further 100 devices were deployed to District Nurses and Intermediate Care at NHS Calderdale.

Due to the numbers involved, not all District Nurses were issued a device, but all those working over 22.5hrs per week have their own device. Weekend workers and those in the Overnight service share devices. This has resulted in just over half the District Nurses having access to a device.

NHS Calderdale are actively promoting their electronic record (SystmOne), and have piloted a 'paper-light' system, which they are rolling out across Services in the area – professional leads are responsible for implementing this, and have had workshops to look at changing working practices and hours, utilising the technologies available. All business change activities locally are designed to maximise the use of the electronic record and mobile access is just one element of this.

Local changes to the organisation had a large effect on the local mobile working project, making ongoing collection of benefits data difficult.

Connectivity remained an ongoing challenge, but the 'Briefcase' functionality (off line) available in SystmOne was not being pursued at present due to lack of local resource to support this.

At a Glance – data returned

Clinicians	Number in project	Baseline returns	Benefit 1 returns	Benefit 2 returns	Benefit 3 returns
District Nursing & Community Matrons	86	40	59	52	21
Intermediate Care	14	-	10	4	2
Total	**100**	**40**	**69**	**56**	**23**

Table 9 Calderdale Overview of Returns used in analysis

Days data	Baseline returns	Benefit 1 returns	Benefit 2 returns	Benefit 3 returns	Total
District Nursing & Community Matrons	330	494	373	83	1,280
Intermediate Care	-	66	22	5	93
Total	**330**	**560**	**395**	**88**	**1,373**

Table 10 Calderdale Overview of Number of Days of data returned

Calderdale achieved a 40% return rate at Baseline, which fell to 23% by Benefits 3. Although the percentages are low, they are relatively consistent so the results should be reliable

Metric analysis

Contacts:

A total of **8199** contacts were recorded in Calderdale over the **1373** days that data was recorded.
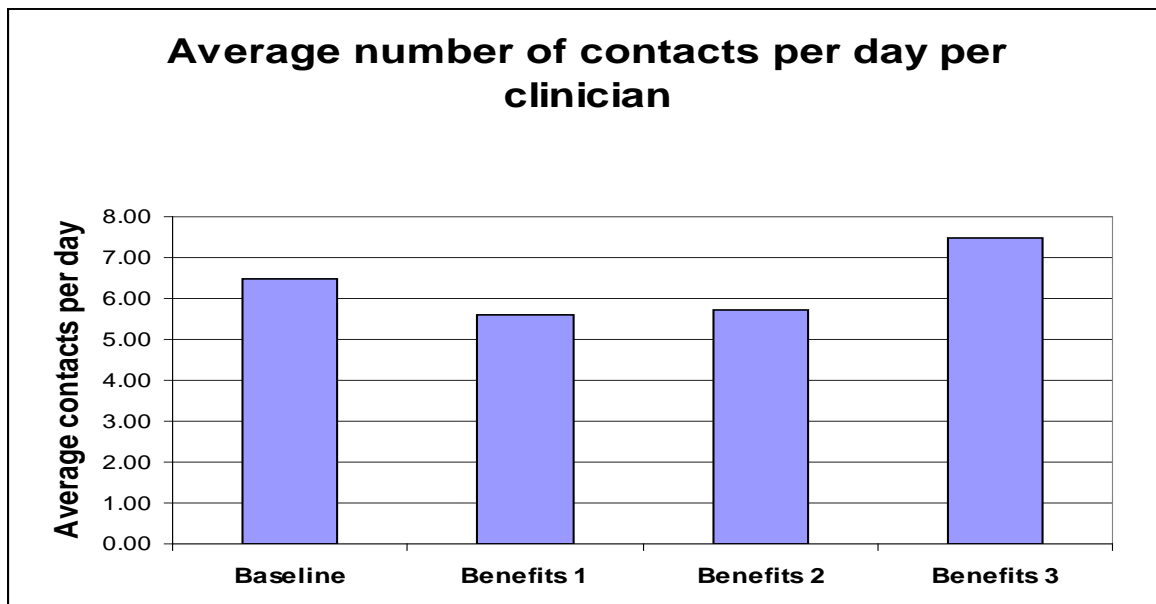
Figure 14 Calderdale Average contacts per clinician, per day

The average number of contacts per clinician per day increased by **15%** from Baseline to Benefits 3.

Total Contacts By Duration Category

Figure 15 Calderdale Total contacts by duration

The data for number of contacts split by duration category shows an increase in activity across all time bands. This has resulted in total time spent with patients increasing by **15%**.

There was only complete data for the District Nursing Service, who showed an **18% increase** from Baseline to Benefits 3.

Journeys:

Average number of journeys per clinician per day
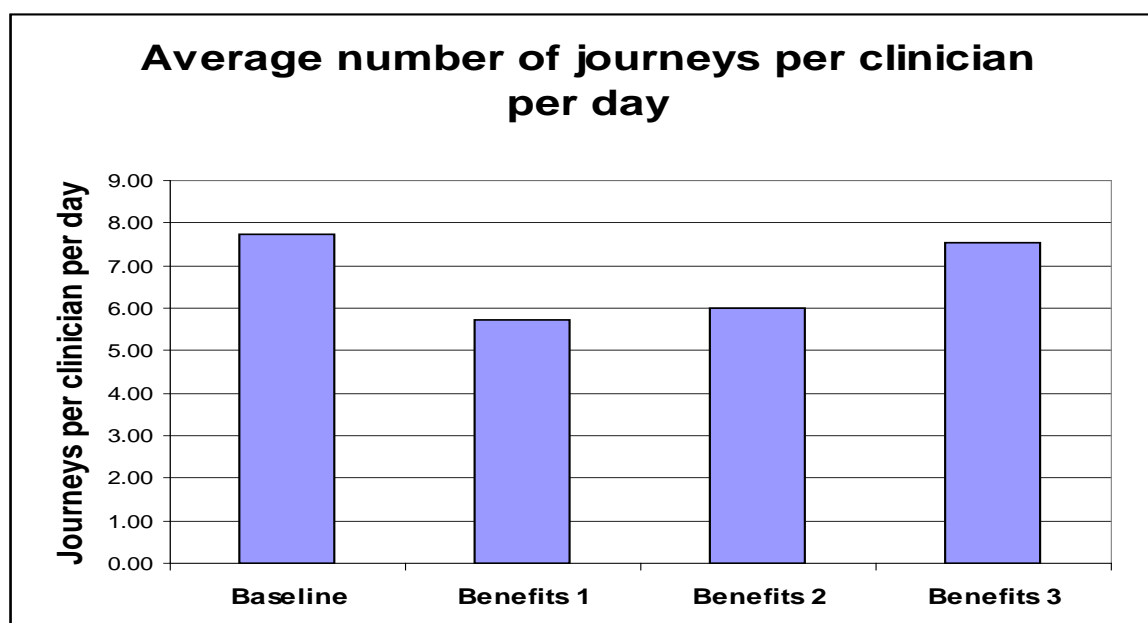
Figure 16 Calderdale Average journeys per clinician, per day

The average number of journeys per day decreased by **2%** from Baseline to Benefits 3.

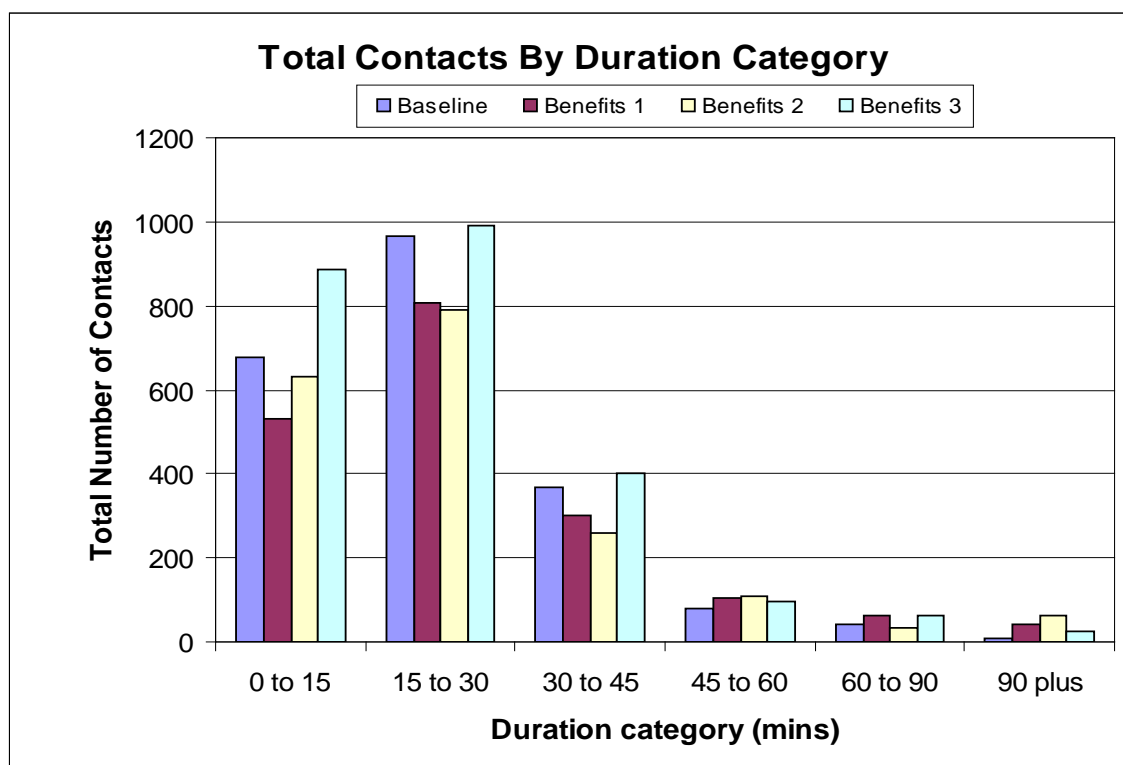The overall time spent on journeys increased by **3%**, due to there being a slight increase in longer journeys, although short journeys dropped.

When looking at journeys split by service, there is only data to support District Nursing, which showed an increase of less than **1%** from Baseline to Benefits 3.

No Access Visits:

Due to the small numbers involved, the figures are presented as an average across the combined benefits periods.
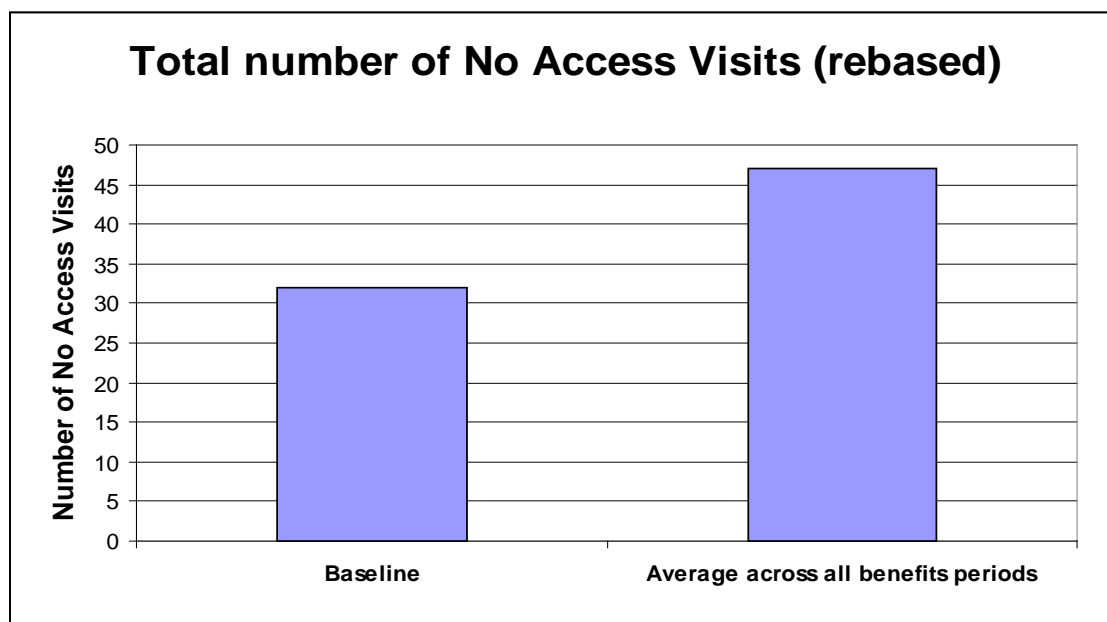
Figure 17 Calderdale No Access Visits

The average number of No Access visits across all benefits periods shows an increase of **47%** from Baseline. This has been significantly affected by the Benefits 3 data, which was collected prior to Christmas, and is likely to reflect a seasonal variation.
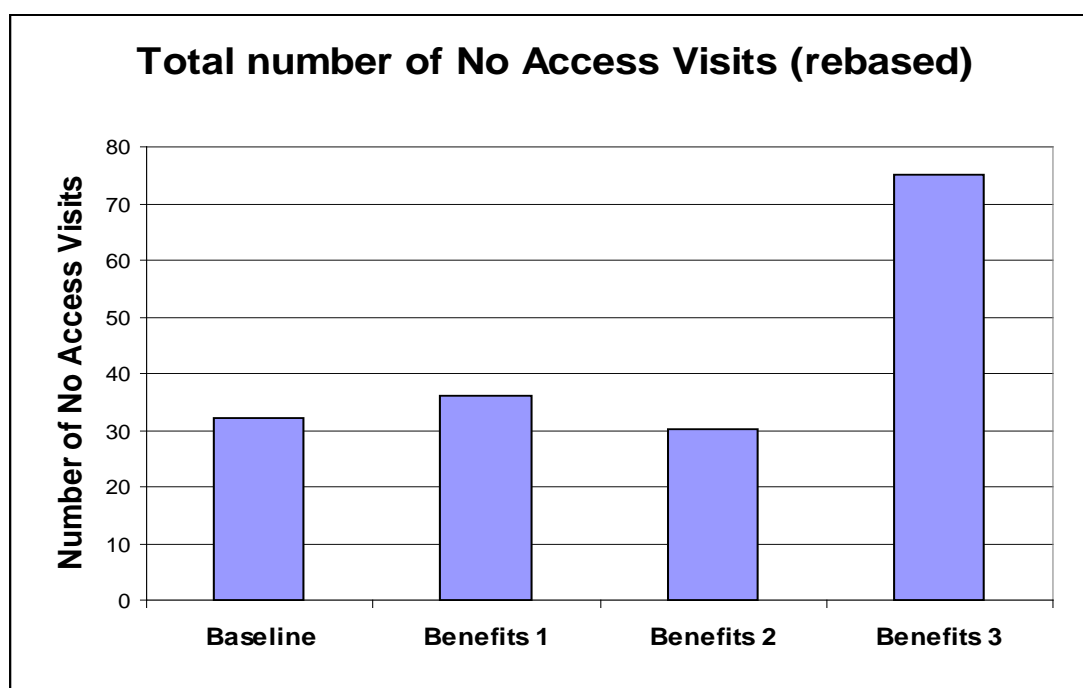
Figure 18 Calderdale No access visits by data collection period.

Duplication of Data:
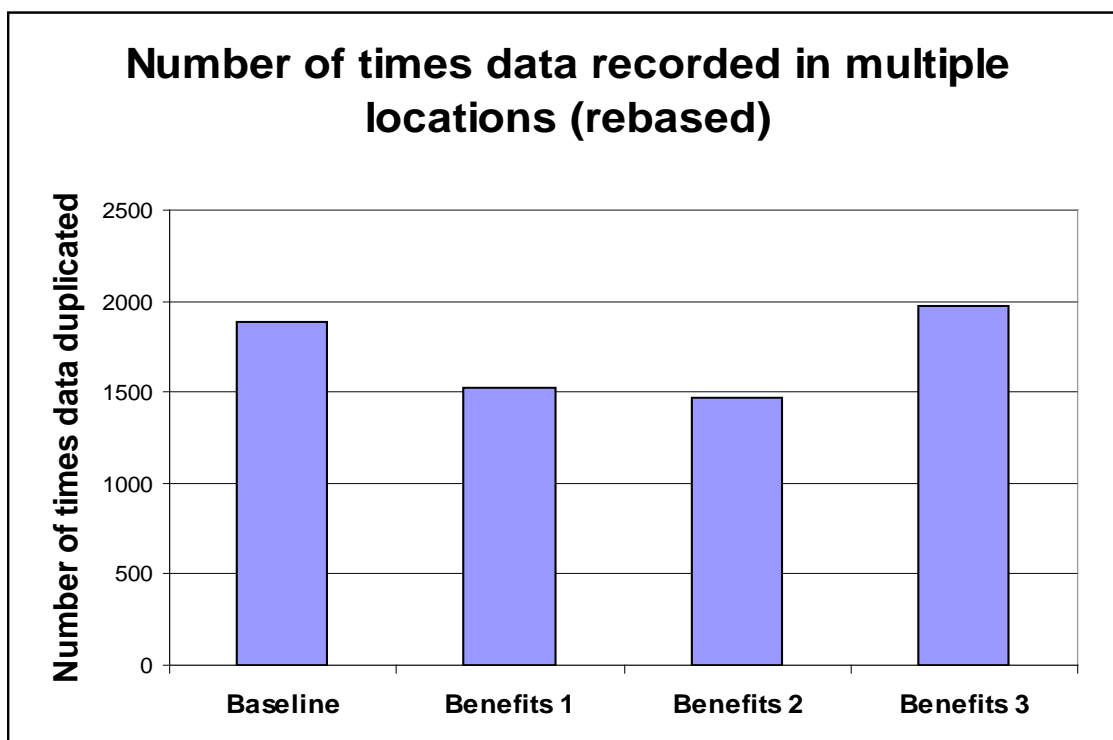
Figure 19 Calderdale Duplication of data

The data shows a small increase of **5%** from Baseline to Benefits 3 for duplication of data.

The initial 2 benefits periods showed a reduction in duplication, but this had increased by Benefits 3. This may reflect that changes to practice have not become embedded, and as the project has progressed, clinicians have reverted to old practices.

There was only complete data from the District Nursing Service across all periods and this shows an increase of **4%** from Baseline to Benefits 3.

Referrals:

In total, **957** referrals were made across the benefits periods. Clinicians at Calderdale estimated that due to having mobile access to systems, they saved **206** potential referrals. This equates to an **18% saving** in referrals.

Admissions:

In total, **69** admissions were made across the benefits periods. Clinicians at Calderdale estimated that due to having mobile access to systems, they saved **2** potential admissions. This equates to a **3%** saving in admissions.

6. North Tees and Hartlepool NHS Foundation Trust

Site profile

Project Lead	Ben Ryan
Clinical Leads	Michael Chivunga, Karen Smith (DN), Marion Bateson (Head of Paediatric SLT)
Business Change Lead	Business change workshops facilitated by Ben Ryan, clinical lead, and service improvement facilitator to produce process flows. A Business change group meets monthly and reports to IMT & IG group.
Devices funded	95
Services involved in Phase 2	SLT * D/N* Community Matrons, Heart Failure nurses, Cardiac Rehab nurses, Macmillan nurses Stroke team (1) * * indicates also have phase 1 involvement
Go-live	End Dec 2010
Data Collection periods	Baseline : Dec 2010 3mth post go-live : Feb 2011 6mth post go-live : Jun 2011 9mth post go-live : Sep 2011 (all data collections for 2 weeks)

Table 11 Hartlepool Phase 2 Site Profile

Project Overview

A further 95 devices were deployed at North Tees and Hartlepool NHS Foundation Trust, to provide devices to complete services, and a local business case is being written to procure and deploy additional devices (154).

Process maps were created for the new services and the existing ones were re-used for the Services involved in Phase 1. The project was affected by the extensive local organisational changes, and staff in many services felt unable to be proactive in taking forward new ways of working in the climate of change. There were also difficulties in maintaining the gains already achieved. This was in part due to issues/problems not being passed on in a timely manner, as staff were unsettled due to the organisational changes.

In order to address the concerns regarding maintaining use of the devices, there are local action plans to monitor usage of both the devices and the clinical system. Configuration changes have been made to the settings on the devices, to help make the devices more user friendly. These include changing log on settings so that users are only locked out of windows when the device lid is shut rather than a time-out due to inactivity.

The local project team found that there was less enthusiasm for the deployment of the phase 2 devices than there had been for the devices in Phase 1 – this may be due to the local changes taking place at the time of deployment, or because they were looking to give devices to all staff in a service, the ones who were keen to implement technology had volunteered first, and therefore all those who were not so keen were left for phase 2.

Connectivity remained an ongoing challenge, and Hartlepool decided to look at the offline 'Briefcase' functionality available in their clinical solution, SystmOne. Following an initial successful deployment, this functionality will be rolled out to further services, to be used alongside and complement connected access.

The local team have explored other technologies such as PDAs and digipens, and 40 additional laptop devices have been purchased and deployed since the start of the original project.

The project team are aiming to continue to standardise setups and configuration across units/teams and standardise ways of working, using the electronic clinical record.

At a Glance – data returned

Clinicians	Number in project	Baseline returns	Benefit 1 returns	Benefit 2 returns	Benefit 3 returns
District Nursing & Community Matrons	34	6 (17)	6 (26)	20	20
MDT's	2	0 (1)	0	2	2
Palliative Services	8	1 (6)	2 (5)	5	5
Respiratory Services	1	0 (3)	1 (3)	1	2
Specialist Nursing	10	6	3 (7)	6	5
Speech & Language Therapy	38	3 (29)	0 (29)	33	29
Total	**93***	**16 (56)**	**12 (70)**	**67**	**63**

* 2 devices issued to non clinicians
Table 12 Hartlepool Overview of Returns used in analysis

The figures in ( ) in the table above and below indicate additional data that was extracted from the clinical system to support total contact data only, due to the low level of returns for these periods. All analysis other than contacts is based on the lower figures for Baseline and Benefits 1. This needs to be considered when looking at the results, as comparisons of the contact data showed that the lower returns may result in increased average numbers per day.

Days data	Baseline returns	Benefit 1 returns	Benefit 2 returns	Benefit 3 returns	Total
District Nursing & Community Matrons	140(173)	131(326)	170	175	616(844)
MDT's	0(20)	24 (0)	18	15	57(53)
Palliative Services	13(52)	35(68)	40	43	131(203)
Respiratory Services	0(24)	15(37)	10	14	39(85)
Specialist Nursing	36(42)	30(81)	56	24	146(203)
Speech & Language Therapy	36(237)	0(379)	256	267	559(1,139)
Total	**225(548)**	**235(891)**	**550**	**538**	**1548(2,527)**

Table 13 Hartlepool Overview of Number of Days of data returned

As discussed, the site struggled with returning data at Baseline and for the first benefits collection, returning data from only 17% of users at Baseline. The extract from the clinical system increased this to 59%. In contrast to every other site, the returns rose as the project progressed, and by Benefits 3, data for 59% of users was returned.

Metric analysis

Contacts:

A total of **10519** contacts were recorded in Hartlepool over the **2527** days that data was recorded.
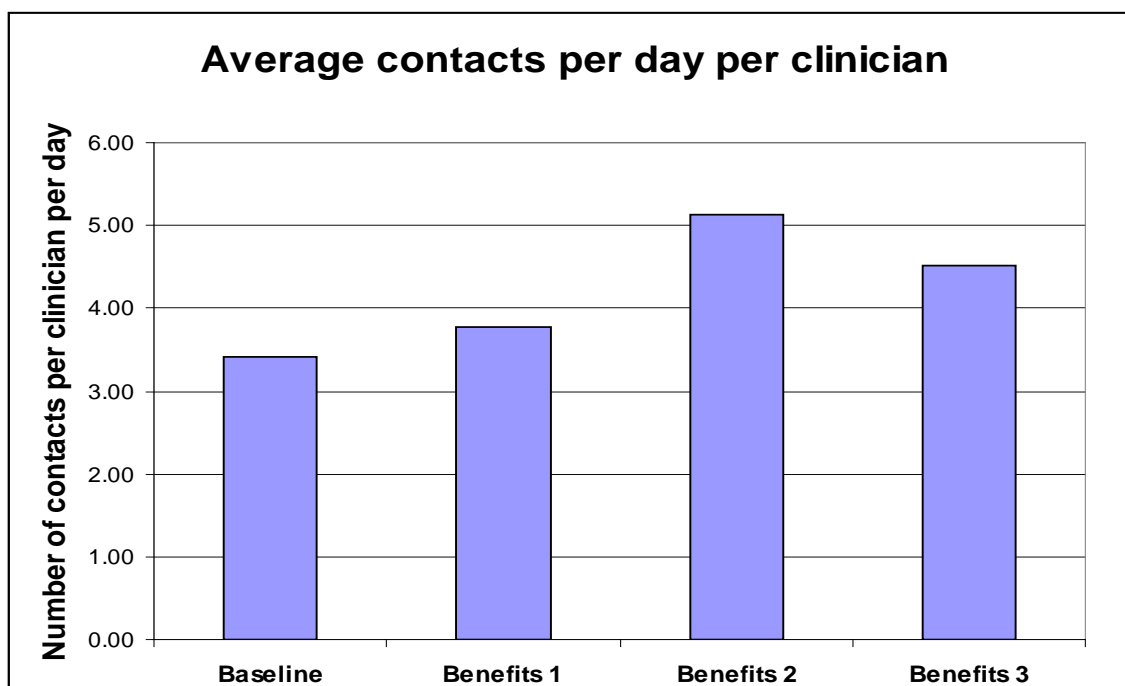

Figure 20 Hartlepool Average contacts per clinician, per day

The average number of contacts per clinician per day increased by **33%** from Baseline to Benefits 3.

As the supporting data extracted from the clinical system was for total contacts only and did not split the contacts down into duration categories, it is not possible to show the contacts split by duration category or calculate the total time spent with patients
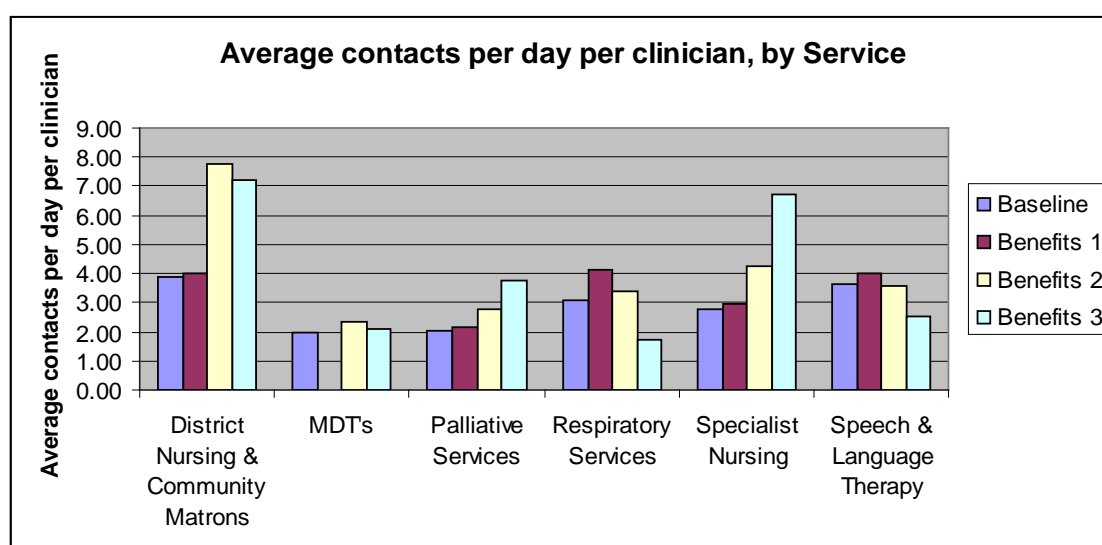

Figure 21 Hartlepool Average contacts per day per clinician, by Service

There were increases in contacts across 4 of the 6 services returning data, ranging from **3%** (MDT) to **142%** (Specialist nursing).

Two Services (Speech & Language Therapy and Respiratory Service) showed a fall in contacts, of **30%** and **45%** respectively.
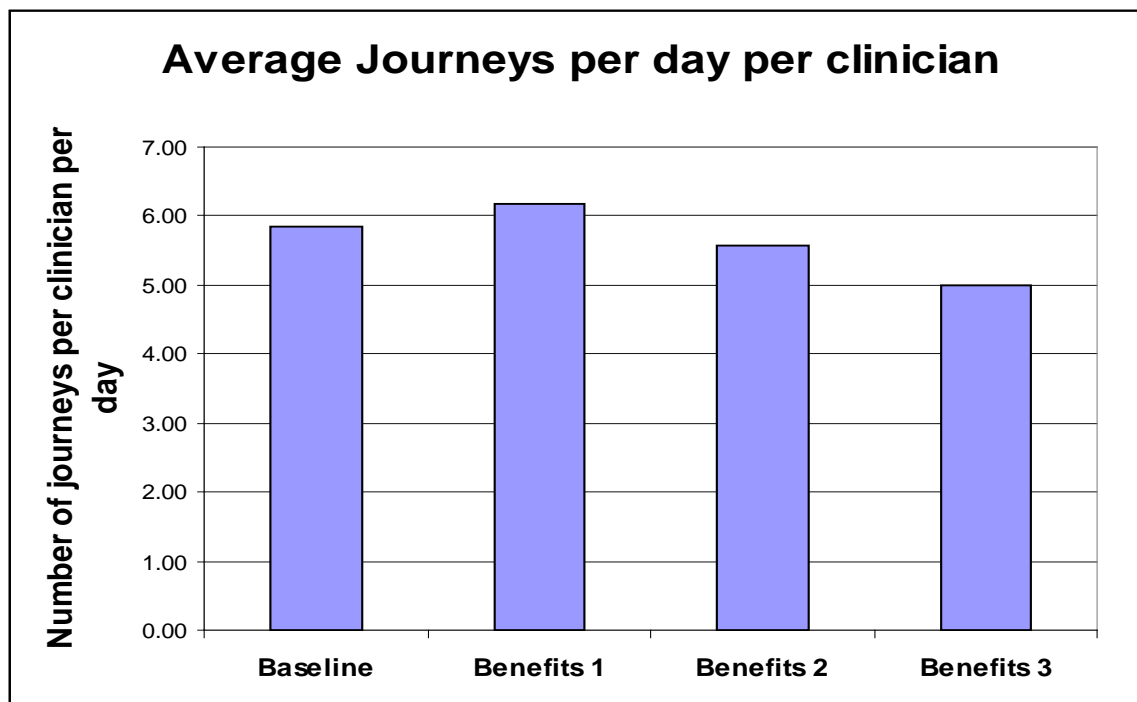
Journeys:

Figure 22 Hartlepool Average journeys per clinician, per day

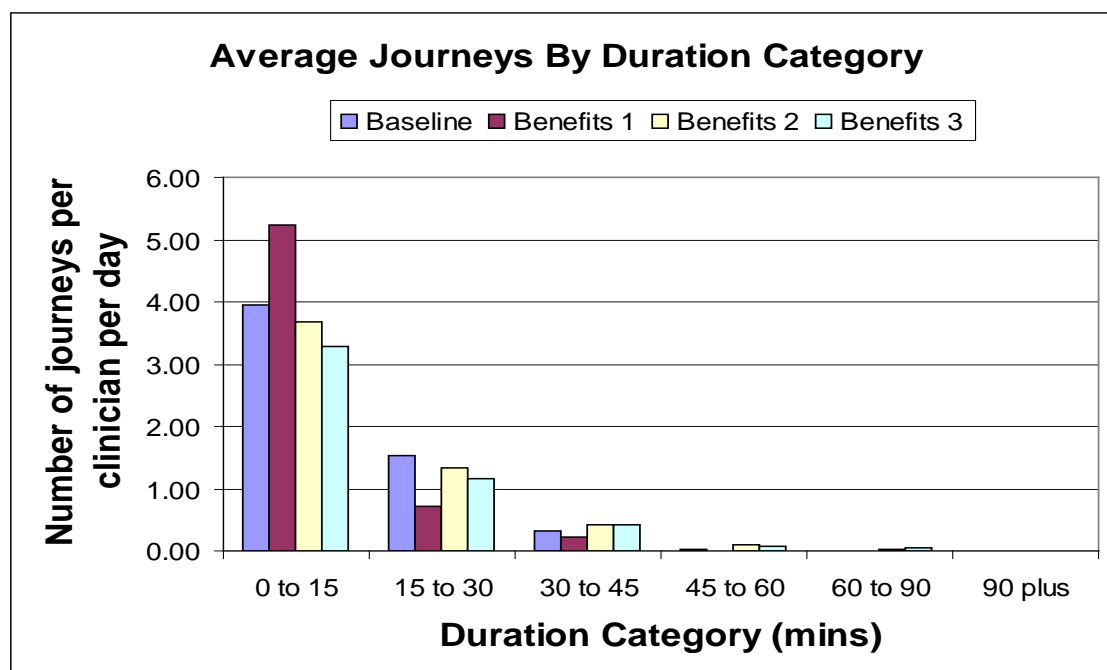The average number of journeys per day decreased by **15%**.

Figure 23 Hartlepool Average journeys per clinician, per day by duration category

The overall time spent on journeys decreased by **5%** - this is less than the drop in total journeys due to there being a slight increase in longer journeys, although short journeys dropped.
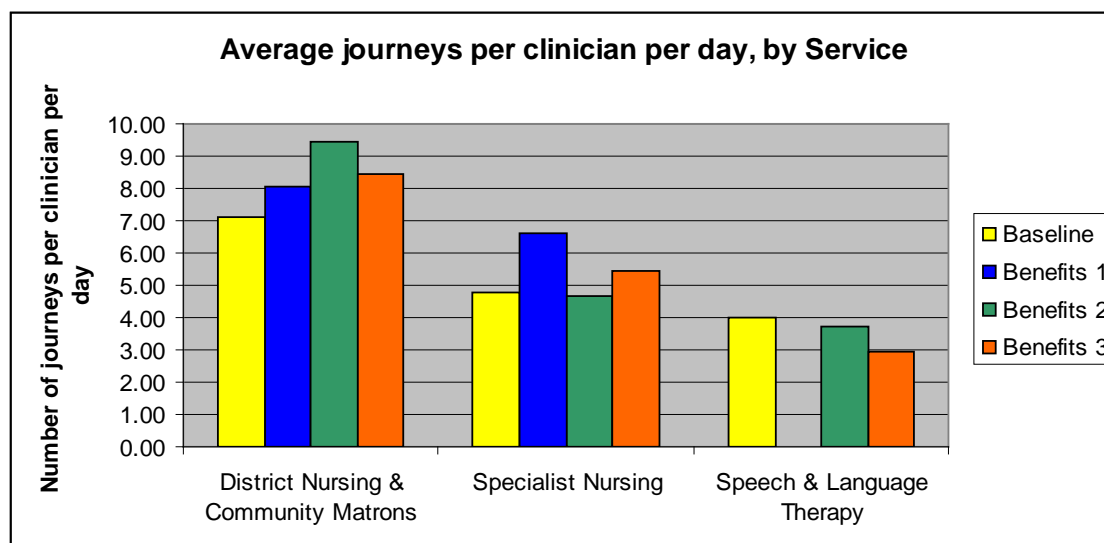

Figure 24 Hartlepool Journeys split by Service

When looking at journeys split by service, there is only data to support three Services – these showed variations, from a **26%** fall in journeys (Speech & Language Therapy) to a **19%** increase (District Nursing and Community Matrons).

The fall in Speech & Language Therapy reflects their fall in contacts, whereas the increase in Specialist Nursing and District Nursing is far less than their increase in contacts, reflecting a significant degree of increased efficiency.

No Access Visits:

Due to the small numbers involved, the figures are presented as an average across the combined benefits periods.
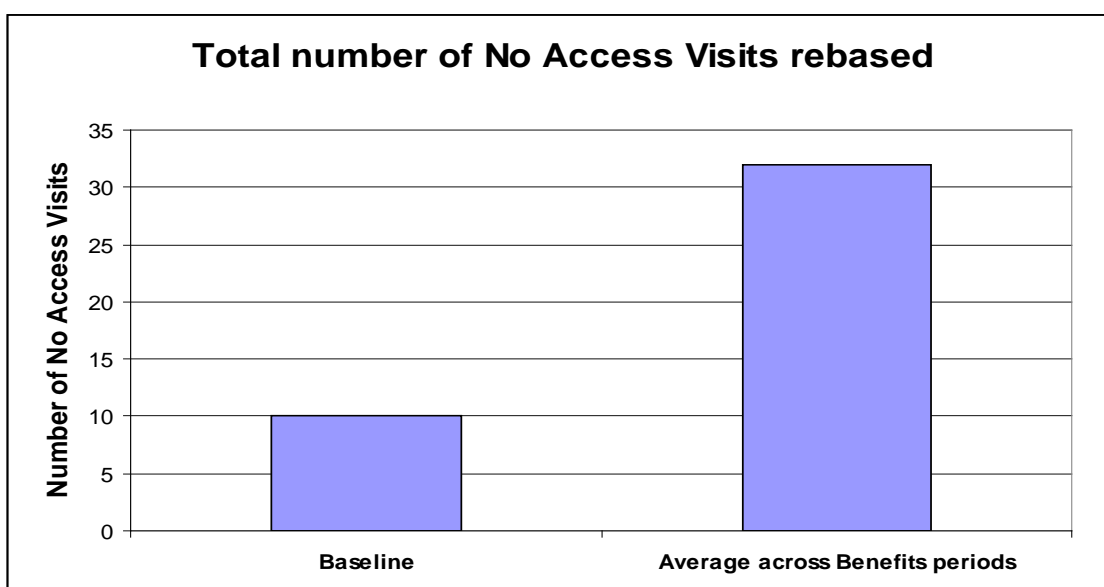
Figure 25 Hartlepool No Access Visits

The average number of No Access visits across all benefits periods shows an increase of **220%** from Baseline. The breakdown across all periods shows it is likely the low level of returns for Baseline and Benefits 1 have significantly affected this analysis.

Figure 26 Hartlepool No access visits by data collection period

Duplication of Data:

Figure 27 Hartlepool Duplication of data

The data shows an decrease of **55%** from Baseline to Benefits 3 for duplication of data, and it is consistently falling as the project progresses.

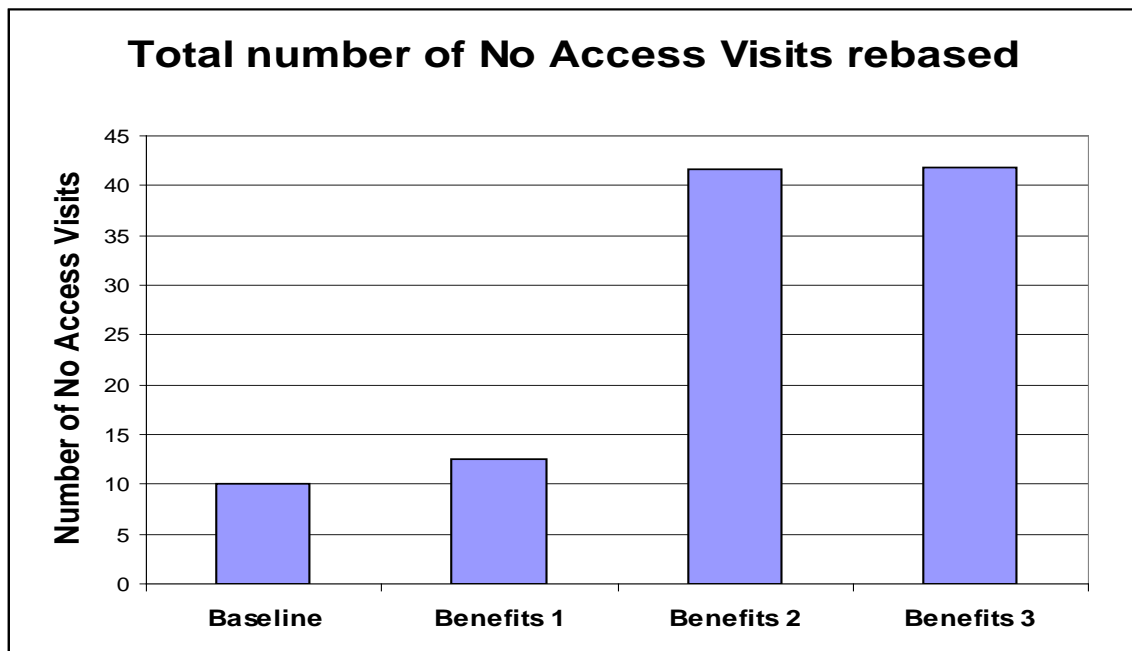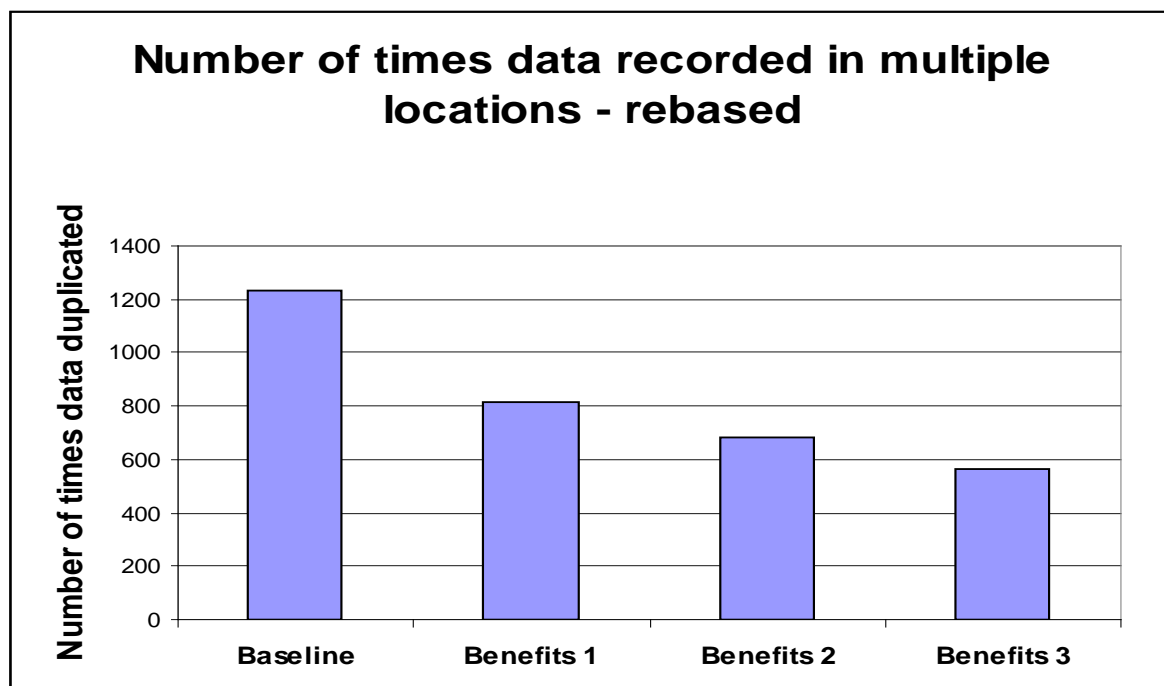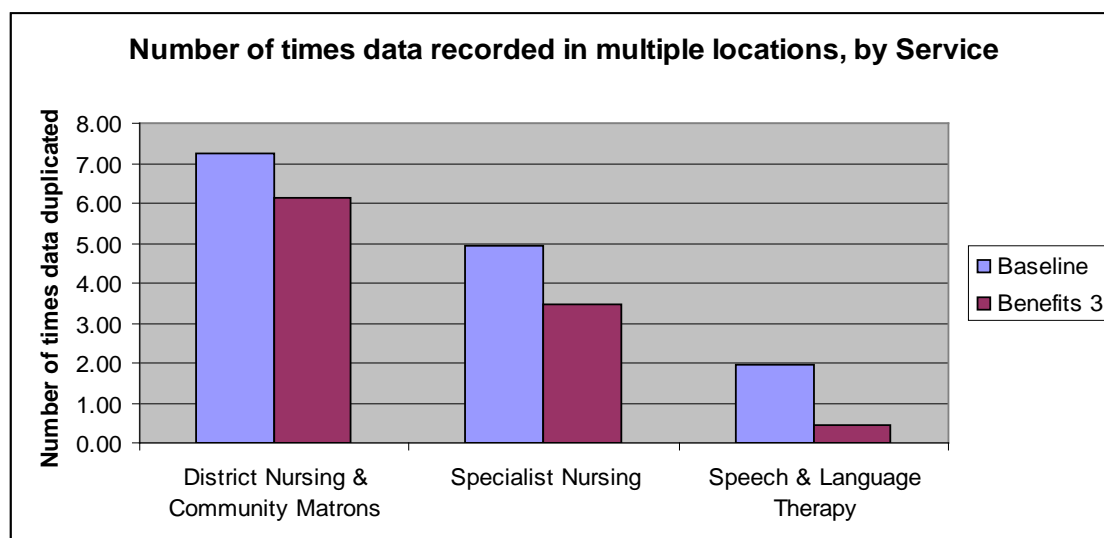**Number of times data recorded in multiple locations, by Service**

Figure 28 Hartlepool Duplication of data, by Service

Falls can be seen across all three Services where data was returned, from **16%** (District Nursing) to **77%** (Speech & Language Therapy)

Referrals:

In total, 1463 referrals were made across the benefits periods. Clinicians at Hartlepool estimated that due to having mobile access to systems, they saved 264 potential referrals. This equates to a **15%** saving in referrals.

Admissions:

In total, 22 admissions were made across the benefits periods. Clinicians at Hartlepool estimated that due to having mobile access to systems, they saved 60 potential admissions. This equates to a **73%** saving in admissions.

Mileage:

This site was the only site to produce enough data for analysis and to allow comparisons.

19 users returned data across all 4 data collection periods :

Baseline	Benefits 1	Benefits 2	Benefits 3
4764 miles	4521 miles	2771 miles	3097 miles

This equates to a very significant **35%** fall from Baseline to Benefits 3

33 users who returned data for Baseline and Benefits 3 only:

Baseline	Benefits 3
10735 miles	5307 miles

This represents a huge **51%** fall from Baseline to Benefits 3

7. South West Essex Primary Care Trust (part of North East London Foundation Trust)

Site profile

Project Lead	Keith Apperley
Clinical Leads	Julie Price
Business Change Lead	Transformation Team
Devices funded	85
Services involved in Phase 2	District nurse teams (65) COPD (3) * Community Matron's (11)* * indicates also have phase 1 involvement Some devices unallocated
Go-live	March 2011
Data Collection periods	Baseline : 31st Jan – 14th February 2011 3mth post go-live : 20th June 2011 6mth post go-live : 12th September 2011 9mth post go-live : December 2011 (all data collections for 2 weeks)

Table 14 South West Essex site profile

Project Overview

A further 85 devices were deployed in South West Essex. South West Essex Community Provider Service formed its own business unit within the North East London Foundation Trust (NELFT) during the local re-organisation, as part of the Transforming Community Services programme.

NELFT is taking forward mobile working due to the success of the initial deployment in South West Essex and project support has been retained partly due to the success of the initial project.

Clinicians at South West Essex report definite improvements in work-life balance, due to the changes in the structure of their working days that the mobile devices have facilitated.

Larger changes to working practices have been difficult to achieve due to the perceived cultural changes required.

The local transformation team is looking at paper records rationalisation, and aim to move towards paper-light practices, but acknowledge this will take time to embed.

Due to the organisational change, the Project Lead moved to a new role and a significant amount of project intelligence was lost. Due to this the standard data collection tools were not used, so in order to provide any data for analysis, it had to be derived from the clinical electronic system. The data included number of contacts, contact durations and No Access Visits. It was limited to only these fields, so there was no data to support data duplication, number of journeys, travel durations, referrals or admissions.

At a glance – data returned

Clinicians	Number in project	Baseline returns	Benefit 1 returns	Benefit 2 returns	Benefit 3 returns
District Nursing & Community Matrons	76	76	76	76	76
Respiratory Services	3	3	3	3	3
Total	**79***	**79**	**79**	**79**	**79**

Table 15 South West Essex South West Essex site profile

Days data	Baseline returns	Benefit 1 returns	Benefit 2 returns	Benefit 3 returns	Total
District Nursing & Community Matrons	760	760	760	760	3,040
Respiratory Services	30	30	30	30	120
Total	**790**	**790**	**790**	**790**	**3,160**

Table 16 South West Essex Overview of Number of Days of data returned

Metric analysis

Contacts:

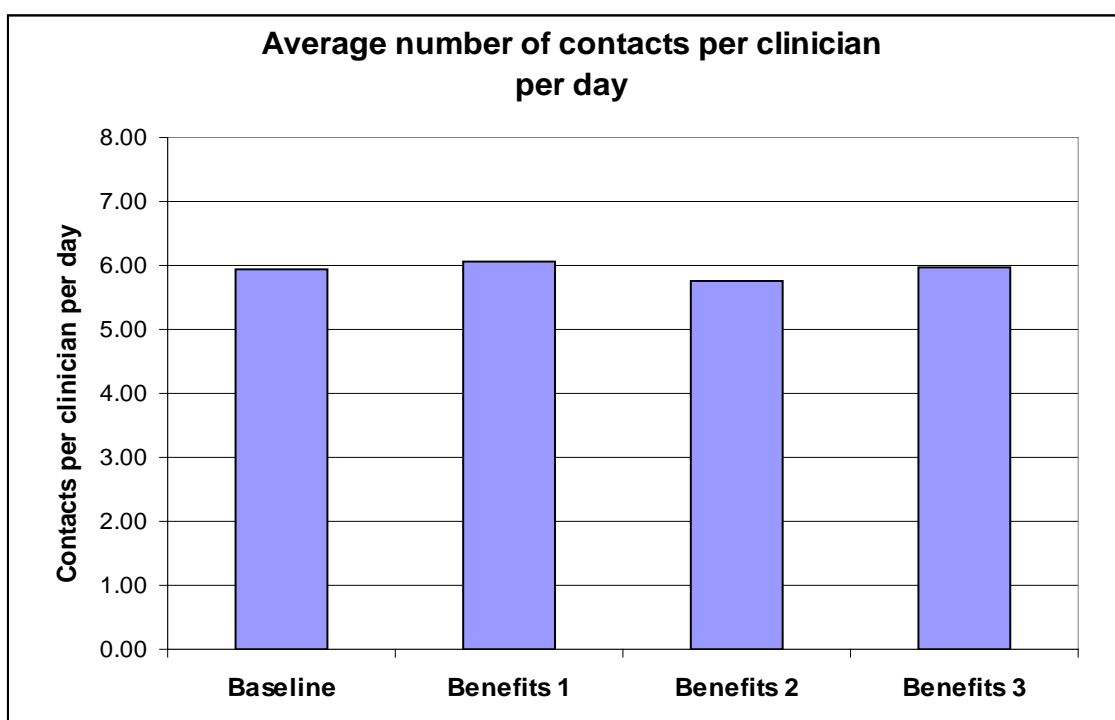A total of **18754** contacts were recorded in South West Essex over the **3160** days that data was recorded.

Figure 29 South West Essex Average contacts per clinician, per day

The average number of contacts from baseline to Benefits 3 increased by **1%**

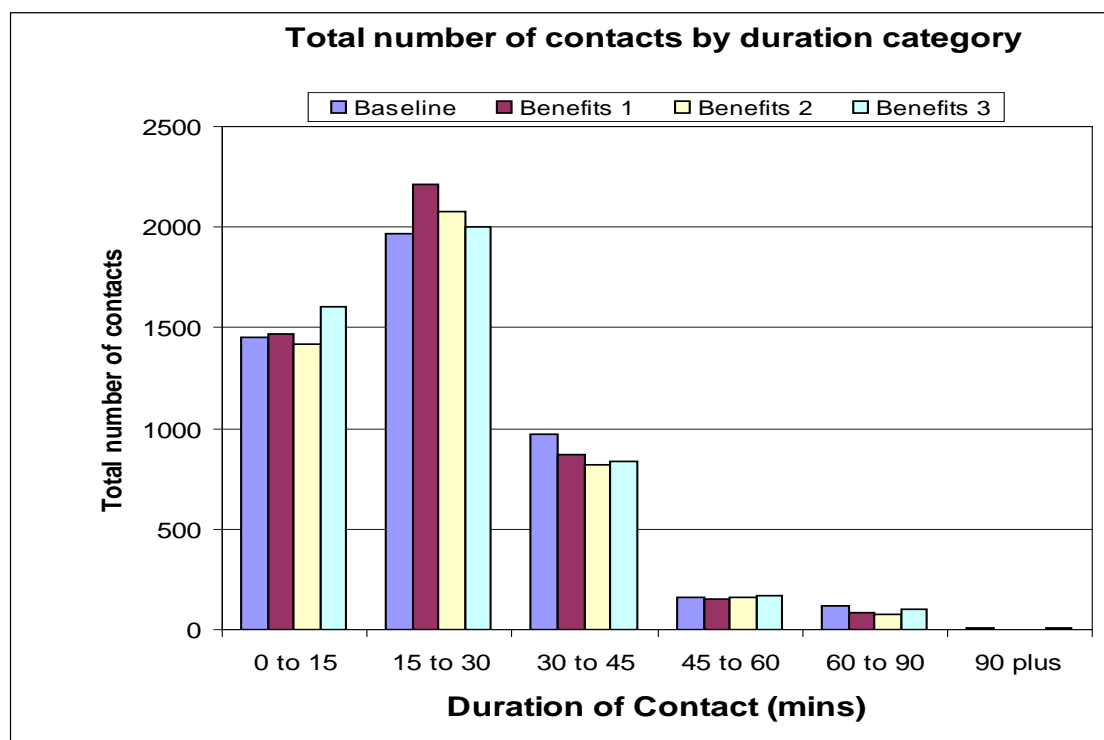**Total number of contacts by duration category**

Figure 30 South West Essex Contacts by duration category

The data for the number of contacts split by duration shows an increase in activity in the two shorter contact duration time bands with decreases in all the other time durations .This has resulted in a decrease in total time spent with patients of **4%** from Baseline to Benefits 3.

When split by service the District nursing and Community Matrons saw an increase in contact duration of **1%**, while Respiratory services showed a decrease of **12%** from Baseline to Benefits 3

Journeys:

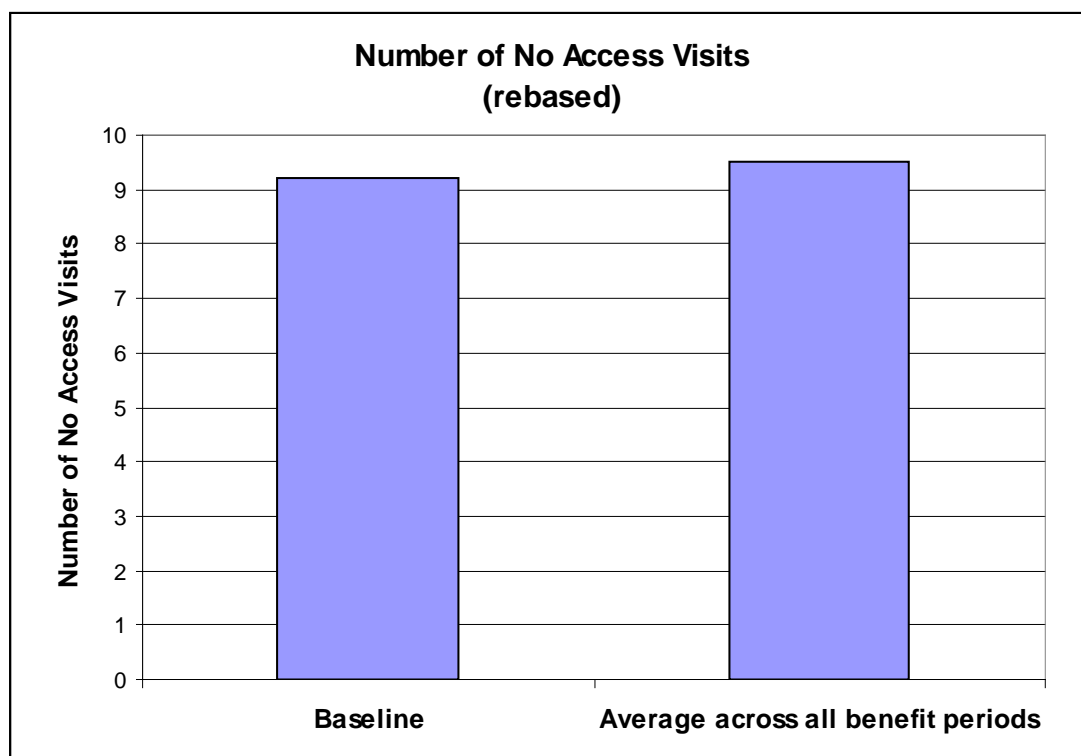Journey data was not available from South West Essex

No access visits:

Figure 31 South West Essex No access visits

The numbers for no access visits shows an increase of **1%** from Baseline to Benefits 3

Duplication of Data:

No data was provided for analysis on the duplication of data

Referrals:

No referral data was provided.

Admissions:

No admission data was provided.

8. NHS Tower Hamlets

Site profile

Project Lead	Satinder Tatter
Clinical Leads	Locality Clinical Leads
Business Change Lead	None attributed to the project
Devices funded	70
Services involved in Phase 2	Children's Service
Go-live	June 2011
Data Collection periods	Baseline : April / May 2011 3mth post go-live : August 2011 6mth post go-live : November 2011 9mth post go-live : February 2012 (all data collections for 2 weeks)

Table 17 Tower Hamlets Site Profile

Project Overview

Tower Hamlets identified process changes that could be made in Children's services, and identified that a further 70 devices would be required to support two complete teams.

Process flows were produced by the local project team to show the changes to working practices needed to implement mobile working, but these were not shared widely with the clinicians, nor were staff made aware of the benefits which were likely to be realised.

Representatives from Children's Services worked with the local project team to develop templates within the clinical application to support the collection of data, but no time was allocated for anyone to build the templates in the clinical solution (Emis). There was also no clinical lead or change management to support the project.

The teams are actively working on reducing data duplication and rationalising note keeping. but allocation of time to support this is again an issue.

As with other sites, the organisational changes as part of Transforming Community Services affected the Project, with the Tower Hamlets Community Health Services transferring to Bart's and the London NHS Trust. There were specifically issues around access to the mobile devices following re-organisation. This had a detrimental effect on the project and affected confidence in the solution.

The local project team struggled with resources to support business change, and there was not adequate support from the transformation team. The clinicians were supportive of the project, but the teams in 4 localities work very differently and the lack of business change support did not help.

At a Glance – data returned

Clinicians	Number in project	Baseline returns	Benefit 1 returns	Benefit 2 returns	Benefit 3 returns
Children's & Family Services	70	43	6	4	-
Total	**70**	**43**	**6**	**4**	**-**

Table 18 Tower Hamlets Overview of Returns used in analysis

Days data	Baseline returns	Benefit 1 returns	Benefit 2 returns	Benefit 3 returns	Total
Children's & Family Services	228	53	39	-	320
Total	**228**	**53**	**39**	**-**	**320**

Table 19 Tower Hamlets Overview of Number of Days of data returned

The site returned data for **61%** of users at Baseline returns and were unable to return any data for Benefits 3. All comparisons are therefore between Baseline and Benefits 2, when there was only data from 6% of users.

Whilst the analysis is provided, it should be treated with extreme caution due to the low levels of returns.

Metric analysis

Contacts:

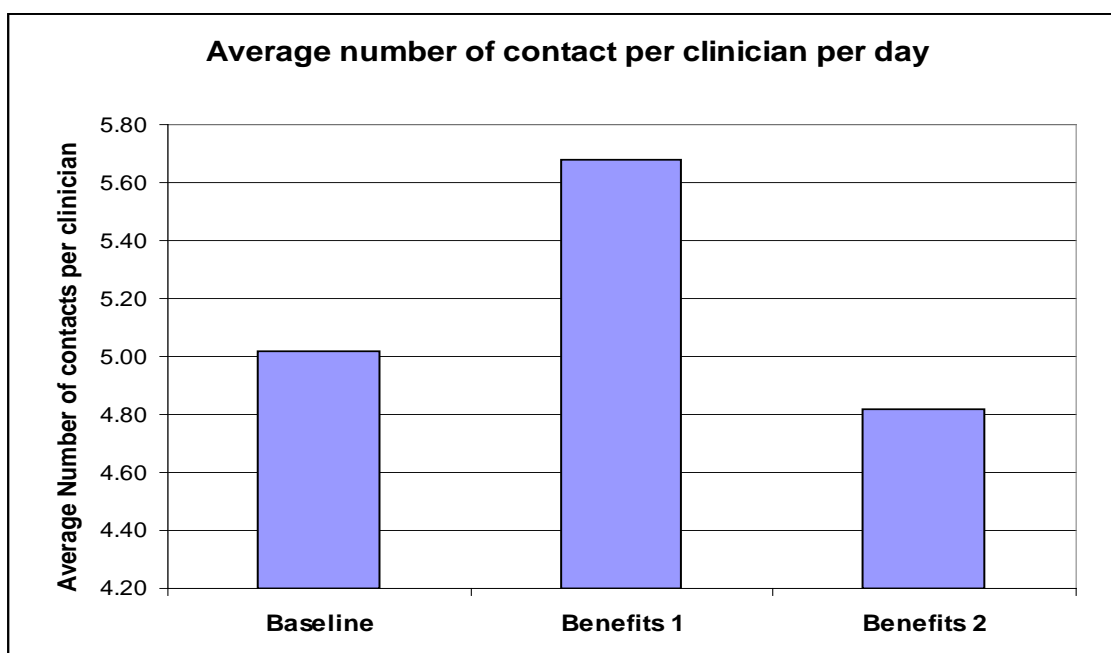A total of **1633** contacts were recorded in Tower Hamlets over the **320** days that data was recorded.

Figure 32 Tower Hamlets Average contacts per clinician, per day

The average number of contacts from Baseline to Benefits 2 decreased by **4%**
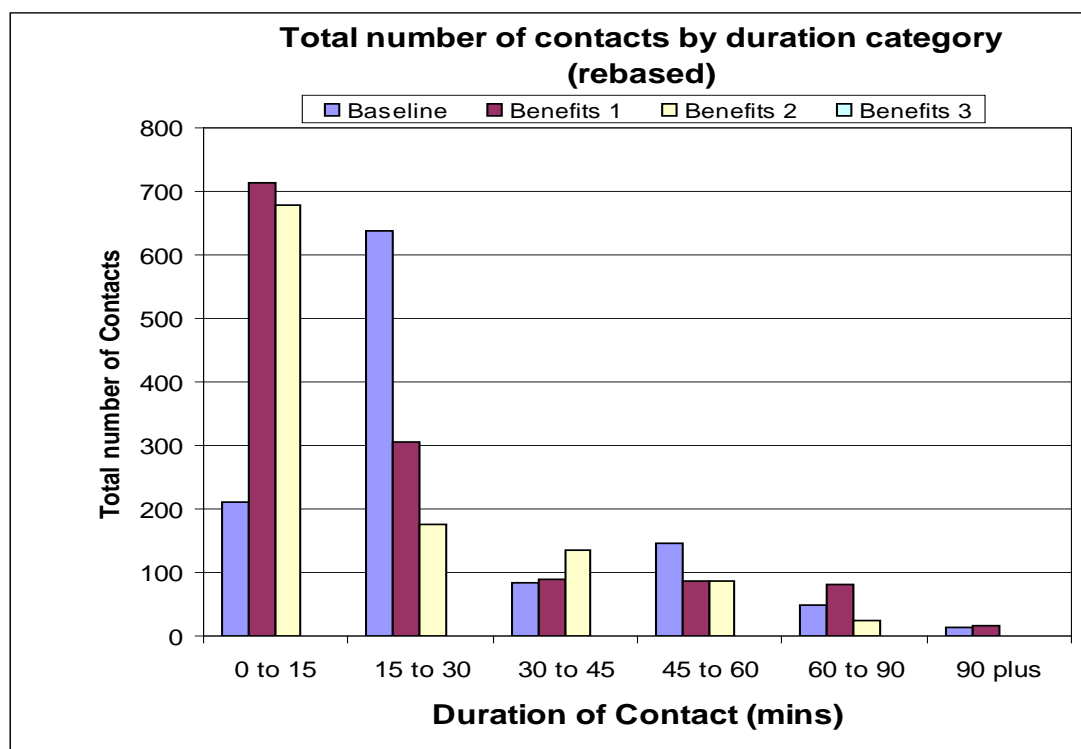
Figure 33 Tower Hamlets Total Contacts by duration

The data for the number of contacts split by duration shows a large increase in the shortest contacts but decreases in the longer contacts, resulting in an overall decrease in the total time spent with patients of **36%**.
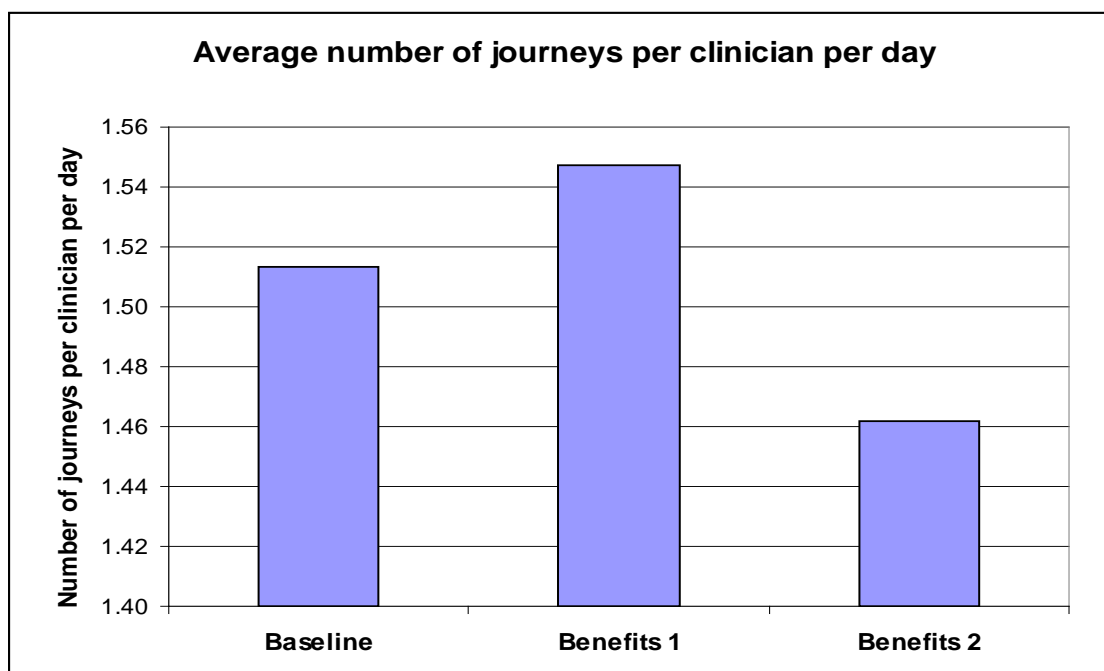
Journeys:

Figure 34 Tower Hamlets Number of average journeys per clinician, per day

The average number of journeys per day decreased by **3%** from Baseline to Benefits 2

The data for number of journeys split across the duration categories show that only the number of the shortest journeys increased greatly, with the mid range time band durations decreasing. There were no journeys recorded over 60 minutes. This resulted in total time travelling decreasing by **33%** from Baseline to Benefits 2.
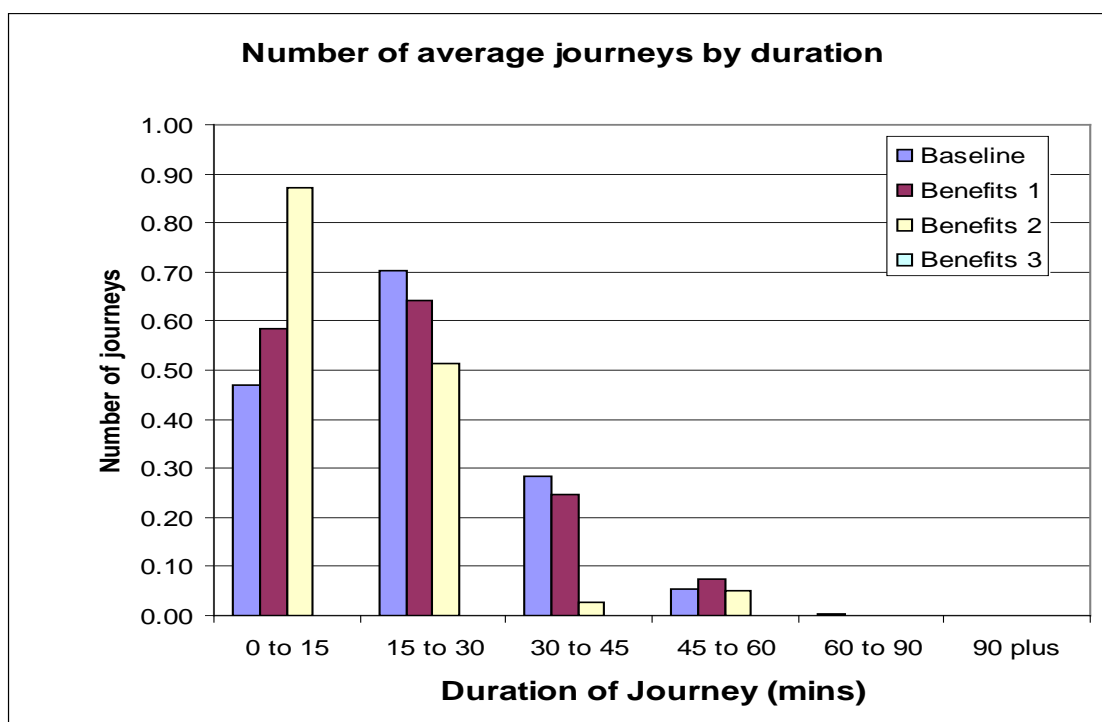

Figure 35 Tower Hamlets Average number of Journeys by duration category
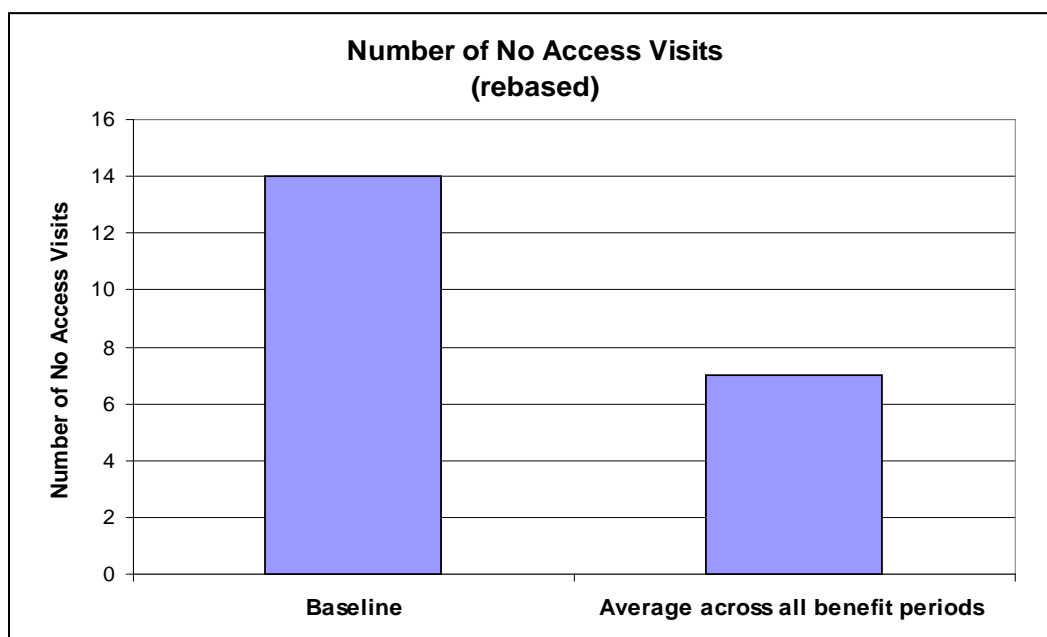
No access visits:

Figure 36 Tower Hamlets No access visits

No access visits decreased from Baseline to Benefit 4 with the average across the Benefits periods falling by **50%.**

36

Duplication of Data:

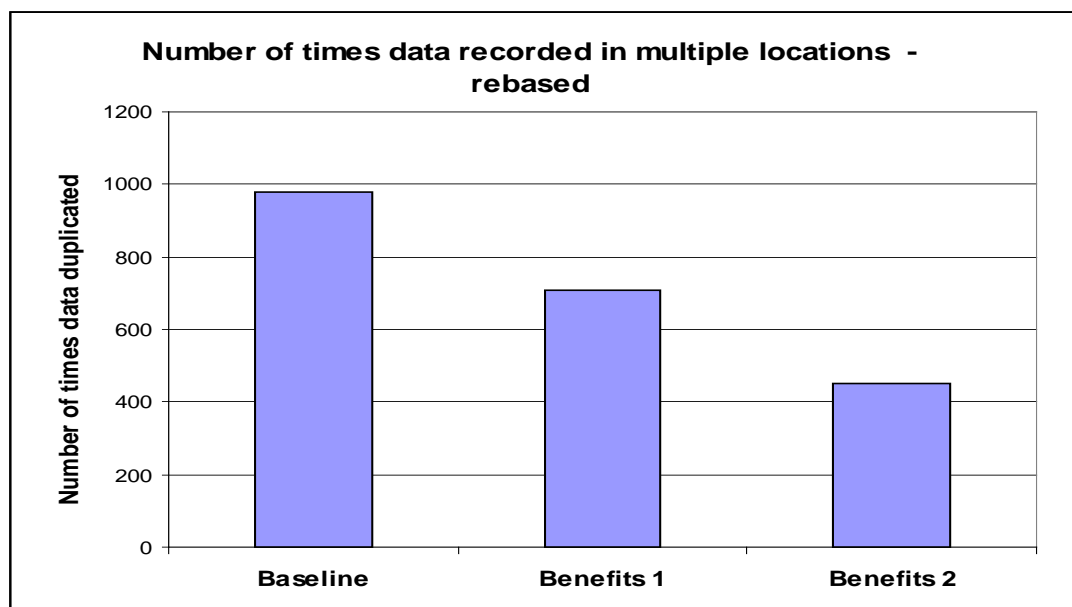**Number of times data recorded in multiple locations - rebased**

Figure 37 Tower Hamlets Duplication of data

The data shows a decrease from Baseline to Benefits 2 of **54%** for duplication for data. This may represent the change locally to the organisation and the progress of their optimisation project to increase use of paper light processes.

Referrals:

No referrals were made across the benefits periods, and no referrals were saved.

Admissions:

No admissions were made or saved