Case study database – Electronic Palliative Care Coordination Systems (EPaCCS)	
Title of case study	**Cheshire EPaCCS**
The issue	We were aware that care for patients at the end of life in South Cheshire, Vale Royal and Eastern Cheshire could be significantly improved if we found a better way of sharing important information about these patients with all those professionals caring for them. EPaCCS was the sensible approach to take. As all but one of our GPs was on EMIS we decided to go with an EMIS solution for EPaCCS. At the end of 2017, all GP practices in the three CCGs are now on EMIS.
Intervention chosen	We wanted to avoid double entry for clinicians. Therefore we decided to use the EMIS EPaCCS template which we knew was compliant with the National EPaCCS information standard SCCI 1580. All our GPs and district nurses were already using EMIS so we have worked with them over the last three years to use the EPaCCS template. We have also influenced a switch to the use of EMIS for a number of other professionals and providers that regularly support people at the end of life to allow them to use EPaCCS and share information to improve patient care. This includes (not an exhaustive list) community Macmillan nurses, heart failure team, integrated respiratory team, hospital Macmillan teams, two hospices (one of these hospices was the first to work with EMIS and has led nationally on this - East Cheshire Hospice) - these teams have read/write access. A number of other teams also have read only access to EMIS to allow them to see EPaCCS data including the GP out of hours service, urgent care centre staff, A&E and some hospital wards. We are due to start piloting EPaCCS in care homes in 2018. West Cheshire have recently joined our steering group to share best practice and are now working with us on a locality EPaCCS project using exactly the same approach as above. We therefore have just one EPaCCS steering group for the whole of Cheshire. We also recognised that we needed to link with social care staff and our mental health provider. We are doing this through an EPaCCS tab on the Cheshire Care Record (graphnet) which will be live in the next 2-3 months. We are also planning for our ambulance provider, North West ambulance - to access EPaCCS through the Cheshire Care Record.

How it was implemented	This has been led by the Cheshire End of Life Partnership (EOLP) www.eolp.co.uk and involves all partners across the four Cheshire CCGs including CCGs, community providers', three acute hospitals, three hospices, two local authorities and GP practices and care homes. Through this collaborative approach we achieved a lot. Whenever we have come across any challenges or issues we have been able to take them to the EOLP chaired strategic group. The group includes senior members of the organisations listed above, and is a huge support in overcoming problems. Our EPaCCS steering group is very well attended and includes IT leads and palliative care facilitators. EOLP has a number of facilitators embedded in our providers so is able to support staff on the ground with EPaCCS and understand the issues very quickly. We make EPaCCS a key part of all our education to staff in Cheshire including statutory and mandatory training of our providers and study days.	
Impact	Scalability - EMIS EPaCCS is very scalable if GPs are on EMIS. Wirral is looking to do something similar, but not all GPs are on the same system which makes it a bit more complicated. The biggest problem with scalability is getting the different IT providers to work together.

Reports are created via EMIS looking at the previously requested Public Health England dataset (now under review locally) for deceased patients, and also for the living patients that are on a GP palliative care register Such reports give aggregated data at GP practice level for the various parameters, and also at a CCG level. Bespoke dashboard and narrative reports are then shared with each practice (their own data against the CCG benchmark) and inform local interventions at practice level.

Percentage of patients identified as being at the end of life: The percentage of patients on the GP palliative care register has been gradually increasing, with a crude rate (GP palliative care register/practice list size) increase from 0.34% to 0.36%, a percentage increase of 5.9% from 2016 to 2017. Some individual practices have significantly increased the percentage of their patients identified on the GP palliative care register compared to patients from their practice population e.g. One practice from 0.09% (2015-16) to 0.48% (2016-17). If looking at the 'expected deaths' rate (the latter using 0.8% of practice list size) this has increased from 42.5% to 45.6% - a percentage increase of 7.3%.

During the last few years there has been a focus on education in practices regarding the use of Read codes, and emphasising the inclusion of non-cancer patients (and those with Dementia at end of life) on GP palliative care registers. In particular, all three CCGs saw an increase in the percentage of non-cancer patients, some as much as two or three times as many. There has also been an increase in the number of palliative care patients registered on the QOF | |

(Quality Outcomes Framework) register.

There has been an overall gradual increase in the percentage of deaths of patients who are registered on EPaCCS. The proportion of patients with a preferred place of death and an actual place of death recorded shows much improvement since 2015-16 data. Now overall 34.26% have a preferred place of death (nearly 50% in one CCG) and actual place of death has increased from 41.3% to 65.5% (up to 82% in one CCG). Having both parameters recorded has allowed a measure of achievement of preferred place of death for more patients. The biggest increase in the recording of place of death has been seen in patients in care homes, where it has more than doubled in two CCGs.

There has been an increased percentage recording of those (deaths) on EPaCCS with a CPR decision, the majority being a DNACPR (do not attempt CPR). Those with an EPaCCS record are two to three times more likely to have a CPR decision recorded than those without an EPaCCS record. It is now hoped that linking local EPaCCS data to the North West Ambulance Service will support better identification of people at the end of life and prevent inappropriate resuscitation attempts/admissions to hospital.

Conditions for success	• Staff training - EPaCCS is a system for coding and sharing appropriate information. The key to success is for all staff to feel confident to have the right conversations at the right time. Therefore education and facilitation for staff around end of life conversations are absolutely key and must go hand in hand with implementing EPaCCS. • Leadership - in all organisations that are using, or could use, EPaCCS, leadership is absolutely essential. Having a system/solution that is easy to use is very important. Staff need to understand why EPaCCS makes a difference (i.e. not just a tick box) and good facilitators are essential to help with this. Also IT leads have to be fully signed up. We have had, and continue to have, difficulties encouraging different IT providers to work together. Having people on the team who 'speak IT' is therefore very important. • All providers and commissioners need to be on board from the beginning. • Project should be clinically led as opposed to IT led. • Realistic expectations around timescale. • IT leads are key. • End of life facilitation and support for staff. • GP engagement is very important as they hold the key patient record. • Flexibility - e.g. we started off with just an EMIS solution and were planning to use the MIG but when the West Cheshire Care Record was changed to become pan-Cheshire we realised we had to work to make EPaCCS part of the Cheshire Care Record as well, even though this is with a different IT provider.

	- Good data collection. - Someone who understands data sharing agreements. - Integration of the EPaCCS agenda into other local and regional IT strategies.
Learning from key challenges	- Anything with IT systems can take a long time and took longer than initially anticipated. - We need national support to make IT providers work together - this has been our biggest challenge. - EPaCCS needs time, leadership and project management assigned to it. It won't just 'happen' on its own. - We need to consider how we evaluate the impact of using EPaCCS on patient experience, rather than relying on using achievement of place of death as a proxy measure.
Key contact for further info	Name: Dr Sinead Clarke Organisation: Medical Lead Cheshire End of Life Partnership and Clinical Director South Cheshire and Vale Royal CCGs. Email: sinead.clarke@nhs.net
Link to useful resources	- www.eolp.org.uk - End of Life Partnership website. - www.cheshire-epaige.nhs.uk - Webpage with end of life information for people working in Cheshire and includes section on EPaCCS.