

Coordinate My Care (CMC) is a clinical service which is underpinned by an electronic solution providing a seamless palliative care coordination system. The CMC approach represented a challenge to integrate care and overcome local and individual barriers. For the first time a truly virtual multidisciplinary care plan was to be shared across different care settings. The CMC record is visible to all those caring for the patient, which drives quality improvement. Patients are empowered as they can see the record and ask for changes to be made. The organisations and professionals creating and updating the records had to adapt to this new way of working. Participation in CMC for patients is entirely voluntary and around 88% of patients approached wanted to set up a plan.

### The Challenge

Research exploring patients' care and treatment preferences when they are approaching the end of life has shown that not only do 60% of people state that they "wanted to die at home" they also said that "having as much information as they wanted" and "choosing who makes decisions" about their care were also important priorities.

NICE guidelines state that these patients should have "the opportunity to discuss, develop and review a personalised care plan for current and future support and treatment", care should be "coordinated and delivered in accordance with their personalised care plan" and that people should receive "consistent care that is coordinated effectively across all relevant settings and services at any time of day or night, and delivered by practitioners who are aware of the person's current medical condition, care plan and preferences".

Although there have been improvements in end of life care services in England, with the number of people dying in their 'usual place of residence', i.e. at home or in care homes, rising from under 38% in 2008 to 44.5% in 2014, the Trust wanted to enable more patients to die in their preferred place (home, care home, hospice), enable patients to have choices about the care they received and to make those choices known to those who cared for them. In order to achieve this, patients needed a personalised urgent plan where they could express their wishes and preferences for how and where they are treated and cared for, which all urgent care providers such as the patient's GP, OOH, NHS 111 and Ambulance services could access.

The Trust also wanted to save time for staff who were having to fill out and fax numerous forms. Prior to the introduction of CMC, if a patient was being sent home 4 or more forms would have to be sent to various organisations. Across South London there were over 13 different forms, and if a clinician needed to update the details they would have to start the process all over again.

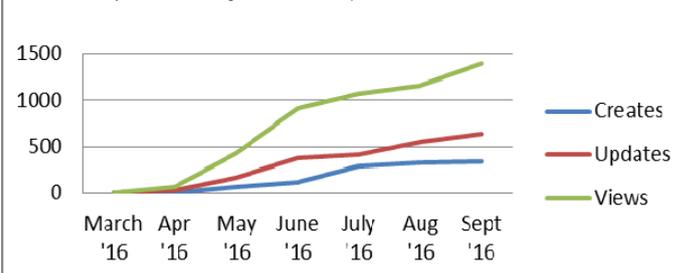
### The Solution

The CMC service is supported by a dedicated IT system, which is based on the Intersystems's HealthShare platform and is hosted and managed by the supplier. The users access the system via a web browser over the secure N3

network. For clients outside of the N3 network, access is provided via the Authen2cate solution. Both patients and clinicians or social workers who have a legitimate relationship with the patient have a link to the CMC care plan.

The single sign on works within EMIS, as users can launch the CMC record from EMIS via a shortcut (EMIS sends a message via interface, if a patient has a CMC record an icon will display on the EMIS screen) without having to sign on. This means GPs using EMIS do not have to log out of EMIS and into CMC and vice versa. The connection between EMIS and CMC is now a single 'click'.

The rate of creation and updating is steadily increasing, with views by GPs accessing the plan via the EMIS system increasing to almost 1500 per month



The current roadmap is to develop a generic single sign-on with bi-directional data flows, that could be used for any systems, such as RIO or the systems used in the acute setting and hospices.

Urgent and Emergency Care Providers are automatically notified by CMC in regards to the existing Care plans, so they are aware of it at the time of call-out/attendance and can make better informed decisions for patient care.

There is an Information Sharing Agreement with every single organisation involved in the patient's care. The Information sharing agreement has been approved by the Information Commissioner. The Acceptable User Policy (UAP) is in place, and will be added digitally in the next release. Every person who uses the service has to either be trained or self-certify that they can create plans in order to qualify for a UAP.

### AT A GLANCE

**Solution:** a dedicated team providing a clinical service underpinned by an IT system, based on the Intersystems's HealthShare platform

**Implementation:** Pilot sites, followed by quick roll out

**Funding:** Tech Fund Matched Funding

**Benefits:**

- Promotes Patient Choice
- Improved patient experience
- Integrated health record accessible to treating clinicians and social care
- Reduction in hospital admissions
- Improved information and reporting
- Improves evidence base through research and audit
- Reduced stationery costs
- Efficiency and time savings

## Implementation/Deployment Overview

CMC selected Intersystems as a preferred supplier to provide an electronic solution for the service in May 2015. According to Prof. Julia Riley, CMC Clinical Lead, it was *“an unparalleled opportunity to deploy a solution that works for the London Ambulance Service, NHS 111, primary and secondary care providers and, most importantly, patients”*. Procurement was also driven by the flexibility of the system to be scalable so that it could be easily expanded to other regions.

The governance structure included both a Clinical Lead and an experienced team, who provided strong leadership and oversaw all stages of the projects from design and build to the rollout and post go-live developments.

Deployment approach was initially to cover 2 CCGs in London, it was then rolled out to the rest of London at ambulance request. CMC is best mapped to ambulance regions to work effectively.

CMC is one of the partners of plan for the Healthy London Partnerships' which has an overall digital architecture planned for the complete interoperability of London's health and social networks.

Over 34,000 CMC care plans have been created and there are currently about 1,000 CMC clinicians trained to create plans in London.

Clinical Portal is currently being developed and a pilot is starting for the patient portal in the Spring of 2017.

***“Now I have a plan, I feel so much happier. Because I've got some control over things. I will probably need urgent care in the middle of the night again – that's how cancer goes. But, this time, everyone will know what to do with me. I won't have to explain it all and repeat myself to different people. I'll get the right painkillers, at the right time. And I'll be in my own home, instead of sitting in pain, in A&E. I'll get the care I need, the way I want it.***

***Sitting here, feeling strong today, I can't tell you how reassuring that is.” - Patient***

## Resulting benefits to staff and patients

### Promotes Patient choice

- 77.3% of patients with a CMC plan died in their first (71.4%) or second (5.9%) place of choice. With the care plan the hospices are able to reduce the length of stay and increase their capacity, thus creating greater availability for patients. There has been an increase in the percentage of patients that are now dying in hospices, from 4% (national) to 17% (CMC).

## Improved patient experience

- Patients have the opportunity to record their decisions and to express wishes about their care so that this information is available to all professionals who are looking after them, helping to ensure that any care the patient receives is in line with what they've decided.
- Patients have confidence that the information documented by them can always be accessed 24/7 by emergency advice and care services.
- Patients do not have to repeat sensitive and sometimes difficult information numerous times.
- Patients can easily see their information via the patient portal.

## LESSONS LEARNT

- Language is important, the London EPaCCS was named “Coordinate My Care” because terms such as “register” and “end of life care” were found to have poor connotations for carers, clinicians and patients
- The service should be mapped to ambulance areas, originally there were to be two systems in London, but the London Ambulance Service asked for one service to cover their whole area.
- The service should be standards based and be able to take advantage of a scalable, sustainable and technical infrastructure
- Implement an EPaCCS and UCP as one; it makes clinical and financial sense to commission an EPaCCS that can support a wide range of patients, such as vulnerable adults and the homeless. It should be able to evolve to support clinical decision making about patients who are vulnerable but are not dying. It is also more cost effective because the change management training for clinicians is the same for both.
- Ensure clinicians are able to use the system from within their native systems
- Training will be needed for social care, care home, and nursing home staff as well as 111, ambulance and OOH clinicians. Ensure that the training module facilitates a change management program and provides support in areas like; *recognising patients that would benefit from having a CMC record, ethical and legal issues and use ongoing management of the plan.*
- Put in place a governance infrastructure that supports the safety and security required to share patient information
- Appoint a Clinical Champion to drive the adoption, as they are fundamental to implementing the program
- Ensure there is a supporting structure: *steering group, stakeholder group, patient reference group, a clinical safety group, incident reporting mechanism.*

## Integrated health record accessible to treating clinicians and social care

- The standardised format ensures information is easily available for staff to quickly access key urgent care information. When residents of nursing homes have CMC care plans created by their GPs, these care plans can be accessed by urgent care services who are then able to advise the nursing home staff whether or not to call an ambulance, consequently in Sutton alone, there have been 92 fewer calls (8.3%) from nursing homes to the ambulance service in the year following the implementation of the training model and the introduction of CMC records; the number of calls went down from 1,109 in 2014/15 to 1,017 in 2015/16.
- Clinicians find the plans informative and can be confident that they are following the patient's wishes. It allows them to access relevant information relating to their patients from one platform. It gives them a full picture of a patient's medical history.

## Reduction in hospital admissions

- Where patients have a CMC care plan 17% die in hospital; nationally 54% die in hospital, which has led to reduced unnecessary and unwanted hospital admissions - data suggest the NHS saves on average £2,100 efficiency savings for patients who have CMC plans in place, as there are less pressures on acute services.
- When done in conjunction with education and training, CMC has been shown to reduce A&E admissions. There has been an 8.3% reduction in the number of ambulance transfers of nursing home residents to hospital: in one CCG the number went down by 78 transfers between April 2014 and March 2016 (the average cost of an ambulance transfer to hospital is £500, this represents an estimated saving of £39,000 for the transfers alone).

## Improved information and reporting

- A wide range of management information reports are available, either on an ad hoc basis or as scheduled monthly/quarterly deliveries to commissioners. NHS managers can use the data in the reports for planning and funding purposes. In addition, information held on CMC may be used to look at trends in services in different areas.
- These reports are also able to give information to hospices on the quality of their care plans, driving up good practice
- Hospitals are able to use the quality reports produced to identify training needs and monitor and improve the quality of the plans

## Reduced stationery costs

- No more need for paper records

## Efficiency and time savings

- There is no more need to fax forms resulting in a productivity benefit for both the sender and receiver
- Reduction in dual entry of information between clinical systems

## Future Plans

### Patients initiating their own plan through the patient portal

CMC's 2016-2017 development roadmap plans for patient/carer access to Urgent Care Plans, and includes initiation of the urgent care planning process by the patient. Currently, a clinician enters the information directly onto

the system when they are with the patient. In the new year, the project team will be working on a further enhancement to enable patients to initiate their own care plan via the MyCMC patient portal.

## Information care Exchange

Future phases have support from CCG's to develop CMC's Integrated Care Exchange (ICE) capabilities for additional purposes and to extend the use of the service to patients with complex needs. Two such services will be for patients with pain and patients with cancer.

## Research and Innovation platform

The vision is to develop a CMC Research & Innovation arm. CMC will develop the capacity to:

- Incorporate modular extensions in the form of electronic health applications, before prospectively testing their use
- Act as a prospective research trial platform for cohort, randomised controlled and randomised registry trials
- Release trial-proven electronic applications across the entire CMC platform for their use by suitable patients. This would enable CMC to act as a repository of NHS-approved apps such that both patients and clinicians could use.

## Extension of service to other vulnerable groups

Work is underway on a research project looking at the needs of the homeless, so that when they call for an ambulance, the paramedics are made aware that there is a care plan in place as the system recognises the mobile phone number from where the call was made.

## Single sign on and complete interoperability

Development of a generic single sign on, that could be used for any system. This will enable health and social care professionals to access CMC via their native IT systems. Any new data entered in one system will automatically be updated in CMC and vice versa. It will thus deliver a bespoke urgent care plan for each patient, it will avoid the need for double data entry and deliver a SINGLE VERSION of the truth.

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