NHS
South East
Clinical Delivery and Networks

111 Palliative Care Pilot Interim Report

February 2019

NHS England and NHS Improvement

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Executive summary

In March 2017, the Shifting the Balance of Care report, written by the Nuffield Trust, concluded that targeting end of life care for service innovation has the potential to significantly reduce the burden on emergency services, and to improve outcomes for patients. The most successful schemes targeted certain patient populations, including those at the end of life, by improving access to specialist expertise in the community. The report provided the example of the Marie Curie Cancer Service, which provides comprehensive home-based health and social care for patients at end of life; the patients in contact with the service were more likely to die at home, and were less likely to have emergency admissions compared to those not receiving the service. [1]

It is against this background, and the trials of PallCall and Goldline that the Thames Valley advice line pilot was developed, to provide specialist support via phone to patients using 111 for palliative and end of life care needs.

To analyse the full impact of the service, a period of data gathering took place before the pilot launched. The majority of the palliative and end of life care calls (87%) came in to 111 during out of hours, suggesting (as the Shifting Balance of Care report concluded) that there is an opportunity to impact the urgent and emergency care system across the Thames Valley.

The pilot produced three primary outcomes:
* A reduction in ambulance conveyances
* A 35% reduction in referrals to out of hours primary care
* A fourfold increase in calls closed with no further intervention required.

The pilot produced several other findings:
* There is an opportunity to work with CCGs to increase the use of accessible Special Patient Notes
* A review of the Directory of Services is necessary
* Reviewing community service provision for gaps would be beneficial
* There is an opportunity to promote the end of life 111 service to care homes
* Extending the end of life service to 999 has the potential to reduce hospital transfers from scene ambulance crews.

The pilot provides commissioners with clear evidence of the positive impact of the service and the analysis of the calls of 4 months data demonstrates a significant shift in call outcome however the call numbers are small, and so the savings are likewise small. The findings and economies of scale strongly suggest a collaborative approach across Thames Valley, which can encompass both the 111 and 999 services to provide a single TV wide offering and for consideration of current staffing capacity to consider expansion at limited cost.

[1] Imison, C, Curry, N, Holder, H et al. Shifting the Balance of Care: Great Expectations. Nuffield Trust. https://www.nuffieldtrust.org.uk/files/2017-02/shifting-the-balance-of-care-report-web-final.pdf (last accessed 28th February 2019)

Background

In November 2017, Urgent and Emergency Care (U&EC) and End of Life (EoL) commissioning leads received a joint proposal from South Central Ambulance Service (SCAS) and Thames Hospice to provide a specialist palliative care advice line for Thames Valley, which would work with the 111 service. The proposal argued that it would have a positive impact on the outcomes and closures of calls, however, neither end of life or urgent care commissioners were able to fund and support the proposal.

The Thames Valley SCN end of life network agreed to take on the running and funding of a six month pilot. This was with the full support of both the U&EC and EoL commissioners, and on the understanding that if the pilot was cost effective and delivered the outcomes as proposed, they would support the commissioning of such a service.

Aim

The aim of the pilot was to determine what impact could be made on the outcome of calls to 111 by linking users with specialist palliative care services, to improve patient care and resolve more calls at the point of contact. This would subsequently reduce impact on primary care services, A&E, and thereby contribute to the aim of reducing hospital admissions in the last three to six months of life.

Analysis of calls undertaken with NHS England in 2014[2] highlighted that a number of calls to 999, 111 and out of hours services were made by people, or their families, within the last three to six months of their life. Many families calling were distressed and phoning for support in managing symptoms, particularly during the out of hours period (evenings, overnight, and at weekends) when most community services are unavailable. Patients were often taken to A&E and then admitted to hospital when it was not necessarily the most appropriate response.

In the current 111 system, it is not straightforward as to which service would be the most appropriate for palliative and end of life calls. There are opportunities to improve the quality of the patient pathway and direct patients and their families to specialist advice.

Additionally, the pilot would provide an opportunity to understand:

* the extent of the use of Special Patient Notes, which are an indication of the level and quality of identification of patients at end of life by primary care.
* the comprehensiveness of wraparound community service provision across each CCG
* the completeness and accuracy of the Directory of Services.

The aim of this report is to provide an update which will enable the Urgent and Emergency Care and End of Life commissioners to make informed, future commissioning decisions before the end of February to avoid any gap in service provision, should the decision be made for the service to continue to be provided.

[2] Lambourne, Linda. Thames Valley Integrated Urgent Care paper, 2018.

Evidence

Evidence from the six months PallCall (local) pilot and the Goldline service (Airedale NHS Foundation Trust in West Yorkshire) demonstrates a positive impact on the U&EC system.

PallCall ran in Berkshire West, from October 2016 to May 2017. It was a 24 hour, 365 days a year service that provided a single point of care to patients at the end of life, and their families. In the time it ran, it answered 564 calls, and achieved 42 hospital avoidances, and 60 primary care avoidances.[3] The service was closed by the CCG, due to staffing shortages.[4] Whilst it was operating, PallCall reduced the burden on the ambulance service, as well as primary care.

The Airedale NHS Foundation Trust Goldline is a dedicated 24/7 phone service for people in their last year of life, and their families. It was launched in 2013, and won a BMJ Palliative Care Award in 2015. It manages around 2,231 patients a year, and handles 1,200 calls per month. An evaluation by York Health Economics found that patients using Goldline experienced a 23% reduction in non-elective admissions; the ROI for the service is approximately £2 for every £1 spent.[5] About 38% of calls have no onward referral.[6]

Both of these services demonstrate the point raised in the Shifting the Balance of Care report, written by the Nuffield Trust, that targeting end of life care for service innovation has the potential to significantly reduce the burden on emergency services and to improve outcomes for patients.[7]

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[3] PallCall Sue Ryder Berkshire West Service, http://tvscn.nhs.uk/wp-content/uploads/2017/03/PallCall-and-Strategic-Challenges-in-Urgent-Emergency-Care-Supporting-Patients-in-their-Last-Months-of-Life-1.pdf (last accessed 28th February 2019)

[4] 'Healthwatch Reading revealed the end of Pall Call on Friday after a recruitment crisis', The Reading Chronicle, 10th May 2018. https://www.readingchronicle.co.uk/news/15277554.helpline-for-end-of-life-support-terminated-due-to-nursing-shortage/ (last accessed 28th February 2019)

[5] Goldline. Airedale Digital Care Hub. http://www.airedaledigitalcare.nhs.uk/our-services/goldline/ (last accessed 28th February 2019)

[6] Goldline activity. Airedale Digital Care Hub. http://www.airedaledigitalcare.nhs.uk/our-services/goldline/activity/ (last accessed 28th February 2019)

[7] Imison, C, Curry, N, Holder, H et al. Shifting the Balance of Care: Great Expectations. Nuffield Trust. https://www.nuffieldtrust.org.uk/files/2017-02/shifting-the-balance-of-care-report-web-final.pdf (last accessed 28th February 2019)

Process

This pilot is set against a backdrop of similar developments, service proposals (Oxfordshire) and commissioned services (Berkshire West (BW)) and Berkshire East (BE). The Oxfordshire proposal known as OPEL didn't move into a commissioned service, whilst the BW service known as PallCall was commissioned and ran for a number of months. The service demonstrated a positive impact but was a standalone service and could not be sustained as it was resource intensive on staff. The BE service is a comprehensive palliative care service provided by Thames Hospice. It provides support for inpatients, day patients, and a rapid response team as well as the telephone advice line.

Thames Hospice had already had discussions with SCAS and was in a position to run the pilot, embedded within its current service offering. The provision of Clinical Nurse Specialists (CNS) to answer the calls was seen as key to the success of the pilot, as was the economy of scale achieved by having the advice line sitting as part of a wider service offering.

The specialist palliative care pilot was set up to provide a service to the geographical area of Berkshire West, Buckinghamshire, and Oxfordshire (collectively known as BOB). Berkshire East already had a commissioned advice line service. The proposal was therefore presented to the BOB U&EC board in February 2018. It received overwhelming endorsement, with a request to promote the service to care homes, and to try and secure a positive impact on unplanned admissions.

The TV IUC service was soft launched on 30th August 2018, and hard launched on 4th September. Communications around the launch, led by the individual CCGs, were particularly targeted towards care homes, as a significant source of palliative and end of life care calls.

The pilot is operated in conjunction with South Central Ambulance Service (SCAS) and Thames Hospice. The key proposed outcomes of the pilot were as follows:

i. Reduction in number of inappropriate admissions to acute care

ii. Reduction in inappropriate 999 calls – see the section on comparison of call outcomes, before and during pilot

iii. Identification of gaps in wraparound services to support crisis care across the region (services available/not available)

iv. Identification of locality need

v. The extent of use by practitioners of Special Patient Notes (EPaCCS) and the impact it has on decision making in supporting the coordination of care

vi. An increase in the closure of calls and appropriate signposting to services.

Calls received by NHS 111 were recorded, and patient information shared electronically using a secure method. Any Special Patient Notes were referred to, and if flagged, recorded as hard data within Adastra (a clinical patient management system). When calls were identified as palliative, they were transferred to a t Clinical Nurse Specialist at Thames Hospice who assessed and managed the

call, and consulted any available Special Patient Notes.

SCAS provided telephony and training for the Clinical Nurse Specialists, which included management of Adastra, and use of a Directory of Services in order to locate services and close calls. SCAS DX codes (118 and 332) were used to code palliative care calls, and to plot call demand by time and day (see figure 1). This data was used to identify where there was additional need for cover, and staffing complement was increased with bank cover at 1.75 WTE.

Calls transferred to Thames Hospice were answered within about ten minutes.

Data collection

SCAS uses Adastra to both record and provide data, which includes core clinical records and demographics. This data can be extracted as reports or via an XML feed, the latter of which was upgraded to provide additional information in January 2019.

Thames Hospice recorded a number of datapoints via spreadsheet:
* Case/NHS number
* Locality
* Diagnosis
* Who called (eg care home)
* Evidence of Advance Care Planning (eg DNACPR, ReSPECT)
* What would the CNS liked to have been put in place?
* What was put in place? (eg available services)
* Was a Special Patient Note available and if so, was it helpful?
* Was the patient known to other services?
* Other comments

Findings

Baseline data by DX code suggested that 19 palliative calls per week were received by 111 from across the Thames Valley.

The findings presented here are interim, based on before pilot and during pilot data from May to December.

Number of palliative calls to NHS 111 before pilot and during pilot

The table below demonstrates the number of palliative care calls managed by SCAS and Thames Hospice, from May 2018 to December 2018, which subsequently shows the difference in call numbers before and during the pilot.

Table 1 Number of palliative care calls managed by SCAS and Thames Hospice, May-December 2018

Calls by managed by SCAS and Thames Hospice	**Months**									**No. of cases missed due to unavailability of CNS**
	May 18	**Jun 18**	**Jul 18**	**Aug 18**	**Sep 18**	**Oct 18**	**Nov 18**	**Dec 18**	**YTD**	
SCAS (call handler and/or 1st line clinician)	86	59	83	66	30	38	27	25	414	
Thames Hospice					37	50	51	74	212	**19**
Total	**86**	**59**	**83**	**66**	**67**	**88**	**78**	**99**	**626**	**3.04%**
Thames Hospice demand = 63.86%										

From May to August, palliative care calls were managed by SCAS clinicians only. Once the pilot began, Clinical Nurse Specialists (CNS) managed 63.86% of the total demand. 19 calls were not managed by the CNSs, for the following reasons:

* Clinical Nurse Specialists unavailable due to attendance at complex home visit for primary service.
* Staff shortages due to sickness, or vacancies unfilled by bank staff.
* Technical issues, including incorrect cabling following an office move and a system connectivity issue (now resolved).

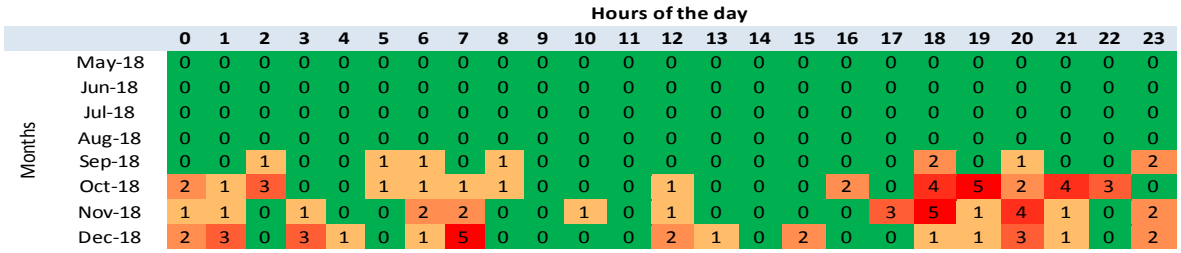
Other factors have affected the management of the demand handled by Thames Hospice.

* New starters and changes of operating process resulted in some calls not being referred using the appropriate pathway, and causing non-compliance with procedure. These calls were managed by 111 instead.
* Using the algorithms, call handlers are able to identify the reason for the call, and in some cases specialist palliative care advice is not required.
*Patient choice: one caller requesting pain relief contacted 111 rather than the out of hours service as advised. Call was managed by 111 instead of Thames Hospice.

Call demand by day and time

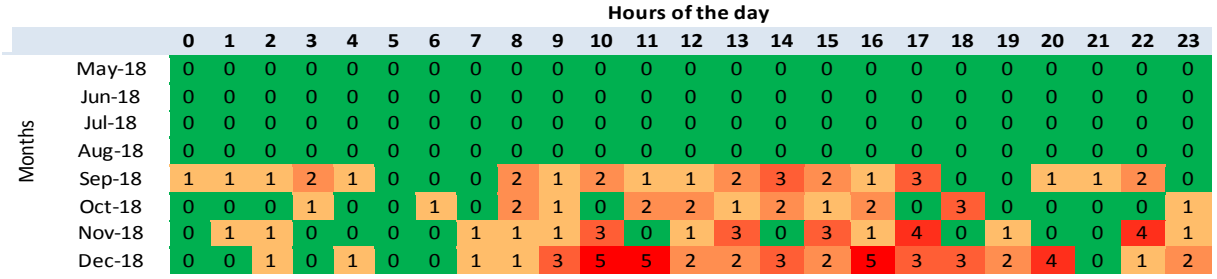
The following data was collected from SCAS, via Adastra.

Figure 1 Number of calls via Thames Hospice during pilot, Monday to Friday per hour of the day (September to December 2018)



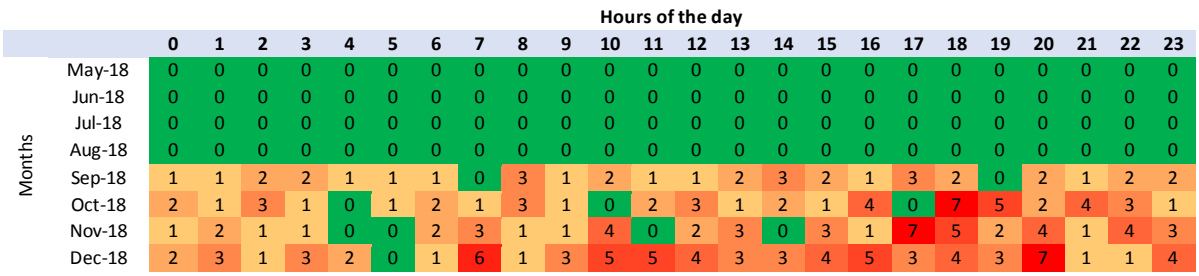
Months	Hours of the day																							
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
May-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep-18	0	0	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	2	0	1	0	0	2
Oct-18	2	1	3	0	0	1	1	1	1	0	0	0	1	0	0	0	2	0	4	5	2	4	3	0
Nov-18	1	1	0	1	0	0	2	2	0	0	1	0	1	0	0	0	0	3	5	1	4	1	0	2
Dec-18	2	3	0	3	1	0	1	5	0	0	0	0	2	1	0	2	0	0	1	1	3	1	0	2

Figure 2 Number of calls via Thames Hospice during pilot, Saturday and Sunday (September to December 2018)



Months	Hours of the day																							
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
May-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep-18	1	1	1	2	1	0	0	0	2	1	2	1	1	2	3	2	1	3	0	0	1	1	2	0
Oct-18	0	0	0	1	0	0	1	0	2	1	0	2	2	1	2	1	2	0	3	0	0	0	0	1
Nov-18	0	1	1	0	0	0	0	1	1	1	3	0	1	3	0	3	1	4	0	1	0	0	4	1
Dec-18	0	0	1	0	1	0	0	1	1	3	5	5	2	2	3	2	5	3	3	2	4	0	1	2

Figure 3 Number of calls via Thames Hospice combined hours of weekday and weekends (September to December 2018)



Months	Hours of the day																							
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
May-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep-18	1	1	2	2	1	1	1	0	3	1	2	1	1	2	3	2	1	3	2	0	2	1	2	2
Oct-18	2	1	3	1	0	1	2	1	3	1	0	2	3	1	2	1	4	0	7	5	2	4	3	1
Nov-18	1	2	1	1	0	0	2	3	1	1	4	0	2	3	0	3	1	7	5	2	4	1	4	3
Dec-18	2	3	1	3	2	0	1	6	1	3	5	5	4	3	3	4	5	3	4	3	7	1	1	4

The data indicates that call demand increases from 18:00 to 00:00, with another, smaller increase between 05:00 and 08:00, during weekdays with a higher demand on services during out of hours.

A peak in calls occurs around 07:00, which is associated with the time of changeover from out of hours to normal surgery hours and a potential gap in access to primary care. A second peak occurs at midday, which may be caused by routine primary care services closing for lunch (refer to Appendix 1 for more detail).

A further rise occurs after 16:00 and again around 18:00; many surgeries close at 18:30 with their phone services using automated messages which is a potential influencing factor.

During the weekend period, there is an increase in activity between 09:00 and 20:00.

For both weekdays and weekends, calls increase around midnight due to patients or their families being anxious about difficulties sleeping due to symptom management (nurse captured data from pilot).

The heat map identifies that demand for palliative care is greater out of hours, represented by 87% calls in this period. It is likely that limited 24/7 community nursing services and GP practices working Monday to Friday are contributing factors to this pattern.

Demand for service according to CCG

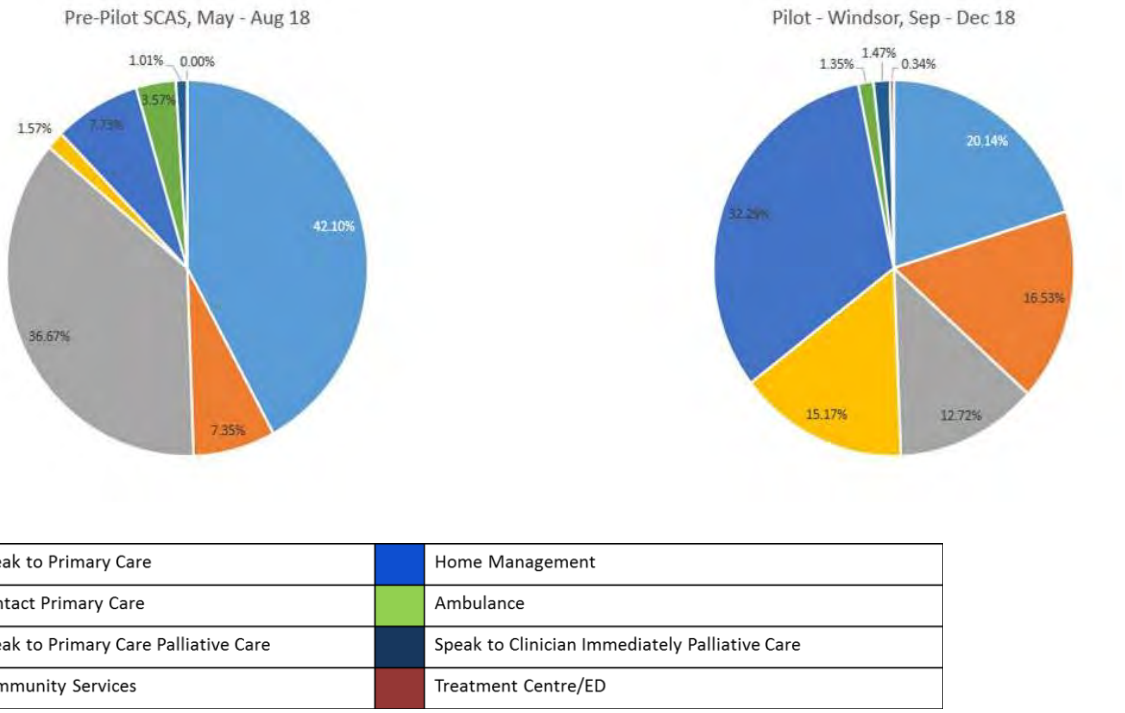
The table below shows the average demand for the service per CCG.

Table 3 Demand for Thames Valley IUC service per CCG with population demand per CCG as rate per 100,000

Clinical Commissioning Group	Thames Hospice demand	Thames Hospice demand %	Rate per 100,000	Rate per 100,000 (based on mid-2017 ONS estimated population)
Oxon CCG	108	50.94%	16.15	16.18
Bucks CCG	45	21.23%	8.37	8.36
West Berks CCG	39	18.40%	8.10	8.02
East Berks CCG	20	9.43%	4.68	4.64
Total	212	100.00%	10.02	9.98

As mentioned in the Process section of this report, Berkshire East has its own service but some patients and families from the area used the pilot service.

Figure 4 Final disposition: Compare before pilot and during pilot



See **Appendix 2** for detailed information on locality need within CCGs.
See **Appendix 3** for a comparison of call outcomes by CCG.

Comparison of call outcomes, before and during pilot

The proposal was that the provision of an advice line would changes the outcome of calls. This can be seen in the table below:

Table 4 Outcomes of palliative care calls, before and during pilot

Referral outcome	Before pilot	During pilot	Percentage of shift change
Primary care	84.59%	49.38%	35.21% ↓
Community/other	0.97%	15.17%	14.2% ↑
Home management	8.14%	32.28%	23.5% ↑
Ambulance	4.55%	1.35%	3.2% ↓

Before the pilot began, 111 call handlers referred the majority (84.59%) of cases to primary care. 8.14% of calls were provided home management advice, and 0.97% of cases were referred to community services. In addition, 4.5% of calls resulted in ambulance transfer.

During the pilot, onwards referrals to primary care reduced to 49.38%, 32.28% of calls were provided with home management advice requiring no further intervention, and an increasing number of cases, 15.17%, were referred to community services.

It should be noted that in Oxfordshire, the referrals to the district nursing service have to go through out of hours GPs, so the data cannot exactly capture the breakdown between primary and community care.

There was a reduction in ambulance conveyances falling to 1.35%. One exception was a call with immediate recognition of a sudden and unexpected deterioration with symptoms consistent with a cerebral vascular accident, resulting in an appropriate transfer to hospital.

Calls by place of residence

Table 5 Calls by place of residence, May to December 2018

Calls by place of residence	**Before and during pilot 2018**										
	May	**Jun**	**Jul**	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**	**Total**		
SCAS	**86**	**59**	**83**	**66**	**30**	**38**	**27**	**25**	**414**	**% based on residence**	
House	82	58	76	62	30	35	24	23	390	**94.20%**	
Care/Nursing home	4	1	7	4	0	3	3	2	22	**5.64%**	
Thames Hospice	**0**	**0**	**0**	**0**	**37**	**50**	**51**	**74**	**212**		
House					24	20	43	66	153	**72.17%**	
Care/Nursing home					13	30	8	8	59	**38.56%**	
Grand total	**86**	**59**	**83**	**66**	**67**	**88**	**78**	**99**	**626**		

Calls largely came from patients not currently linked to, or receiving care from a hospice. The intention of the service was not to undermine or replace current hospice care, instead addressing the needs of patients not known to a hospice or a specialist palliative care service.

The small number of calls from care homes indicates that there is potential to increase the use of the service by this care system. The original communications, led by the CCGs, will have varied across BOB and may have been absent or limited in some areas.

Availability of Special Patient Notes

Special Patient Notes (SPN) are used to share electronic information for patients identified as being in the last 6-12 months of life, and that are on an EoL register. SPNs are brief summaries of background information regarding patients' medical and social circumstances, provided by their own GP. Their purpose is to aid out of hours and emergency services to make appropriate decisions and undertake best management, to warn staff of specific patient health needs, and patient future

wishes and preferences at the end of life.[8]

Table 6 Availability of Special Patient Notes (data collected by Thames Hospice)

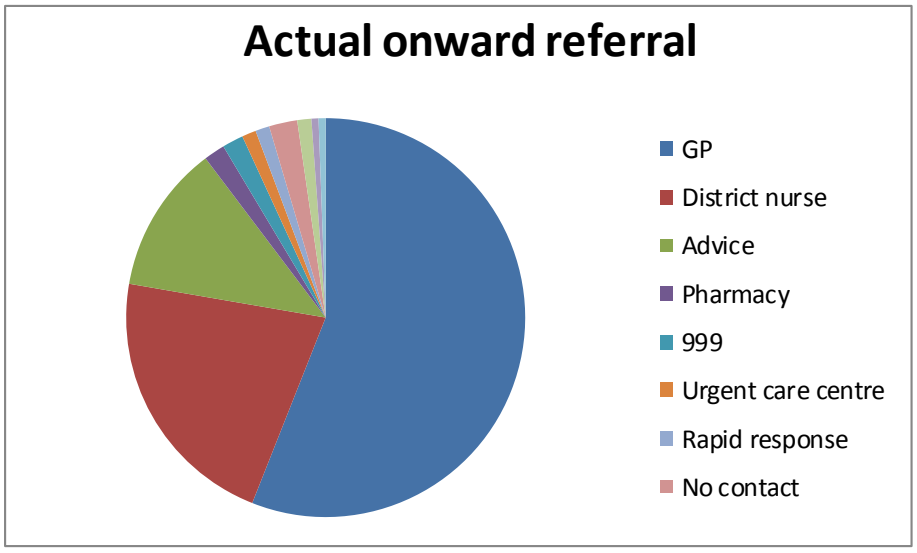
CCG	Number of calls	Number of Special Patient Notes identified
Buckinghamshire	43	13
Oxfordshire	100	3
West Berkshire	34	17
East Berkshire	14	7
Total	191	40

Of the 191 notes, in which the CCG was specified, 21% had Special Patient Notes. The overall percentage of all SPNs that were deemed to be helpful was 80%, demonstrating that when SPNs are used, the information recorded about the patient can have a positive impact on the decision making of the CNS, which will encourage improved outcomes and a better coordination of care. When considering this data alongside the TVSCN EPaCCS Report, it is evident that the electronic sharing of care plans and key information is not as widespread as was perceived to be. More SPN in place would support rapid decision making in the urgent and emergency care pathway.

Gap analysis: Who would you have liked to call?

CNSs were asked to record onward referrals, and to identify any shortcomings in service provision to support this decision making.

Figure 5 Actual onward referral for the pilot



[8] Holt V, Bernstein D, Jones A et al, Out-of-hours special patient notes, London J Prim Care. 2013; 5(2): 102-105. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3960641/ (last accessed 25th February 2019)

Figure 6 Preferred referral outcome

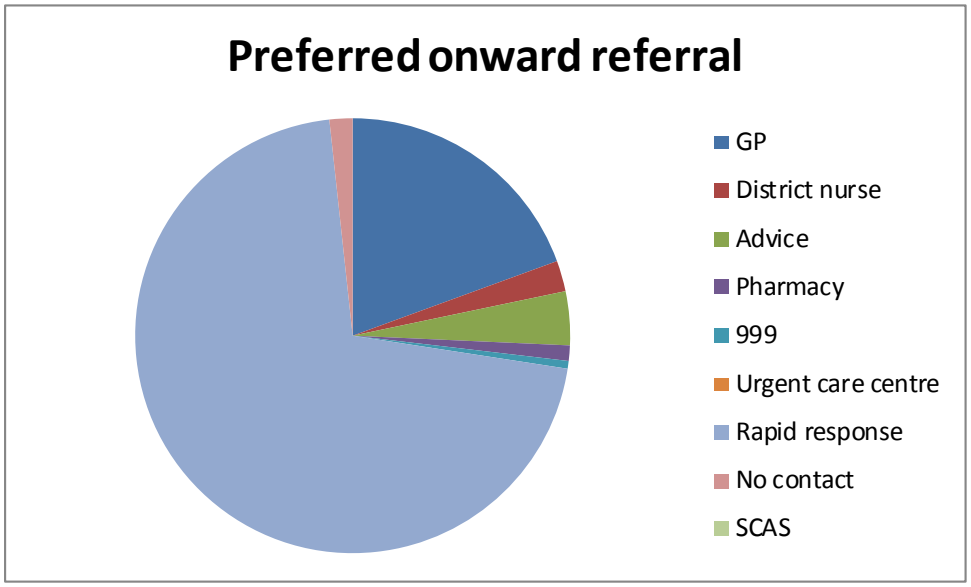


Figure 5 shows what the actual onward referral was and figure 6 shows what the CNSs would have preferred to do had the service been available across all localities.

There is clear evidence that the CNSs would have a preferred option of sending a Rapid Response Team out to patients. The majority of CCGs in Thames Valley do not provide a Rapid Response service. Those that do, do not provide it over the 24/7 period, or are restricted to those already on their caseload.

Palliative medicine consultant opinion

As part of the pilot, data was captured whether each call required additional input from a palliative medicine consultant. During the pilot, this option was not chosen. This is not unexpected as the Thames Hospice team is staffed by experienced palliative clinical nurse specialists.

Availability of services and a Directory of Services Review

The SCAS database relies on the Directory of Services (DoS) to show clinicians where they can refer a patient to if the call cannot be closed to home management. It is therefore essential that the DoS is accurate and up to date. The table in **Appendix 4** contains an overview of the data held on the DoS.

The review of the DoS shows that the palliative care services across the regions are included apart from two gaps (refer to **Appendix 4**, areas highlighted in grey).

However the information contained within it is not always clear and some services have no DX code, which means that they will not be identified when a call handler is trying to find a local, appropriate service.

SCAS have had profiling discussions with some providers but the DoS is still not as accurate or as useful as it needs to be, this issue needs to be addressed with some urgency.

Costs

The TVSCN provided funding for the life of the pilot (seven months) to enable infrastructure, data collection, report writing, project oversight and the provision of the advice line service.

Data available, to date, is based on the first four months of the pilot, where one can see an increasing trajectory of call numbers. At this stage it is not possible to determine the call celling.

In addition the potential impact for greater uptake of the service through increased promotion to care homes, as well as expansion to the 999 line are not included in the costings aspect.

Project costs

The network provided £3,000 to SCAS. This contributed to hardware, training and project/data support. It also provided £57,000 to Thames Hospice, which provided for project support, data collection, report writing and sufficient available resource to flexibly increase CNS (band 7) capacity during the identified high demand at weekend/out of hours times.

Cost benefit analysis

It should be noted that the assumptions on the service costings below and in the full costings analysis is based on national tariffs, which is based on ambulance and ED costs as charged to SCAS.

Assumptions	
GP OOH	£110 per hour
SCAS cost per STC	228
Treatment Centre/ED	84

The analysis of the calls (four months data) demonstrates a significant shift in call outcome, however the call numbers are small, and so the savings are likewise small, estimated at £6,000 per annum.

Full detail of the analysis is provided in the **appendix 6**.

This small saving does of course need to be offset against both one off costs of service set up and ongoing staff costs.

The case for the provision of this service is clear, as is the economy of scale of it being part of a wider current service offering. The potential of responding to higher call demand through proactive work with care homes and expansion to the 999 service affords a greater impact. There is opportunity for commissioners to work collaboratively in engaging with providers to provide a single Thames Valley-wide offering, and for consideration of expanding current staffing capacity at limited cost.

Costs to include a 999 service

At the direction of the BOB STP U&EC board, discussions progressed with SCAS 999 service regarding the potential impact of specialist palliative care advice on A&E conveyances and subsequent ED activity. The Board recognised the added value of extending the pilot from 111 calls to include 999, in which paramedics could seek expert advice from a CNS during a callout, to inform reactive decision making.

During the pilot, discussions were held with John Black (Medical Director, SCAS), and his team to explore the possibility of offering the advice line through 999. Modelling demonstrated it would be possible as well as beneficial to 999 crews in attendance at scenes. Using the data available, a table top exercise indicated that providing an advice line service would positively impact course of action and decision making by crews on scene, and would reduce ambulance conveyances to ED/A&E.

The potential to offer advice to paramedics in attendance is reflected as per the below from the Bedfordshire PEP service:

For example in December there 32 calls from paramedics who were with a patient in the home

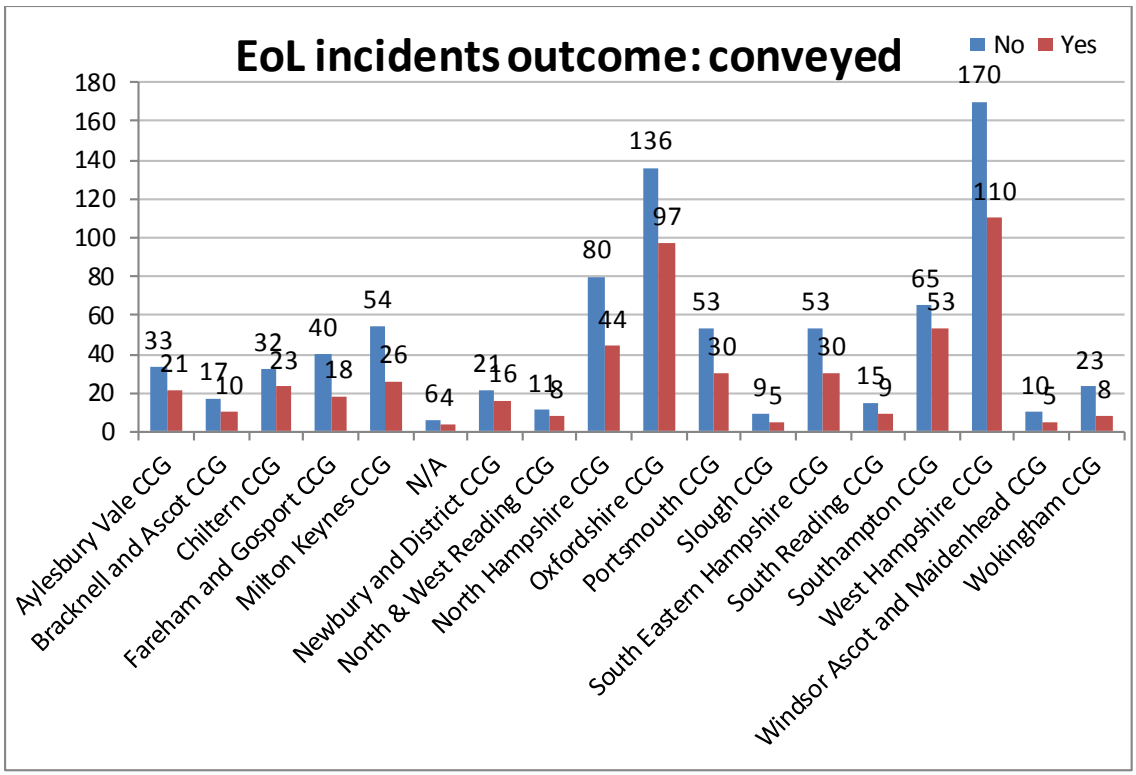
Reason for the calls to Bedfordshire Partnership for Excellence in Palliative Support (PEPS) service are listed as below:

- Symptom advice
- Medication advice
- Confirm DNAR in place
- Emotional support advice
- Crew want to know if patient is on the palliative care register and what services patient is accessing
- Supporting crew in the home to keep patient at home. Crisis visit if necessary
- Advice on anticipatory medication.

The evidence above highlights that there is a need for advice and guidance for paramedics when dealing on scene, a patient that has palliative care needs or is at the end of life.

The graph below demonstrates the number of conveyances across the whole of SCAS, with one CCG in Thames Valley having one of the highest disposition.

Figure 7 Outcome/disposition (conveyed or non-conveyed) between 1st January 2017 and 31st August 2017



Data captured by auditing SCAS manually written case notes that mentioned 'palliative/EoLC' identified 206 paramedic call outs (BOB & Milton Keynes), which predicts an average 5-6 per week. Data from the number of conveyances and palliative/EOL cases supports that Thames Valley would benefit from the use of a Specialist Advisor (as demonstrated by the Bedfordshire PEP evidence) similar to the 111 pilot service, to enable paramedics to make informed decision making and reduce the number of conveyances and admissions to hospital at the point of scene.

Discussions with the 999 service have demonstrated strong support for including DX codes to identify palliative care calls, and having a CNS on call (specialist clinical advisor) to support the paramedics at scene.

The additional cost of this service would be near to equivalent 1.75 WTE but would be dependent on an in-depth analysis of the numbers of palliative care calls to provide an accurate number of WTE CNS service.

Conclusion

The data in this report support the pilot's expected outcomes. The Clinical Nurse Specialist telephone response to 111 callers has led to a reduction in the number of inappropriate admissions to acute care; a 35.2% decrease in referrals to primary care and a 23.5% increase in home management (the group for whom no further treatment or referral was required).

The pilot identified gaps in services: the need for a Rapid Response community response from specialist palliative care and a necessary review of the 111 Directory of Services. The pilot demonstrated a potential to extend this type of CNS advice line to 999.

The project has revealed a varied use of SPN, highlighting the importance of taking the learning from the TVSCN EPaCCS report and pressing the need for such IT systems to provide clinical information to enable timely and appropriate interventions for patients. Special Patient Notes were only available in 21% of calls. For those patients with SPN, 81% were deemed helpful for decision making.

The CNS advice line provided an additional source of support for patients who are not linked with a hospice and for those in a care or nursing home, as indicated by the number of home-based calls.

The outcomes of the pilot demonstrate that with this type of service, patients and their families receive more appropriate support for their palliative and end of life queries than before the pilot. The knowledge and expertise of the specialist palliative care Clinical Nurse Specialists reduced pressure on 111, the ambulance service and primary care, making more use of home management techniques and community services.

The service demonstrates that a Thames Valley-wide service is feasible and allows for economy of scale with staffing targeting the peak demand times. The integration of the service within an existing palliative care team enabled it to be sustainable with minimal additional staffing.

The potential of responding to higher call demand through proactive work with care homes and expansion to the 999 service affords a greater impact and there is opportunity for commissioners to work collaboratively in engaging with providers to provide a single TV wide offering and for consideration of current staffing capacity to consider expansion at limited cost.

A dedicated Thames Valley-wide specialist palliative and end of life telephone advice line to 111 would benefit patients and their families significantly and this model would be sustainable in the longer term.

Wider opportunities and benefits

There is an opportunity to work with CCGs to increase the use of accessible Special Patient Notes.

A review of the Directory of Services is necessary.

Reviewing community wraparound service provision for gaps would be beneficial; this could include a Rapid Response community service.

There is an opportunity to promote the end of life 111 service to care homes.

Extending the end of life service to 999 has the potential to reduce hospital transfers from scene ambulance crews.

Recommendations

With the conclusion of the pilot, we recommend:

1. Commissioners should collectively commission a full time, collaborative, Thames Valley-wide specialist palliative care advice line (as part of a wider palliative care service), for both the 111 and 999 systems.

   This, as a minimum, should be for the BOB area and ideally include Berkshire East.

   The service should be provided by palliative clinical nurse specialists; the evidence shows excellent results in the proactive, timely management of calls, with significant numbers closed at point of call due to the expertise of the CNSs.

   The current data from the pilot shows increasing numbers of calls throughout the period of the pilot. The establishment of a service needs to accommodate this potential growth, and special consideration also needs to be given to the further potential to offer the service to care homes and to enable adoption in the 999 service.

   The service should be an add-on to a wider palliative care service; the economy of scale and learning from elsewhere supports this approach as opposed to a standalone service.

2. A CCG by CCG review of the identification, use and availability of Special Patient Notes. The Thames Valley SCN has carried out a review of EPaCCS use across the geography, and has uncovered a number of barriers to implementing a successful system. The pilot has also revealed the lack of Special Patient Notes, and how they contribute to a more timely and more accurate referral for the patient. More work is required to understand and convey the importance of SPNs at a local level.

3. A CCG by CCG review of the provision of wraparound services across all times of day and week, to support the ongoing review of the directory of services ref to network scoping tool

Appendices

Appendix 1: Detailed call demand heat maps

Call demand by weekday and time for SCAS, Thames Hospice and combined

SCAS

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
May-18	1	0	1	0	2	2	1	2	1	1	1	1	1	2	3	0	2	1	3	6	5	6	1	5
Jun-18	1	0	1	1	0	2	1	1	1	1	1	2	0	0	0	3	0	1	4	6	2	2	1	0
Jul-18	1	2	1	0	0	1	1	2	5	4	0	0	0	0	1	0	3	6	3	4	2	5	3	1
Aug-18	1	1	1	1	1	4	4	4	2	1	0	0	2	1	0	2	0	1	3	1	3	2	5	5
Sep-18	0	3	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2	2	1	0
Oct-18	4	1	0	1	0	1	2	0	0	1	0	0	0	1	0	1	0	1	2	1	2	2	1	3
Nov-18	1	0	1	0	1	2	0	0	0	0	0	0	0	0	1	0	0	1	1	3	2	3	2	2
Dec-18	1	0	0	0	0	1	1	0	0	1	0	0	1	0	1	0	1	1	1	1	0	2	0	0

Windsor

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
May-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep-18	0	0	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	2	0	1	0	0	2
Oct-18	2	1	3	0	0	1	1	1	1	0	0	0	1	0	0	0	2	0	4	5	2	4	3	0
Nov-18	1	1	0	1	0	0	2	2	0	0	1	0	1	0	0	0	0	3	5	1	4	1	0	2
Dec-18	2	3	0	3	1	0	1	5	0	0	0	0	2	1	0	2	0	0	1	1	3	1	0	2

Combined

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
May-18	1	0	1	0	2	2	1	2	1	1	1	1	1	2	3	0	2	1	3	6	5	6	1	5
Jun-18	1	0	1	1	0	2	1	1	1	1	1	2	0	0	0	3	0	1	4	6	2	2	1	0
Jul-18	1	2	1	0	0	1	1	2	5	4	0	0	0	0	1	0	3	6	3	4	2	5	3	1
Aug-18	1	1	1	1	1	4	4	4	2	1	0	0	2	1	0	2	0	1	3	1	3	2	5	5
Sep-18	0	3	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	2	2	3	2	1	2
Oct-18	6	2	3	1	0	2	3	1	1	1	0	0	1	1	0	1	2	1	6	6	4	6	4	3
Nov-18	2	1	1	1	1	2	2	2	0	0	1	0	1	0	1	0	0	4	6	4	6	4	2	4
Dec-18	3	3	0	3	1	1	2	5	0	1	0	0	3	1	1	2	1	1	2	2	3	3	0	2

Call demand by weekend day and time for SCAS, Thames Hospice and combined

SCAS

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
May-18	0	0	0	0	0	0	1	0	4	3	3	3	1	4	1	0	2	1	2	4	1	4	2	2
Jun-18	1	1	0	1	0	0	1	2	3	4	1	0	0	3	1	1	2	0	2	2	1	1	1	0
Jul-18	1	0	0	2	1	0	3	1	3	3	3	3	3	0	0	0	2	5	0	0	3	0	2	3
Aug-18	0	0	0	0	0	0	0	3	0	1	2	2	3	0	0	0	3	1	1	3	1	0	1	0
Sep-18	0	1	0	1	0	1	1	0	0	2	1	1	1	2	4	0	1	0	1	0	0	0	0	0
Oct-18	1	0	0	0	0	0	0	0	0	2	0	2	0	0	1	2	1	1	1	0	1	1	1	0
Nov-18	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	2	0	0	1	0	0
Dec-18	2	0	0	0	0	0	0	1	0	0	1	0	2	1	0	0	3	0	0	2	0	0	1	0

Windsor

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
May-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sep-18	1	1	1	2	1	0	0	0	2	1	2	1	1	2	3	2	1	3	0	0	1	1	2	0
Oct-18	0	0	0	1	0	0	1	0	2	1	0	2	2	1	2	1	2	0	3	0	0	0	0	1
Nov-18	0	1	1	0	0	0	0	1	1	1	3	0	1	3	0	3	1	4	0	1	0	0	4	1
Dec-18	0	0	1	0	1	0	0	1	1	3	5	5	2	2	3	2	5	3	3	2	4	0	1	2

Combined

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
May-18	0	0	0	0	0	0	1	0	4	3	3	3	1	4	1	0	2	1	2	4	1	4	2	2
Jun-18	1	1	0	1	0	0	1	2	3	4	1	0	0	3	1	1	2	0	2	2	1	1	1	0
Jul-18	1	0	0	2	1	0	3	1	3	3	3	3	3	0	0	0	2	5	0	0	3	0	2	3
Aug-18	0	0	0	0	0	0	0	3	0	1	2	2	3	0	0	0	3	1	1	3	1	0	1	0
Sep-18	1	2	1	3	1	1	1	0	2	3	3	2	2	4	7	2	2	3	1	0	1	1	2	0
Oct-18	1	0	0	1	0	0	1	0	2	3	0	4	2	1	3	3	3	1	4	0	1	1	1	1
Nov-18	0	1	1	0	0	0	0	1	2	2	4	0	2	3	0	3	1	4	2	1	0	1	4	1
Dec-18	2	0	1	0	1	0	0	2	1	3	6	5	4	3	3	2	8	3	3	4	4	0	2	2

Appendix 2: Call demand by CCG locality

Month	Contract	CCG	Percentage of the Total Selected
Sep	Oxfordshire	NHS OXFORDSHIRE CCG	44.44%
Sep	Buckinghamshire	NHS AYLESBURY VALE CCG	12.70%
Sep	Berkshire	NHS SOUTH READING CCG	11.11%
Sep	Berkshire	NHS BRACKNELL AND ASCOT CCG	6.35%
Sep	Berkshire	NHS NEWBURY AND DISTRICT CCG	6.35%
Sep	Berkshire	NHS NORTH & WEST READING CCG	6.35%
Sep	Buckinghamshire	NHS CHILTERN CCG	6.35%
Sep	Berkshire	NHS WINDSOR, ASCOT AND MAIDENHEAD CCG	3.17%
Sep	Berkshire	NHS WOKINGHAM CCG	3.17%
Oct	Oxfordshire	NHS OXFORDSHIRE CCG	52.94%
Oct	Buckinghamshire	NHS AYLESBURY VALE CCG	10.59%
Oct	Buckinghamshire	NHS CHILTERN CCG	9.41%
Oct	Berkshire	NHS NORTH & WEST READING CCG	7.06%
Oct	Berkshire	NHS WOKINGHAM CCG	7.06%
Oct	Berkshire	NHS SOUTH READING CCG	5.88%
Oct	Berkshire	NHS NEWBURY AND DISTRICT CCG	3.53%
Oct	Berkshire	NHS BRACKNELL AND ASCOT CCG	1.18%
Oct	Berkshire	NHS SLOUGH CCG	1.18%
Oct	Berkshire	NHS WINDSOR, ASCOT AND MAIDENHEAD CCG	1.18%
Nov	Oxfordshire	NHS OXFORDSHIRE CCG	52.00%
Nov	Buckinghamshire	NHS AYLESBURY VALE CCG	14.67%
Nov	Buckinghamshire	NHS CHILTERN CCG	9.33%
Nov	Berkshire	NHS SOUTH READING CCG	8.00%
Nov	Berkshire	NHS BRACKNELL AND ASCOT CCG	5.33%
Nov	Berkshire	NHS SLOUGH CCG	4.00%
Nov	Berkshire	NHS WINDSOR, ASCOT AND MAIDENHEAD CCG	4.00%
Nov	Berkshire	NHS NEWBURY AND DISTRICT CCG	1.33%
Nov	Berkshire	NHS WOKINGHAM CCG	1.33%
Dec	Oxfordshire	NHS OXFORDSHIRE CCG	47.37%
Dec	Berkshire	NHS WOKINGHAM CCG	10.53%
Dec	Buckinghamshire	NHS AYLESBURY VALE CCG	10.53%
Dec	Berkshire	NHS NEWBURY AND DISTRICT CCG	7.37%
Dec	Buckinghamshire	NHS CHILTERN CCG	7.37%
Dec	Berkshire	NHS SLOUGH CCG	5.26%
Dec	Berkshire	NHS BRACKNELL AND ASCOT CCG	4.21%
Dec	Berkshire	NHS NORTH & WEST READING CCG	3.16%
Dec	Berkshire	NHS WINDSOR, ASCOT AND MAIDENHEAD CCG	3.16%
Dec	Berkshire	NHS SOUTH READING CCG	1.05%

Month	County	Percentage Demand
Sep-18	Oxfordshire	44.44%
	Buckinghamshire	19.05%
	Berkshire West	26.98%
	Berkshire East	9.52%
Oct-18	Oxfordshire	52.94%
	Buckinghamshire	20.00%
	Berkshire West	23.53%
	Berkshire East	3.53%
Nov-18	Oxfordshire	52.00%
	Buckinghamshire	24.00%
	Berkshire West	10.67%
	Berkshire East	13.33%
Dec-18	Oxfordshire	47.37%
	Buckinghamshire	17.89%
	Berkshire West	22.11%
	Berkshire East	21.05%

Appendix 3: Complaints and compliments

Thames Hospice were notified of one datex in Quarter 3. This pertained to an emergency ambulance having been called to a dying patient which was deemed inappropriate by the crew. The Adastra records were reviewed by the Thames Hospice Director of Patient and Family Services and the SCAS lead and a report submitted.

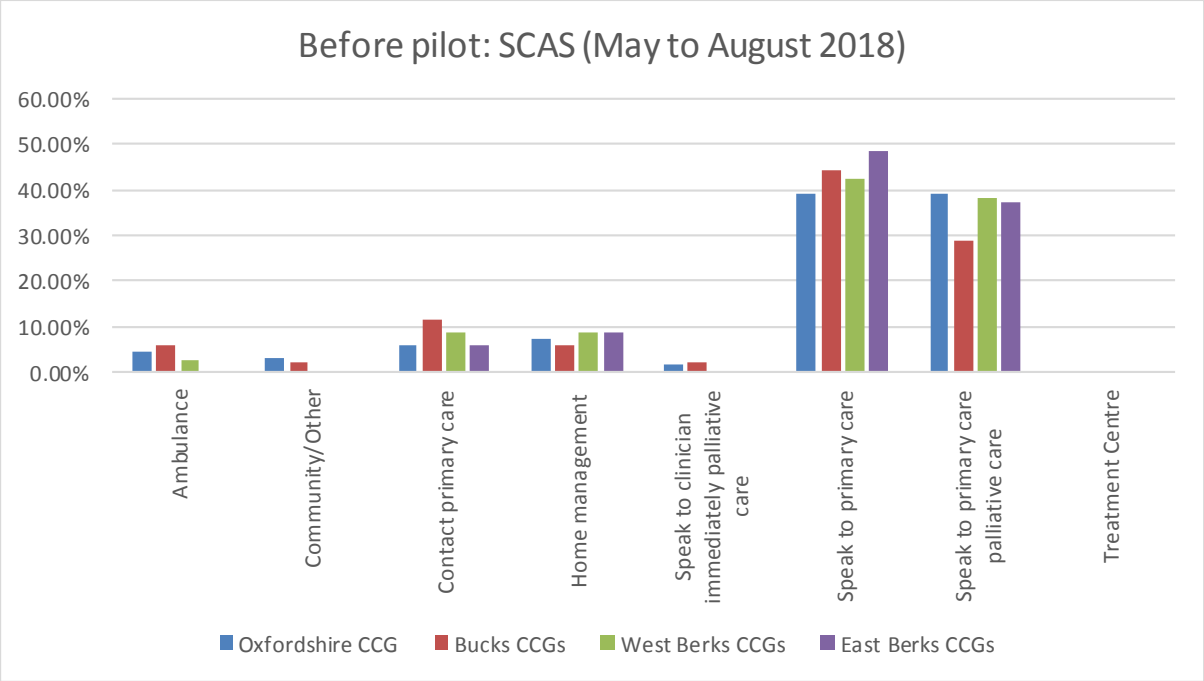
Investigation outcome**:** The report concluded that the crew were correct in their judgement that an emergency ambulance was not required.

The cause was found to be a non-compliant call by call handler who did not use the palliative care pathway and assessed the patient resulting in a Cat 2 emergency ambulance being sent. The call handler was told by the Marie Curie nurse that she wanted to speak to the palliative care nurse as she had been in contact with the hospice previously that day.

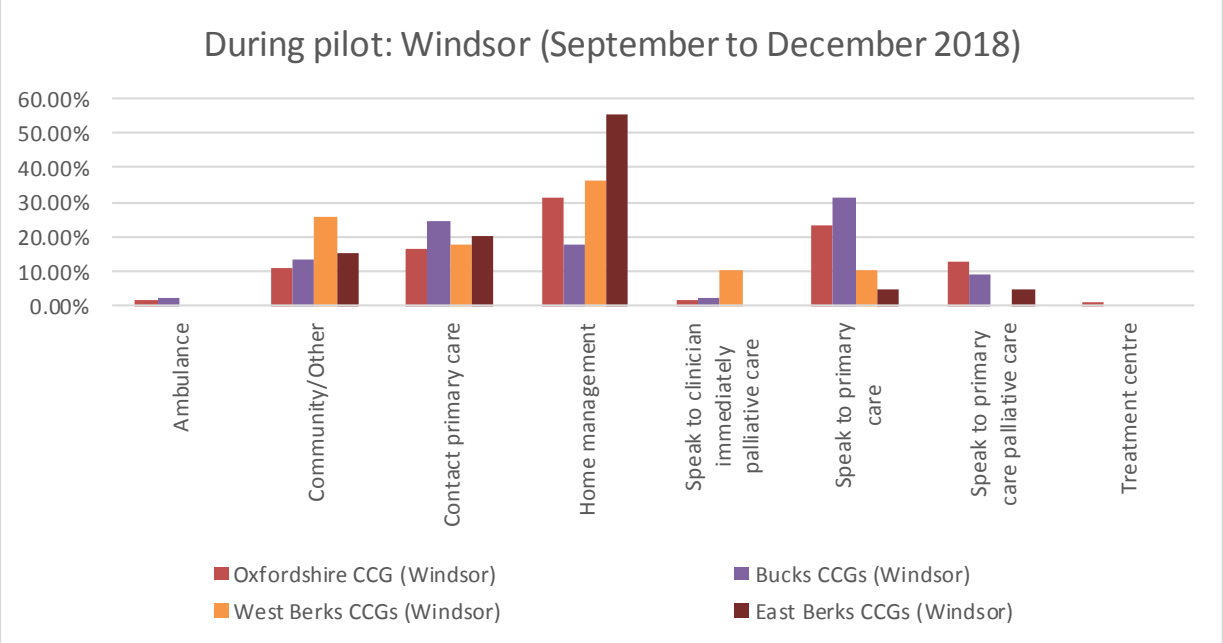
Positive outcomes:
* Recognition and reporting by crew through SCAS training.
* Use of repeat caller to palliative care – continuity of care and good patient experience.

Future learning:
* Training for call handlers and 111, via the education team and staff information.

Appendix 4: Comparison of call outcomes by CCG



The data demonstrates that SCAS clinicians refer the majority of end of life calls on to primary care. It is of interest to note that this is common across Thames Valley, including Berkshire East where the Thames Hospice Rapid Response Team is available via the Directory of Services 24 hours a day.



The above figure shows that with the introduction of the Thames Hospice clinicians, there is an overall shift in outcome; particularly in the closing of calls through home management and reduction of referrals to primary care.

Appendix 5: Information held in the Directory of Services

The SCAS database relies on the Directory of Services (DoS) to show clinicians were they can refer a patient to if the call cannot be closed to Home Management. It is therefore essential that the DoS is accurate and up to date. The following table contains an overview of the data held on the DoS.

Service	Pathways referral	Open hours	DX05 to DX15 code/s	Comments
East Berkshire				
Palliative Care- Thames Hospice – 24 Hour Advice Line & Rapid Response Team	No	Open all hours	Yes	Needs Pathways referral
Palliative Care - East Berkshire Macmillan	Yes	Open all hours, number given old District Nursing number	Yes	No longer in existence, taken over by Thames Hospice - remove
Palliative Care - Alexander Devine – Berkshire Children' s Hospice service				Not on DoS
West Berkshire				
Palliative Care - Sue Ryder	Yes	Open all hours	Yes	No GP surgery information
Charles Clore Day Hospice				Not on DoS
Oxfordshire				
Palliative Care Rapid Response Hub – Sue Ryder, - South and South East Oxfordshire	Yes	08.00 to 20.00	No	Needs DX codes
Palliative Care- Nettlebed Hospice – Sue Ryder Care -Oxfordshire	No	Open all hours	Yes	Community Team work 09.00-17.00.
Palliative Care – Cruse Bereavement Care - Oxfordshire	Yes	10.00 to 13.00 or 09.30 to 17.00	No	Clarify times. Difference due to face to face and telephone?
Palliative Care – End of Life, Matron Service - Oxfordshire	Yes	09.00 to 17.00	No	Needs DX codes
Palliative Care- Helen and Douglas House Hospice – Oxfordshire	Yes	Open all hours	Yes	Hospice open 24 hours, ? community team hours
Palliative Care – Kates Home Nursing - Oxfordshire	No	09.00 to 17.00	Yes	
Palliative Care – Katherine House Hospice - Oxfordshire	Yes	Open all hours	Yes	Inpatient service
Palliative Care – Katherine House Hospice, Palliative Care Comm Nurses - Oxfordshire	Yes	09.00 to 17.00	Yes	DX codes need checking
Palliative Care – Lawrence Home Nursing, Chipping Norton – DAY TIME CARE	Yes	06.30 to 22.00	Yes	Referral has to be via GP.
Palliative Care – Lawrence Home Nursing, Chipping Norton – NIGHT TIME CARE	Yes	22.00 to 23.59	Yes	Referral has to be via GP.
Palliative Care Triage Service –	Yes	Open all hours	Yes	

Sobell House Hospice				
Buckinghamshire				
Palliative Care – Sue Ryder - Nettlebed Hospice (South Bucks Pts)	Yes	Open all hours	No	Inpatient service
Palliative Care – Thames Hospice – Covering East Berks and part of South Bucks	No	Open all hours	Yes	Needs Pathways referral
Palliative Care – Pepper Childrens Hospice at Home	No	Open all hours	No	Not an adult service. Needs DX codes
Palliative Care – Rennie Grove Hospice – Hospice at Home Care Information Line	No	10.00 to 16.00	No	Needs DX codes. No mention of Community Team
Palliative Care – Single Point of Access , Florence Nightingale Hospice, Bucks	No	Open all hours	No	SPA open 24 hours
Palliative Care – South Bucks Hospice – Hospice Day Care for Adults	No	09.00 to 17.00	No	
Palliative Care – The Hospice of St Francis – Hospice or Hospice at Home - Bucks	No	Open all hours	No	Clarity needed on 24 hour service

Appendix 6: Cost benefit analysis

										Annualised					
												Higher volumes			
	Pre-pilot	Volume	Rates at Windsor	Total	If at the same proportions as pre trail	Channel shift	Cost per intervention	Cost benefit	Annualised	at old %	at new %	Channel shift	net saving
Final disp description - Collated	SCAS	294.00		212.00					636.00		2000		
Primary care: 'Speak to'	42.10%	124	20.14%	42.7	89.25	-46.6	£ 41.25	-£ 1,920	-£ 5,761	842	403	-439	-£ 18,117
Primary care: 'Contact'	7.35%	22	16.53%	35.0	15.58	19.5	£ 55.00	£ 1,070	£ 3,211	147	331	184	£ 10,098
Community services	1.57%	5	15.17%	32.2	3.33	28.8	£ 41.25	£ 1,189	£ 3,568	31	303	272	£ 11,219
Home management	7.73%	23	32.28%	68.4	16.39	52.0	£ -	£ -	£ -	155	646	491	£ -
Ambulance	3.57%	10	1.35%	2.9	7.57	-4.7	£ 312.00	-£ 1,468	-£ 4,403	71	27	-44	-£ 13,844
Speak to clinican immediately	1.00%	3	1.47%	3.1	2.12	1.0	£ 17.89	£ 18	£ 54	20	29	9	£ 168
Speak to primary care palliative care	36.67%	108	12.72%	27.0	77.74	-50.8	£ 18.89	-£ 959	-£ 2,877	733	254	-479	-£ 9,048
Treatment centre/ED	0.00%	0	0.34%	0.7	0.00	0.7	£ 84.00	£ 60	£ 180	0	7	7	£ 568
								-£ 2,009	-£ 6,028		Net saving		-£ 18,957
										Cost of running line			110508
Assumptions									The answer	Net benefit			£ 91,551	**-ve is good +ve is bad**
GP OOH	£110 per hour													
SCAS cost per STC	228													
Treatment Centre/ED	84													