

## Appendix 1: Review of BaNES Early Home Visiting Service – December 2018

### 1. Background

- 1.1 Primary Care is under significant pressure as a result of workforce shortages and increased demand. Similarly, secondary care is seeing increased demand with particular challenges in delivering the four-hour standard at the RUH. Following a pilot, the CCG decided to invest in an Early Home Visiting Service (EHVS) as part of the 2017/18 Earlier Presentation QIPP which also encompassed the Urgent Transport Service and Urgent Connect. The focus of these services was to enhance patient care and clinical effectiveness by facilitating patients being seen by the right clinician as early as possible, ultimately aiming to return patients to their own home as quickly as possible. Historically in Bath and North East Somerset (BaNES), GP home visits were done after morning surgery. This means that where a hospital admission is necessary, patients may not arrive into hospital until later in the afternoon and can end up staying overnight unnecessarily. To address this problem, the CCG provides funding for additional staff to carry out early home visits.
- 1.2 The EHVS offers patients who are unwell and cannot get to their surgery (most likely the elderly and frail at risk of a hospital admission), the option to call the practice in the morning to request an early home visit. For patients who subsequently require hospital attendance, this maximises the amount of same day time available to staff in Ambulatory Care and other settings to conduct an assessment on the same day. This should allow more patients to be discharged the same day with a management plan thereby reducing unnecessary hospital admissions.
- 1.3 The EHVS was piloted on a small scale in October 2016. Following the original pilot, it was extended to include all 26 GP practices in July 2017. In 2018/19 this service extended to provide afternoon home visits to some of the Bath practices. It is estimated that the EHVS makes up less than 1% of face to face appointments in BaNES general practices.
- 1.4 The service is funded until March 2019. The future direction of the service needs to be decided through this review by evaluating the impact and cost effectiveness of the EHVS to date.

### Wider Context

- 1.5 As part of their core contract and delivery of essential services, practices are expected to have appropriate arrangements in place to meet the reasonable needs of their patients. This could be at the practice or at an alternative location off site. The practice leaflet should also outline the criteria for home visits and the method of obtaining one. The CQC review home visits under the safe and responsive domains, highlighting a patient safety alert from 2016 where lack of prioritisation of home visits by a practice was related to a patient death. Therefore practices should already be clear on the decision making on the need for a home visit, prioritisation and alternative arrangements should the urgency mean a practice visit is not appropriate.
- 1.6 The South Central and West CSU *Multi-Disciplinary Team (MDT) Working to Deliver Same Day Primary Care* paper demonstrates how using MDT professionals can increase capacity and provide cost effective care. It highlights the value in using the skill mix of MDT professionals, such as Specialist Paramedics and Advanced Nurse Practitioners, when seeing patients with same day/urgent care needs, work traditionally undertaken by GPs. The paper highlights that such posts are being funded mainly by individual GP Practices or occasionally from external sources (often pilots) e.g. local CCGs.

## 2. Early Home Visiting Service

2.1 The key outcomes for this service are:

- A. Financial savings through avoiding hospital admissions and ED attendances
- B. Earlier patient presentation at hospital
- C. Improved access to, and patient satisfaction with, primary care
- D. Increased capacity and increased resilience in primary care

2.2 During 2016/17, we piloted three schemes:

- Specialist Paramedic led service in Bath (supported by BEMS)
- GP led service in Norton Radstock (supported by BEMS)
- GP led service in Keynsham (run by a group of three practices led by St Augustine's Surgery)

**The total cost of this service in 2016/17 was £105,954.** This included 6 months of the BEMS services and 5 months of the Keynsham service.

2.3 The 2016/17 pilot assumed that 50% of visits resulted in a saved admission. This methodology led to assumed savings of £135,071. On this basis, the pilot was rolled out in 2017/18 to the (then) 26 practices, with funding going to five different services based on the model preferred by clusters of practices:

- Specialist Paramedic led service in Bath Sulis and part of Bath Aqua (run by BEMS on behalf of nine practices)
- Advanced Nurse Practitioner led service covering the rest of Bath Aqua (run by a group of three practices with St James Surgery taking the lead)
- GP led service in Norton Radstock (run by BEMS on behalf of six practices). A GP led service was decided as there were no other specialist paramedics available
- GP led service in Keynsham (run by group of three practices led by St Augustine's Surgery). Only 9 months' data were submitted (Q2-Q4)
- GP led service in Chew Valley (run by a group of two practices led by Chew Medical Practice)

**The total cost to the CCG for this service in 2017/18 was £406,167.** This included 12 months of the BEMS and Keynsham service and 9 months of the other services. For the purposes of this report only the 9 month period for which data was submitted by the Keynsham service will be used, making the **2017/18 cost £391,055.**

2.4 During 2018/19:

- The BEMS Specialist Paramedic led service for Bath was extended to include the afternoons. This was to provide a more practical rota pattern for SWASFT to fill.
- Heart of Bath (HoB) changed their service model to a Specialist Paramedic and funded an afternoon home visiting service themselves.
- Keynsham changed their service to include an Advanced Nurse Practitioner (ANP) 2 full days per week in October 2018. They continue to use a GP model 3 mornings per week.

**The total cost to the CCG for this service for a full year in 2018/19 is £600,156**

**The total cost of the service to the CCG since it started to the end of 18/19 will be £1,112,277. The CCG also pays £55,000 annually to the RUH for FAST ambulance services as part of the Earlier Presentation QIPP, which EHVS was originally part of.**

### **3. Service Evaluation**

- 3.1 The aim of the evaluation is to review the different service models and effectiveness of the Early Home Visiting Service against the outcomes identified in 2.1.

**For the purposes of this report ‘independent practices’ refers to those not coordinated by BEMS, i.e. practices in Keynsham, HoB and Chew Valley.**

- 3.2 Staff and patients have provided feedback about the EHVS via meetings, telephone, email and an online survey. The CCG has also analysed the data collected by the services. For the purposes of this report the BEMS and independent practice data has been analysed separately due to the following caveats:

- Not all visits have been recorded which may have contributed to the total number of recorded visits being significantly lower than expected. Observations of the service suggest the actual number of visits is likely to be closer to the predicted number outlined in 4.1 but we do not have the data to support this.
- Issues with tracking primary care data to secondary care due to independent practices not submitting data in the format requested and without the patient NHS numbers. This means that not all recorded visits are captured in the savings tables or in the patient flow charts in the appendices. A new recording template has been developed to make it easier to capture the data, as long as the practices ensure full compliance against the data specification.
- Some practices have been using the service to support non-urgent routine home visiting. A small-scale data collection in November 2018 suggests this could be as high as 50% of visits, this means that the overall calculated savings may have been inflated.
- The savings calculations were based on a small scale pilot, from which assumptions were made. Alternative methodologies would have yielded different estimated savings, so there is limited confidence in the accuracy of the savings model (see 4.6).

### **4. Outcome A - Financial savings through avoiding hospital admissions and ED attendances**

- 4.1 From the initial pilot it was anticipated that the service would visit 3-4 patients per service per morning (excluding Chew practice who visit 1-2 patients per morning). This equates to between 4,160–5,720 visits over a 12-month period.
- 4.2 Table 1 details the number of patient visits and associated costings for BEMS service (April 17 - March 18) and the independent practices (July 17 - March 18). There were 2,257 patient visits over 9 months which is 35% less than the minimum expected activity (3,460 visits) for that period of time.

**Table 1:** Demonstrates the discrepancy between the expected number of visits and actual number recorded in 2017/18. It highlights the HoB ANP service model is the most cost effective.

	BEMS SP x 2	BEMS GP	Chew GP 9 months	Keynsham GP 9 months	HoB ANP 7months	Total
Total cost to CCG 2017/18	£156,668	£119,571	£31,576	£50,945	£32,295	£391,055*
Minimum expected number of visits	1506	753	190	570	441	3460
Total number of recorded visits	937	400	115	340	465	2257
Average number of visits per clinician each week	9	8	3	9	16	55
Cost per visit based on expected number of visits	£104	£159	£166	£89	£73	£113
Actual cost per visit	£167	£299	£275	£150	£69	£173
Weighted Practice size (April 17)	75,468	47,962	15,990	23,904	28,492	191,816
Cost per patient	£2.08	£2.49	£1.97	£2.13	£1.13	£2.04

\*This includes 9 months' rather than 12 months' funding for Keynsham to correspond with the period for which data was submitted. The full cost was £406,167.

- 4.3 In 2018/19 the CCG increased its annual investment in the BEMS Specialist Paramedic led service by £108,930 as detailed section 2.4. This funding commissioned an extra 3-4 visits per clinician every afternoon, allowing a possible further 1,506-2,008 visits per year.
- 4.4 Table 2 details the number of patient visits and associated costings for each service. In summary, between April 2018 and October 2018, 2,235 early home visits have taken place, which is 32% less than the minimum expected activity (3,278 visits) for that period of time. In addition to inaccuracies in data recording, the reduction in numbers may be related to known recruitment and shift fill difficulties in both the BEMS and Keynsham services.

**Table 2:** Demonstrates the discrepancy between the expected number of visits and actual number recorded in 2018/19. It highlights the HoB SP model is the most cost effective.

	BEMS SP x 2 (AM&PM)	BEMS GP	Chew GP	Keynsham GP/ANP	HoB SP	Total
Total cost 2018/19	£308,415	£108,707	£42,101	£67,927	£73,006	£600,156
Minimum expected number of visits (April – October 2018)	1788	447	149	447	447	3278
Total number of recorded visits (April – October 2018)	1039	271	63	336	526	2235
Average number of visits per clinician each week	18	9	2	11	18	58
Cost per visit based on expected number of visits	£101	£142	£165	£89	£95	£107
Actual cost per visit	£173	£234	£390	£118	£81	£157
Weighted Practice size (April 2018)	70,455	48,254	16,107	24,623	31,186	190,625
Cost per patient	£4.38	£2.25	£2.61	£2.76	£2.34	£3.15

**In summary, for both 2017/18 and 2018/19, the HoB ANP and SP service were the most cost effective per visit. Of the GP models, the Keynsham GP service was the most cost effective per visit.**

### ED Attendance and Admissions 2017/18

- 4.5 The QIPP savings for the first year of the pilot were developed based on the number of patients who were able to stay at home that might otherwise have been conveyed to ED or admitted to hospital.
- 4.6 The 2016/17 savings had been calculated on the assumption that 50% of visits resulted in admission avoidance. Prior to the 2017/18 service starting, a virtual pilot was carried out to determine the percentage of patients whose hospital admission could have been prevented by an early home visit. GPs were asked to state if the patients that went in to hospital after an afternoon home visit would have likely avoided a hospital attendance if they had been seen earlier. Based on this data, we have therefore assumed that 6.8% of visited patients avoided an admission to hospital and that 7.4% avoided an ED attendance. A small-scale review of these savings assumptions in November 2018 by EHVS professionals suggested that 21% of visits are likely to have prevented a hospital admission which is significantly higher than the original pilot data (but does not take into account people who may have subsequently presented in secondary care) and may mean we have not captured the full extent of the savings in the tables below.
- 4.7 Results from the five services in 2017/2018 are detailed below in table 3, and in the patient flow charts in appendix 1, together with the range of conditions seen. In summary, of the recorded 2183 early home visits between April 2018 and October 2018, 75% of patients required no further treatment.

**Table 3:** Demonstrates the savings based on admissions and ED avoidance in 2017/18. Only the HOB service realised any net savings.

	BEMS SP x 2	BEMS GP	Chew GP	Keynsham GP	HoB ANP	Total
Total number of recorded visits	937	400	115	340	465	2257
Total number of visits recorded <u>with</u> NHS numbers	937	400	112	294	440	2183
Total number of patients recorded <u>with</u> NHS numbers who did not require hospital treatment or subsequently present in secondary care.	688 (73%)	259 (65%)	109 (97%)	216 (73%)	373 (85%)	1654 (75%)
Admissions saved (6.8%)	47	17	7	15	25	110
ED saved (7.4%)	51	19	8	16	28	121
Admissions saved (£)	£145,108	£52,587	£22,756	£45,094	£77,871	£343,416
ED saved (£)	£8,979	£3,355	£1,404	£2,783	£4,807	£21,328
Overall saved (£)	£154,087	£55,942	£24,160	£47,877	£82,677	£364,744
Expenditure	£156,668	£119,571	£31,576	£50,945	£32,295	£391,055
<b>Net Cost (-) /Saving (+)</b>	<b>-£2,581</b>	<b>-£63,629</b>	<b>-£7,416</b>	<b>-£3,068</b>	<b>+£50,382</b>	<b>-£26,311</b>

- 4.8 Using this methodology, the EHVS pilot saved £21,328 on ED attendance and £343,416 on admissions, totalling £364,744. The service cost £391,055, so no net savings were made

and there was a net expenditure of £26,311. By way of comparison, the Falls QIPP scheme costing a similar amount of £312,000 made a net saving of £560,000 in 2017/18.

### ED Attendance and Admissions 2018/19

4.9 For 2018/19 the QIPP savings are calculated based on three months rollover of the morning service from 2017/18 and the afternoon BEMS Specialist Paramedic model only. To date, the calculated gross savings are £58,207 with a forecast of £116,414. The savings assumptions are calculated based on the same methodology as the morning service. However, as the patient is seen at the same time as if it was a routine afternoon home visit, there is unlikely to be the same number of saved admissions or earlier presentation to hospital. The main benefit of the afternoon service is increased capacity and support in primary care, linked to increased skill mix rather than decreased admissions.

4.10 Results from the five services in April- October 2018 are detailed below in table 4, and in the patient flow charts in appendix 1, together with the range of conditions seen. In summary, of the recorded 2132 early home visits between April 2018 and October 2018, 78% of patients required no further treatment.

**Table 4:** Demonstrates the savings based on admissions and ED avoidance in 2018/19. Only the services using a SP or ANP realised net savings.

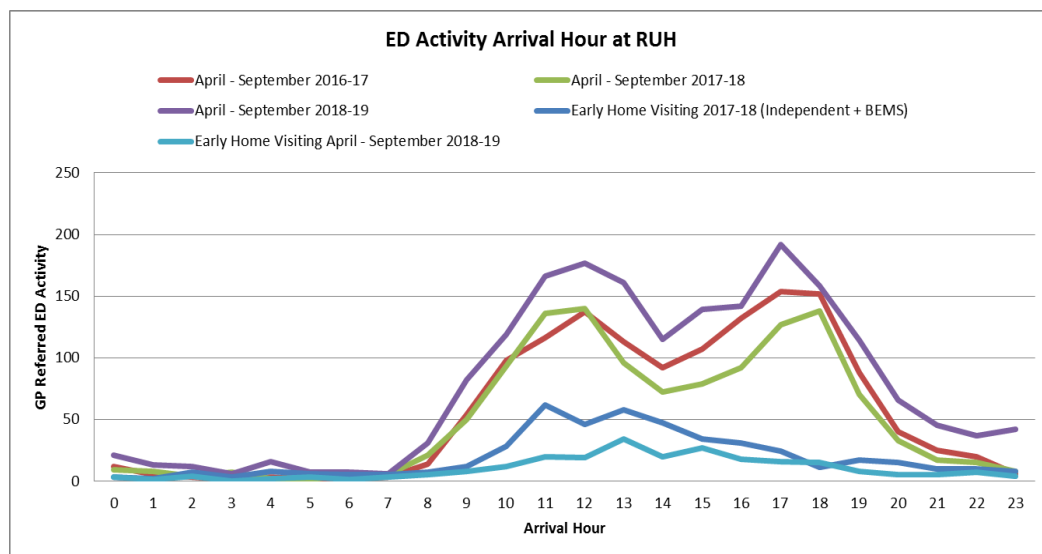
	BEMS SP	BEMS GP	Chew GP	Keynsham GP/ANP	HoB - SP	Total
Total number of recorded visits (April- October 2018)	1039	271	63	336	526	2235
Total number of visits recorded <u>with</u> NHS numbers	1039	271	62	269	491	2132
Total number of patients recorded <u>with</u> NHS numbers who did not require hospital treatment or subsequently present in secondary care.	787 (76%)	197 (73%)	58 (94%)	212 (79%)	406 (83%)	1660 (78%)
Admissions saved (6.8%)	54	13	4	14	28	113
ED saved (7.4%)	58	15	4	16	30	123
Admissions saved (£)	£176,485	£44,177	£10,718	£39,175	£75,025	£345,580
ED saved (£)	£10,658	£2,668	£816	£2,984	£5,715	£22,841
Overall saved (£)	£187,143	£46,845	£11,534	£42,159	£80,740	£368,421
Expenditure to date (April-Oct 18)	£179,909	£63,412	£24,558	£39,624	£42,586	£350,089
<b>Net Cost (-) /Saving (+)</b>	<b>+ £7,234</b>	<b>-£16,567</b>	<b>-£13,024</b>	<b>+£2,535</b>	<b>+£38,153</b>	<b>+£18,332</b>

4.11 Using this methodology, the EHVS pilot saved £22,841 on ED attendance and £345,580 on admissions, totalling £368,421. The service cost £350,089, producing an overall net saving of £18,332. The data also shows that suitably trained ANP's and SP's are able to deliver the similar admission avoidance outcomes as a GP.

In summary, if we assume the methodology is reliable, there are some models showing promising savings. With more stringent data collection and assurances that practices are completing the planned minimum number of patient visits per day it is likely that further savings could be realised.

## 5. Outcome B – Earlier patient presentation at hospital

5.1 RUH data shows that the number of all medically expected patients in ED referred by a General Medical Practitioner (GMP) has increased from 8.4% (1045 patients) in 2016 to 9.4% (1895 patients) in 2018. It was anticipated that with the EHVS in place, these medically expected patients would arrive earlier to in ED. The below graph shows the time when GMP medically expected patients arrived in ED at the RUH.



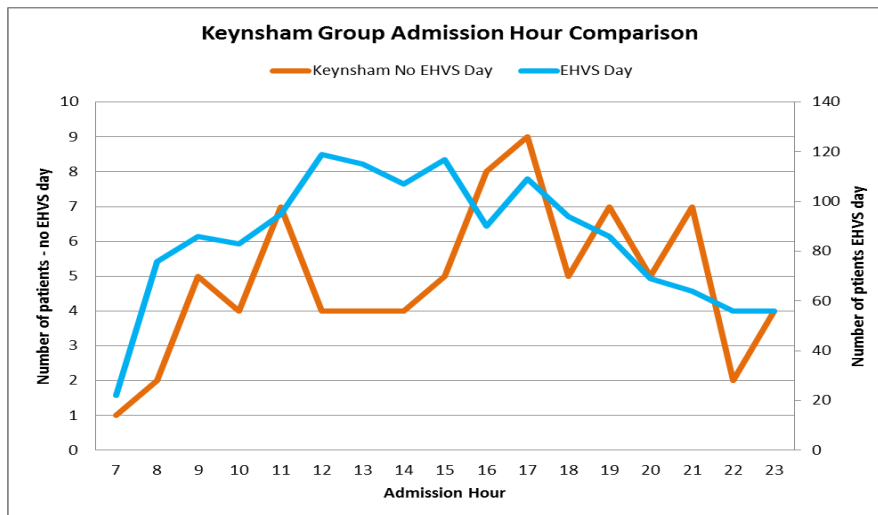
5.1 The number of medically expected EHVS patients is a relatively small percentage of the total number and this graph demonstrates that the service has had little impact on the overall trend of patient arrival times to ED. In 2016/17, prior to the EHVS starting, 39% of GP medically expected patients arrived at the RUH before 2pm and this remains unchanged for 2018/19. That said, there does appear to be a general trend with patient arrival time peaking at around 12pm and again at 5pm. This trend is not evident in the patients who were seen by EHVS, as the majority of patients arrive between 11am and 1pm and there is not a further influx of patients in the evening.

5.2 For the EHVS patients who did attend hospital, it appears to have been possible for some patients to attend earlier in the day. In 2017/18, 46% of patients had attended ED and 72% patients had been admitted by 2pm. Between April – September, 40% of patients attended ED by 2pm but only 47% of patients had been admitted by 2pm. See appendix 2 for further details.

5.3 In 2018/19, 77% of early home visits took place by 1pm with the peak visiting time being between 9-11am. Despite this, 26% of patients arrived to hospital after 6pm, this is an increase from 22% in 2017/18. This means that these patients are unlikely to be seen in Ambulatory Care and, if appropriate, be sent home with a management plan. Instead, they are likely to be admitted to hospital. In 2018/19, of the 347 EHVS patients that required an admission to hospital only 9.8% of patients were seen in Ambulatory care and discharged the same day. EHVS staff have reported that FAST transport has not had the capacity to transport patients to hospital in a timely manner and so ambulances are being used instead.

A transport review is required as not having timely transport to hospital will negate the impact of the earlier visit. This has been highlighted as part of the re-procurement with the RUH.

- 5.4 The Keynsham service recorded thirteen dates in 2018 where they were unable to provide staff cover to the EHVS. This data has been used in the graph below to demonstrate that the EHVS can support earlier presentation at hospital. On the dates the service was available, a majority of patients arrived at hospital between 11am and 2pm, in comparison on the days where there was not a service there was a dip in admissions over this period and these patients did not present until around 5pm.



**In summary, although the EHVS has not impacted on overall admission trends of medically expected patients at the RUH, it has been possible to see that on a smaller scale it is supporting some patients to get to hospital earlier in the day.**

**6. Outcome C – Improved access to, and patient satisfaction with, primary care**

- 6.1 Data from the GP Patient Survey was used to analyse if the addition of EHVS had improved patient access across the practices. There was no increase in patient access, or patients’ overall experience of making an appointment after the service was in place.
- 6.2 Feedback from patients using the five different service models has overall been very welcoming and positive. The BEMS survey shows that 85% of patients were happy with the treatment and advice provided and 100% would recommend the service to family and friends. The main recurring theme has been around the promptness of the services and early visits meaning that 22% of patients did not have to call an ambulance as they may have otherwise done. There have only been one or two patients who have refused to be seen by a Specialist paramedic.
- 6.3 The services have collated ‘patient stories’ throughout the pilot. The stories demonstrate how the service works to support earlier assessment and treatment.

*“Last week I had a telephone call at 9.30am about a patient with abdominal pain who couldn’t get to the surgery. They were seen and assessed by EHVS & admitted to RUH by late morning. They had surgery that afternoon for appendicitis. Had I not had EHVS to call upon, the patient would not have*



*been visited until early afternoon and would likely not have had surgery that day.” GP*

*“A 51 year old patient a 3 day history of cellulitis. She had poor mobility and her family was away so she was unable to get to the surgery’ The EHVS was able to see her at home and dispense antibiotics. Without antibiotics the infection would have likely spread and she would have needed to be admitted to hospital. Specialist Paramedic*

*“An elderly patient called the surgery with concerns of dizziness and nausea. The Specialist Paramedic saw the patient at home at 9am. The patient was diagnosed with severe Labyrinthitis. The patient required further assessment and was admitted to ED. Fast transport arrived within 45 minutes and she was in hospital by 10.30am allowing her to get earlier treatment.*

## **7. Outcome D – Increased capacity and resilience in primary care**

- 7.1 Feedback from practitioners in all five services has been very clear that the EHVS has helped to reduce GP workload and stress and is a step to improving GP retention and can avoid admissions.
- 7.2 The EHVS has provided additional capacity and capability in primary care. Practices have been able to reinstate some GP appointments because they do not need the urgent visit slot for the duty GP every morning. Practices would like additional home visiting in the afternoons, particularly on a Monday and Friday, as this is when most home visits are required. One smaller rural practice reported that they infrequently use the service and would identify alternative uses for any additional funding.
- 7.3 We have heard that this is an appealing job and encourages GPs back to work by offering more flexible roles. The GP workforce ten-point plan has retaining doctors as a priority so the flexibility of this service / role helps towards this national priority. It also helps retain paramedics, who report that they would otherwise leave the service. With a limited supply of Specialist Paramedics, this would leave a skill gap in the workforce.
- 7.4 Practices using professionals from the wider MDT team have feedback how valuable using an SP or ANP is and note the quality of their work. It also identified that these professionals who had specialist skills such as prescribing or dispensing were important for the service.
- 7.5 Working collaboratively in clusters on these projects has enabled the success of these schemes and relationships between practices have grown in a positive way. Being able to have remote IT access and discussing patients before and after visits has been a huge benefit when accessing the records together between practices. That said, there have been some reports from the independent practices that difficulties with the internet connection have meant that the IT equipment has not been used to its fullest.
- 7.6 Referrals have generally been appropriate, and in most cases when an admission has been made, this has been earlier. Where patients have not required an admission, it has allowed other teams such as Reablement to be mobilised earlier in the day.

## **8. Conclusion**

- 8.1 Despite difficulties with data capture it is clear that EHVS is a popular service amongst both GPs and patients. It has provided additional capacity and capability in primary and

community settings and at this current time, with the challenges faced by primary care, the resilience and sustainability of primary care is a priority. Based on the data gathered it is apparent that the service has not fully met its original aims. There are still a significant number of patients being seen by EHVS that are still not attending hospital until later in the day, and a relatively low number of patients that do attend hospital who are seen in ambulatory care and discharged the same day. Due to not all the services carrying out the number of expected visits, not all services are providing net savings. Some services do appear to be more cost effective to run and the use of the wider MDT team to support the EHVS has been met with positive feedback. The afternoon service, although provides additional capacity, is even less likely to support admission avoidance or earlier presentation to hospital. The options provided below incorporate the learning from the last 18 months.

## 9. Options

9.1 The following four options were considered:

- **Option 1:** Continue with the service as it is, with both independent and BEMS led services, but with the recommendation that ANPs and SPs are utilised.
- **Option 2:** Cease funding the service.
- **Option 3:** Procure a morning only service through one provider with the recommendation that ANPs and SPs are utilised.
- **Option 4:** Continue the morning only service by directly funding clusters of practices. The funding will be at the level of the most cost effective model. This includes utilising ANPs and SPs and running the services independently. It is also recognised that there is an optimum scale for the service to best prioritise patients. Currently, the smallest viable scale is around 23,000 patients. Consideration for Chew Valley and its rurality would be needed in relation to the cluster size.

**Full details of all the options can be found on pages 14-18.**

## 10. Recommendation

10.1 Despite being unable to evidence that the service is meeting its original aims to the anticipated extent, on balance and in recognition that the service has supported the resilience and sustainability of primary care during a challenging time, **option 4 is recommended**. This would provide a morning only service to be trialled for a further two years. The reason for continuing the services as an extended trial is that longer term funding will support recruitment and enable the practices to collect more robust data with clear guidance and new data recording templates from the CCG.

10.2 Option 4 would allow the trial of the EHVS to continue at significantly reduced cost to the CCG at an estimated total cost for two years of £521,535 (see appendix 3 for full costings). This will allow the practices to decide at a local level how to run the service; each cluster will be allocated funding and be given a clear guidance on the service requirements. The clusters can choose which professional to recruit and whether they would like to run the service themselves or subcontract it out. The level of funding will however reflect the most cost effective services currently running to encourage the clusters to utilise an ANP or SP and to manage the service themselves. If clusters choose to use a GP or subcontract the service then they will have to fund any additional costs to meet the minimum service requirements. A training budget has been included to encourage practices to either employ professionals who can prescribe, or train them to do so, as this has proven to be a positive asset to the service. The data demonstrates that EHVS works best when there is a degree of scale as this allows for better patient prioritisation. Currently, the smallest viable option is Keynsham with a weighted practice size of 24,623. For this reason, we would encourage

smaller practices to join a larger cluster but recognise that due to the rurality of Chew Valley a different approach may be needed.

10.3 Option 4 has many benefits but does present the following risks:

- The CCG funding the morning service only provides a significant risk in regards to being able to retain the paramedics via SWASFT. However, this may be mitigated by practices either employing specialist paramedics themselves or subcontracting SWASFT paramedics for a whole day if they feel there is a wider benefit of a visiting paramedic than we see in terms of the remit of this service.
- By no longer using BEMS, unless we had a separate agreement, we may no longer have access to Riviam. This would save 41k per annum but we may need to work with the clusters on alternative IT solutions.
- Overall, BEMS has provided more robust data collection, however if we tighten the referral criteria and data collection with the clusters this could be achieved within the independent practices.
- It places the emphasis on any procurement or contract management on clusters of practices where as some of this currently held by the CCG. The impact of this is considered minimal as it is already effectively working elsewhere.
- More stringent requirements for data collection will put additional pressure on practitioners to collect this data.

11. Next steps

11.1 If option 4 were to be agreed by JCC then the CCG would be required to do the following:

- Agree the source of the funding.
- Formally give notice to end the contract with BEMS, with effect from 31st March 2019.
- Facilitate discussions between BEMS and the affected clusters.
- Establish the data collection requirements and KPIs.
- Agree the funding level per cluster and what we want to achieve for that funding e.g. the number of visits and referral criteria.
- Identify a lead practice from each cluster with whom the EHVS contract would be held and funding paid to on behalf of all practices in that cluster.
- To consider the nature of the contracts and the ability to clawback funds if there is significant under delivery of the number of patients the service visits.
- Improve the methodology around savings assumptions by requiring professionals to record if the visit is likely to have avoided an admission. This data can then be tracked through SUS to ensure that the patient does not later present in secondary care. This would provide a new, more reliable, baseline for the savings assumptions.

<b>Equality &amp; Diversity</b>	Applicable	✓	Not Applicable	
	Equality and quality impact assessments has been completed with the Quality Lead in BaNES CCG.			

The following table sets out the options for the service, their relative advantages, and the extent to which they are likely to meet the following identified home visiting objectives:

- A. Financial savings through avoiding hospital admissions and ED attendances
- B. Earlier patient presentation at hospital
- C. Improved access to, and patient satisfaction with, primary care
- D. Increased capacity and increased resilience in primary care

Obj.	Option 1: Continue with the service as it is, with both independent and BEMS led models, but with the recommendation that ANPs and SPs are utilised.		
	Benefits	Risks / threats	Mitigations / opportunities
A	<ul style="list-style-type: none"> <li>• This option would continue to avoid admissions and ED attendances at the current level.</li> <li>• Use of SPs and ANPs would reduce the cost per visit of the service. The use of SPs and ANPs would standardise the cost more, removing the more expensive outliers.</li> <li>• Pilot data has shown that ANPs and SPs are as effective in their role for EHVS as GPs and are a more affordable cost-effective option.</li> </ul>	<ul style="list-style-type: none"> <li>• There is limited confidence in the savings calculation methodology.</li> <li>• Afternoon visiting does not have the same impact on admission avoidance.</li> <li>• Recruitment of suitable SPs and ANPs has been problematic but this is partly due to short term funding.</li> <li>• The service may be subject to procurement, with the associated costs and risks.</li> </ul>	<ul style="list-style-type: none"> <li>• Savings would be maximised according to the methodology if the number of visits increased – this could be achieved through more active contract management, more robust data capture and a mechanism to recover unspent funds.</li> <li>• Improve data capture and savings calculation methodology to give more confidence in the savings.</li> <li>• Longer term certainty about funding should make it easier to recruit.</li> <li>• Mobile IT access should be improved to support more efficient visiting.</li> </ul>
B	<ul style="list-style-type: none"> <li>• The morning element of the service will continue to lead to earlier presentation of relevant patients.</li> <li>• Capacity and resilience in primary care will continue to be supported.</li> </ul>	<ul style="list-style-type: none"> <li>• As noted, the effect is negligible when considered in context of the total number of patients presenting at hospital.</li> <li>• Afternoon visiting does not have the same impact on earlier presentation.</li> <li>• There are additional reasons why a patient might present later to hospital, even if they are visited earlier (e.g. transport issues).</li> </ul>	<ul style="list-style-type: none"> <li>• The service could be funded to deliver just in the mornings, although this would exacerbate recruitment problems and has not been a tenable model to date.</li> <li>• Using SPs/ANPs will create more capacity for the money.</li> </ul>
C	<ul style="list-style-type: none"> <li>• There will continue to be a service for patients that need it – access for relevant patients will continue to be good.</li> </ul>	<ul style="list-style-type: none"> <li>• There are high amounts of variation amongst the independent practices regarding how the service is run and the referral criteria resulting in an inequity of service across BaNES. Some practices are using it as a general home visiting service.</li> <li>• This option means less ability to flex according to demand compared to fewer, larger services (options 3</li> </ul>	

		<ul style="list-style-type: none"> <li>and 4).</li> <li>Other areas have made better use of wider MDT professionals in primary care, but this has mainly been funded through practice budgets rather than the CCG.</li> <li>The data has not shown an increase in access to primary care before and after the service has been in place.</li> </ul>	
D	<ul style="list-style-type: none"> <li>Practices will still be able to influence the service at a local level</li> <li>Values the wider MDT, encouraging new ways of working and a wider skill mix in primary care.</li> <li>It may help retain SPs and GPs who may otherwise leave the NHS.</li> </ul>	<ul style="list-style-type: none"> <li>There are high amounts of variation amongst the independent practices regarding how the service is run and the referral criteria resulting in an inequity of service across BaNES. Some practices are using it as a general home visiting service.</li> <li>This option means less ability to flex according to demand compared to fewer, larger services (options 3 and 4).</li> <li>Other areas have made better use of wider MDT professionals in primary care, but this has mainly been funded through practice budgets rather than the CCG.</li> </ul>	<ul style="list-style-type: none"> <li>More standardisation of referral criteria</li> </ul>
<p><b>The main benefit of this option is to continue to support resilience in primary care. The admission avoidance and earlier presentation evidence is marginal, whereas the evidence of increased primary care resilience is strong. Practices are already contracted to provide home visits and these mostly happen in the afternoon, so although the current afternoon service provides additional capacity it does not support admission avoidance or earlier presentation to hospital. This option is not recommended because there are other options which would meet the objectives equally well and be more cost effective (option 4).</b></p>			
<b>Option 2: Cease funding the service</b>			
	<b>Benefits</b>	<b>Risks / threats</b>	<b>Mitigations / opportunities</b>
A	<ul style="list-style-type: none"> <li>As home visiting is already funded as part of the practices core contract, ceasing the service would reduce CCG expenditure and the patients would still be seen.</li> <li>There is no requirement for procurement, and no breach of procurement rules.</li> </ul>	<ul style="list-style-type: none"> <li>There will be increased avoidable hospital admissions and ED attendances which would need to be paid for.</li> </ul>	<ul style="list-style-type: none"> <li>Consider the use of funds in a more effective way to achieve required outcomes, with increased confidence over savings.</li> </ul>
B	<ul style="list-style-type: none"> <li>The effect on time of presentation at hospital because of ceasing the service would be negligible</li> </ul>	<ul style="list-style-type: none"> <li>There will be later presentation of patients to hospital if there is no visiting service until after morning surgery.</li> </ul>	
C	<ul style="list-style-type: none"> <li>The data has not shown an increase in access to primary care before and after the service has been in place.</li> </ul>	<ul style="list-style-type: none"> <li>Those patients requiring a home visit may need to wait longer, if there was no service in place.</li> </ul>	

D	<ul style="list-style-type: none"> <li>Those people requiring a home visit would be visited under the GP practices' PMS contract, at no additional expense to the CCG.</li> </ul>	<ul style="list-style-type: none"> <li>The EHVS has supported primary care resilience over the last two years – ceasing the service would remove this help with the attendant risks of further overstretched primary care, including risks to patients and staff wellbeing/retention.</li> <li>This option would be very unpopular with the majority of GPs.</li> </ul>	<ul style="list-style-type: none"> <li>Practices could elect to employ specific home visiting professionals to support home visiting. The learning from the pilot could be shared with practices.</li> <li>Direct funding by practices would be more in line with our knowledge of practice in other practices and CCGs in the South West.</li> </ul>
<b>This option is not recommended as although it has been difficult to prove that the service has achieved its original aims, it has provided significant in supporting GP practices resilience and sustainability, a key priority in these times of unprecedented demand.</b>			
<b>Option 3: Procure the service through one provider with the recommendation that ANPs and SPs are utilised.</b>			
	<b>Benefits</b>	<b>Risks / threats</b>	<b>Mitigations / opportunities</b>
A/B	<ul style="list-style-type: none"> <li>A co-ordinated service will allow for greater prioritisation, maximising admission avoidance and earlier presentation as all practices would use the same prioritisation criteria.</li> <li>It has been difficult to capture data through individual practices; a single provider would allow a more simple and consistent data capture process.</li> <li>A thorough procurement process would allow standardisation of process, and tighter contract monitoring requirements.</li> <li>There is the potential to reduce the total value of the service and it would still be viable because of the scale.</li> <li>As option 1 re use of SPs and ANPs</li> </ul>	<ul style="list-style-type: none"> <li>One provider reduces the independent practices' ability to influence the service at a local level.</li> <li>There could be significant waste through additional travel time.</li> <li>The best value for money models would cease although the learning would inform the procurement requirements.</li> <li>Even with improved data, there is limited confidence in the savings methodology.</li> <li>There are costs, time requirements and risks associated with procurement – it is unlikely that it would be in place for April 2019.</li> </ul>	<ul style="list-style-type: none"> <li>There could be clinical review across the service to ensure that needs in different areas were being met.</li> <li>One provider would need to run the services out of a practice or area e.g. in Chew Magna otherwise significant travel time would be added.</li> <li>The provider would need to be able to provide IT equipment that could access all notes systems.</li> <li>Improved confidence in the savings calculation could be gained through revising the data that is captured.</li> <li>Secure advice and support from the CSU.</li> </ul>
C	<ul style="list-style-type: none"> <li>Some patients will continue to be seen earlier in the day than they would without a service in place.</li> </ul>		
D	<ul style="list-style-type: none"> <li>One provider allows the option of cross-cover across different areas, responding to the most high priority requests.</li> <li>It may help retain SPs and GPs who may otherwise leave the NHS.</li> </ul>	<ul style="list-style-type: none"> <li>There is concern over equity between areas, meaning that this option may be less popular with practices.</li> <li>Other areas have made better use of wider MDT professionals in primary care, but this has mainly been funded through practice budgets rather than the CCG.</li> </ul>	<ul style="list-style-type: none"> <li>There could be clinical review across the service to ensure that needs in different areas were being met.</li> </ul>
<b>This option is not recommended because it does not realise the benefits of the most cost-effective models at the moment.</b>			

Option 4: Continue the morning only service by directly funding clusters of practices. The funding will be at the level of the most cost effective model. This includes utilising the use of ANPs and SPs and running the services independently. It is also recognised that there is an optimum scale for the service to best prioritise patients. Currently, the smallest viable scale is around 23,000 patients. Consideration for Chew Valley and its rurality would be needed in relation to the cluster size.			
	Benefits	Risks / threats	Mitigations / opportunities
A	<ul style="list-style-type: none"> <li>This option would continue to avoid admissions and ED attendances at the same level as currently.</li> <li>Use of SPs and ANPs would reduce the cost per visit of the service, especially if prescribing SPs/ANPs could be used. The use of SPs and ANPs would standardise the cost more, removing the more expensive outliers.</li> <li>Pilot data has shown that ANPs and SPs are as effective in their role for EHVS as GPs and are a more affordable cost-effective option.</li> <li>The pilot has shown that there is less demand for the service in a smaller more rural area but the costs of the service are significant and do not provide net savings. Ensuring a minimum practice size number would reduce the number of overall models ensuring more equity and in return reduce the cost of the service.</li> <li>It would allow the currently most cost-effective independent models to continue running.</li> <li>Three larger services with a consistent and robust referral criterion in place would help prioritise the patients most likely to be admitted if not seen sooner.</li> </ul>	<ul style="list-style-type: none"> <li>There is limited confidence in the savings calculation methodology.</li> <li>Afternoon visiting does not have the same impact on admission avoidance.</li> <li>Recruitment of suitable SPs and ANPs has been problematic but this is mostly due to short term funding.</li> <li>The wider the geographic patch the further the travel meaning that less patients may be seen overall if Chew Valley were to join another service rather than continue to run it independently on a smaller scale.</li> </ul>	<ul style="list-style-type: none"> <li>Savings would be maximised according to the methodology if the number of visits increased – this would be achieved through more active contract management, more robust data capture and a mechanism to recover unspent funds.</li> <li>Improve data capture and savings calculation methodology to give more confidence in the savings.</li> <li>Longer term certainty about funding should make it easier to recruit.</li> <li>Mobile IT access should be improved to support more efficient visiting.</li> </ul>

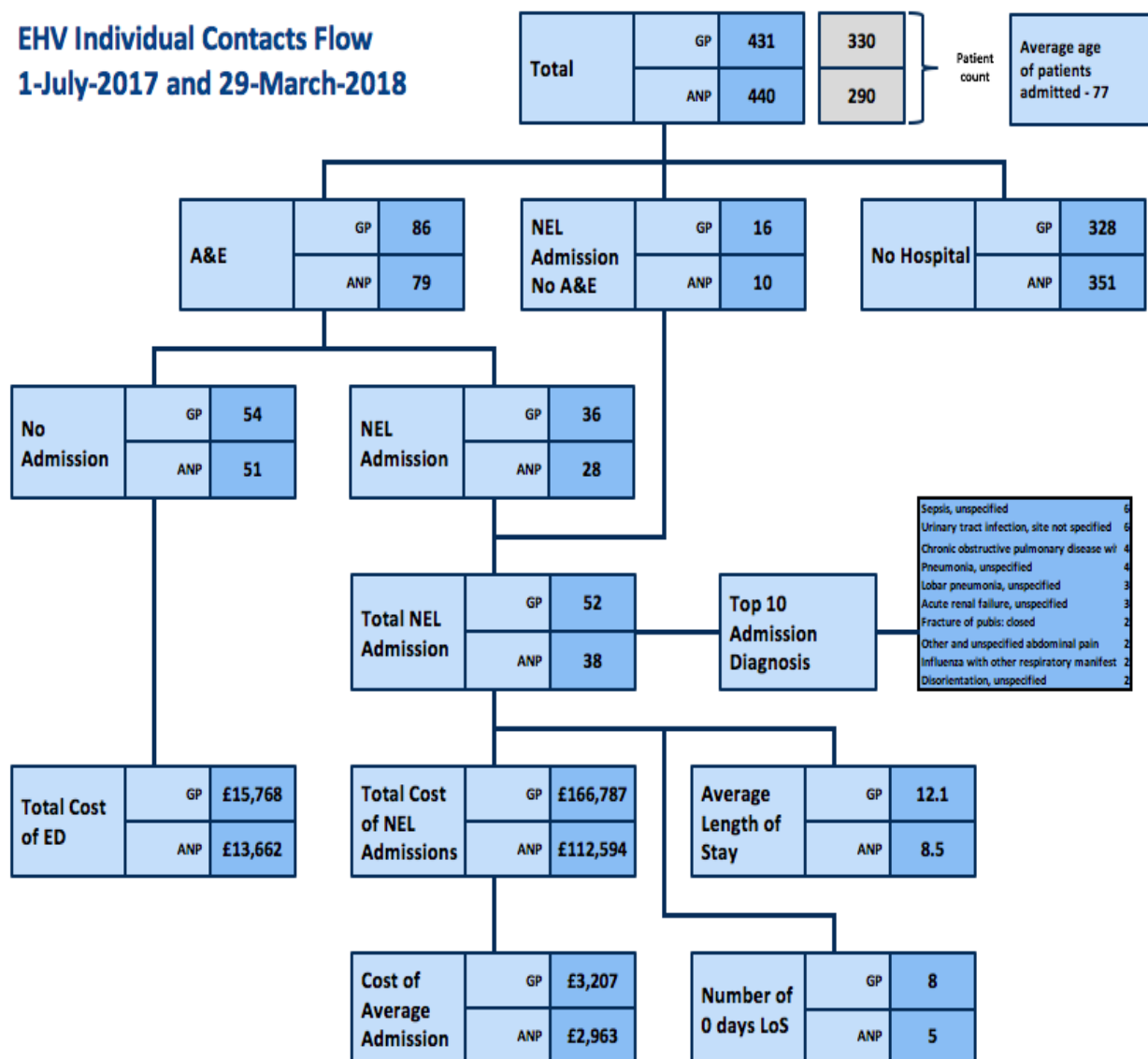
B	<ul style="list-style-type: none"> <li>The morning element of the service will continue to lead to earlier presentation of relevant patients.</li> <li>Capacity and resilience in primary care will continue to be supported.</li> <li>Three larger services with a consistent and robust referral criterion in place would help prioritise the patients most likely to go to ED if not seen sooner.</li> </ul>	<ul style="list-style-type: none"> <li>As noted, the effect is negligible when considered in context of the total number of patients presenting at hospital.</li> <li>Afternoon visiting does not have the same impact on earlier presentation.</li> <li>There are additional reasons why a patient might present later to hospital, even if they are visited earlier (e.g. transport issues).</li> </ul>	<ul style="list-style-type: none"> <li>The service could be funded to deliver just in the mornings, although this would exacerbate recruitment problems and has not been a tenable model to date.</li> <li>Using SPs/ANPs will create more capacity for the money.</li> <li>A review of the transport to hospital would be advisable to support timely arrival to hospital. This has been highlighted as part of the re-procurement with the RUH.</li> </ul>
C	<ul style="list-style-type: none"> <li>Three larger services will allow more flexibility according to demand ensuring those patients that need the service most can access it.</li> </ul>	<ul style="list-style-type: none"> <li>There are high amounts of variation amongst the independent practices regarding how the service is run and the referral criteria resulting in an inequity of service across BaNES. Some practices are using it as a general home visiting service.</li> <li>Other areas have made better use of wider MDT professionals in primary care, but this has mainly been funded through practice budgets rather than the CCG.</li> <li>The data has not shown an increase in access to primary care before and after the service has been in place.</li> </ul>	
D	<ul style="list-style-type: none"> <li>Practices will still be able choose how they group together and influence the service at a local level.</li> <li>Three larger services will allow more flexibility according to demand.</li> <li>Values the wider MDT, encouraging new ways of working in primary care.</li> <li>It may help retain SPs and GPs who may otherwise leave the NHS.</li> </ul>	<ul style="list-style-type: none"> <li>There are high amounts of variation amongst the independent practices regarding how the service is run and the referral criteria resulting in an inequity of service across BaNES. Some practices are using it as a general home visiting service.</li> <li>Other areas have made better use of wider MDT professionals in primary care, but this has mainly been funded through practice budgets rather than the CCG.</li> </ul>	<ul style="list-style-type: none"> <li>More standardisation of referral criteria.</li> </ul>
<p><b>This is the recommended option.</b></p>			



**Appendix 1: Individual contacts flow. Note:** Not all patients seen were captured in the individual contact flow due to practices not consistently recording patient NHS numbers, so it has not been possible to track all patients from primary to secondary care.

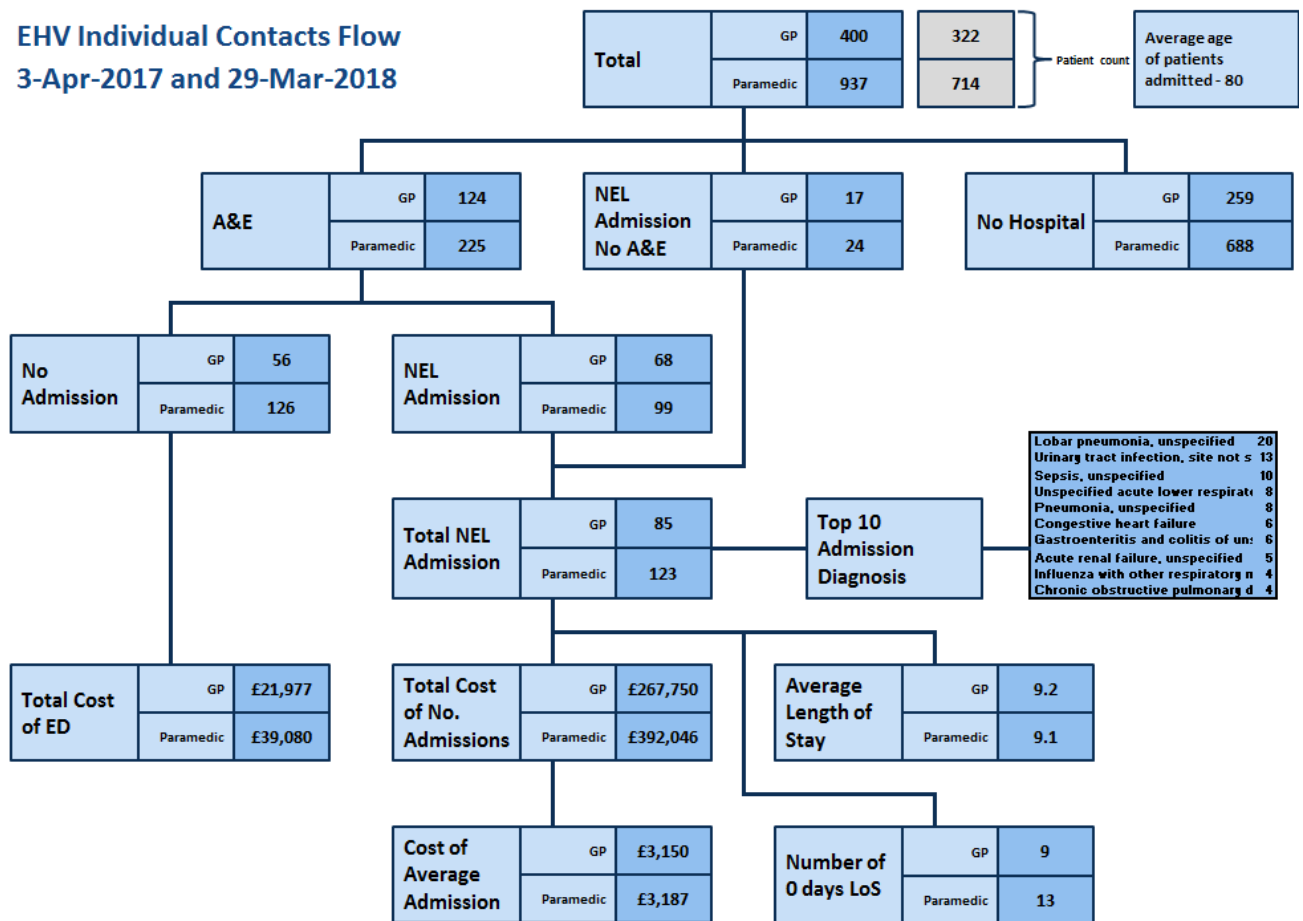
**2017/18 EHVS individual contact flow for Independent practices:**

**EHV Individual Contacts Flow  
1-July-2017 and 29-March-2018**



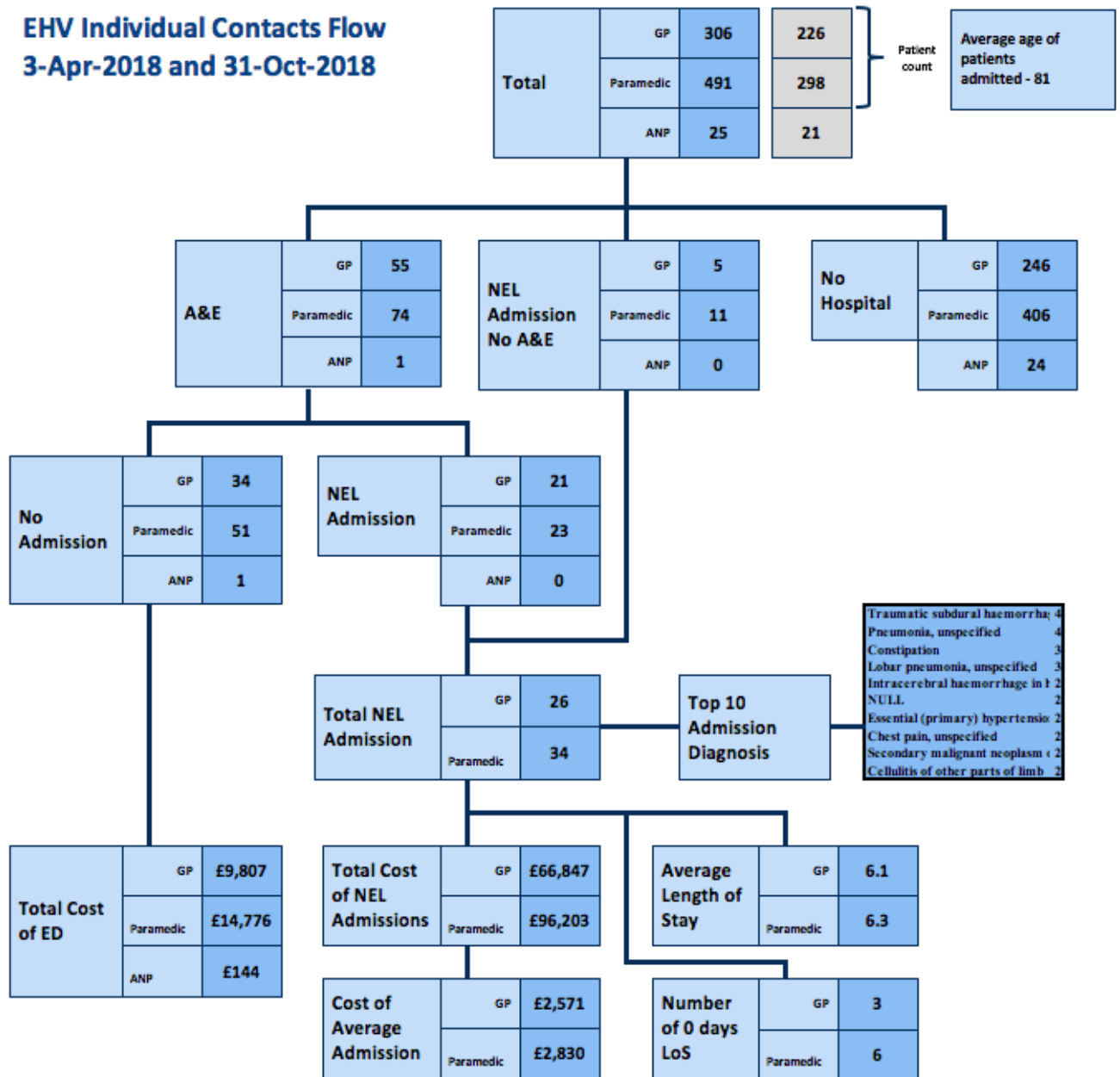
## 2017/18 EHVS individual contact flow for BEMS:

### EHV Individual Contacts Flow 3-Apr-2017 and 29-Mar-2018



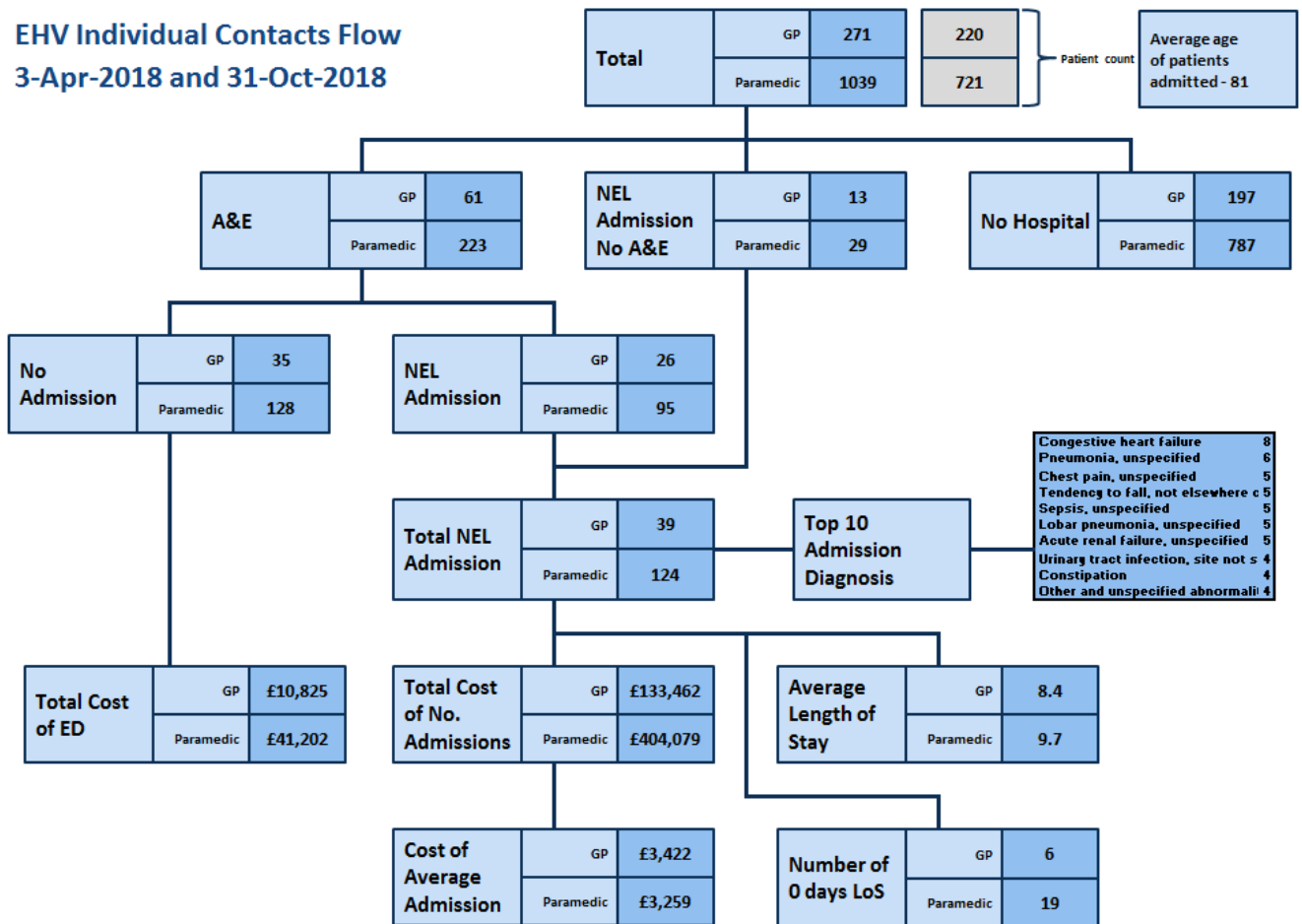
2018/19 EHVS individual contact flow for the independent practices:

**EHV Individual Contacts Flow**  
3-Apr-2018 and 31-Oct-2018



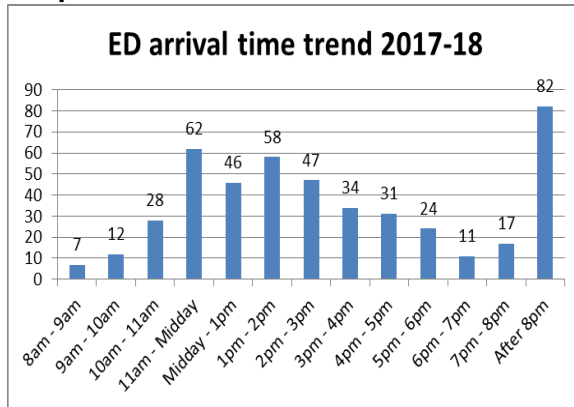
2018/19 EHVS individual contact flow for BEMS:

**EHV Individual Contacts Flow**  
3-Apr-2018 and 31-Oct-2018

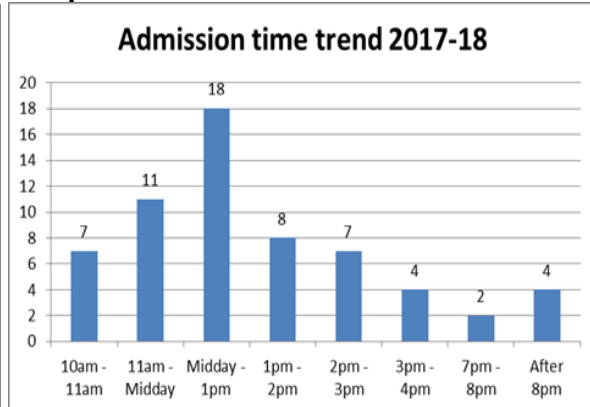


**Appendix 2 – Arrival times of patients at the RUH in 2017/18 and 2018/19:**

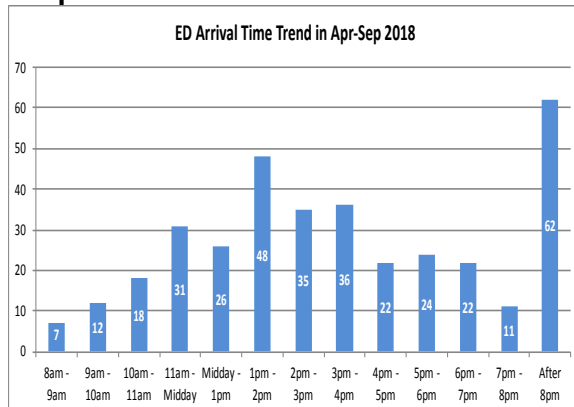
**Graph 1:**



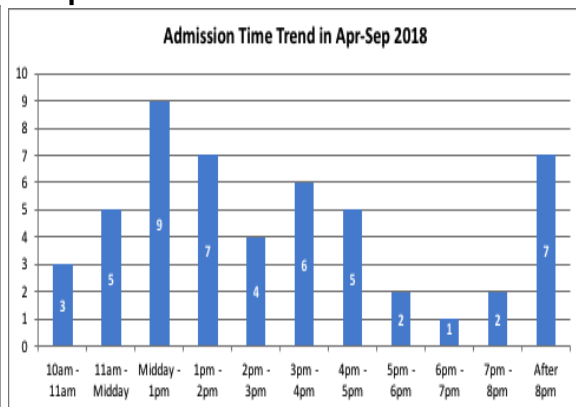
**Graph 2:**



**Graph 3:**



**Graph 4:**



### Appendix 3 – EHVS proposed costings 2019-20 and 2020-21

Funding to go to practice clusters. They can provide it independently or they can sub-contract to BEMS (or other providers)

Description	Unit cost	Units	Total cost
Paramedic - 08:30 to 12:30 Mon to Fri (mid-point)	£25,223	3	£75,668
Advanced Nurse Practitioner - 08:30 - 12:30 Mon to Fri (mid-point)	£25,223	3	£75,668
Annual leave, sickness, training cover (40 days per year)	£25,223	0.96	£24,117
Mileage - 75 miles per week per cluster (estimated)	£0.56	23,464	£13,140
Insurance - nurses	£600	3	£1,800
Insurance - paramedics (estimated costs)	£1,500	3	£4,500
Supplies - paramedics	£2,090	3	£6,270
Data connection	£600	6	£3,600
Prescribing - ANPs	Included in prescribing budget		
Recruitment - 2019-20 only (contingency to be drawn down if required)	£1,000	5	£5,000
IT equipment contingency	£1,000	6	£6,000
Training & development (i.e. prescribing) (contingency to be drawn down if required)			£10,000
<b>Sub-total</b>			<b>£225,763</b>
10% for contribution to overheads and miscellaneous costs		10.00%	£22,576
<b>Grand total at 2018-19 costs</b>			<b>£248,339</b>
RPI inflation to 2019-20 costs (in lieu of planning guidance)		3.30%	£8,195
<b>Grand total at estimated 2019-20 costs</b>			<b>£256,535</b>
RPI inflation to 2020-21 costs (in lieu of planning guidance)		3.30%	£8,466
<b>Grand total at estimated 2020-21 costs</b>			<b>£265,000</b>