The Dorset Care Record is helping Dorset re-engineer the way it delivers health and care across the region. The record currently draws data from three acute hospitals and the majority of Dorset’s GP practices. Datasets from other partner organisations will be added soon. A wide range of providers, including social care and mental health, can view the record. Access for the South Western Ambulance Trust is in the pipeline.

The solution, which uses an Orion Health technology platform, is one of the key digital enablers of Dorset’s Sustainability and Transformation Plan.

The Dorset Care Record links health and social care information to improve care in Dorset. It underpins our ambitions to deliver better and safer care closer to home, prevent ill health and reduce inequalities.

**Timeline**

- **2016**: Dorset Information Sharing Charter signed, providing the basis for the local shared care record
- **2017**: Phase 1 goes live with information shared from acute hospitals and GPs to organisations across Dorset
- **Feb 2018**: Phase 1 goes live with information shared from acute hospitals and GPs to organisations across Dorset
- **May 2018**: Phase 2 goes live with the hospital dataset extended
- **Plan for 2018+**: Further expand datasets. Give access to DCR to ambulance trust. Citizen portal.

**At a Glance**

- **Scale**: M
  - 5 = < 5 organisations
  - M = 5-10 organisations
  - L = 10+ organisations
- **Maturity**: 2
  - 0 = No planned programme for sharing data
  - 1 = Sharing one data type or planning data sharing
  - 2 = Sharing two data types (inc. GP) at read only
  - 3 = Sharing three or more data types at read only
  - 4 = Sharing three or more data types, with write capability

**Overview**

- **Individual Patient Care**
  - Live
- **Care Planning & Coordination**
  - Future
- **Health & Care System Management**
  - Future
- **Population Health Management**
  - Future
- **Research**
  - Future

**How the Dorset Care Record is being used**

- **Individual Patient Care**
  - Live
- **Care Planning & Coordination**
  - Future
- **Health & Care System Management**
  - Future
- **Population Health Management**
  - Future
- **Research**
  - Future

**Approx. 100** hospital clinicians accessing DCR, aiming for 7000
**84** GP practices contributing to the shared record
**Approx. 800k** population covered
LOCAL CONTEXT

• Dorset Care Record (DCR) is being led by Dorset County Council working in partnership with local NHS organisations and borough councils with the aim of delivering more integrated care.

• Dorset has a long history of partnership working. It is an Integrated Care System, known locally as ‘Our Dorset’, which has evolved from many years of collaboration between the region’s health and social care organisations.

• DCR is a key enabler of Dorset’s Sustainability and Transformation Plan (STP), which aims to empower people to stay healthy for longer and feel more confident and supported in managing their own health and care.

• The STP focuses on three main programmes (Prevention at Scale, Integrated Community Services, and One Acute Network) in order to deliver its ambitions, underpinned by the creation of a “Digitally Enabled Dorset”. Dorset’s digital strategy was shaped during 2016 with two stakeholder events for Dorset Digital Vision 2020.

• DCR is a portal solution delivered Orion Health. It is currently read-only. Collaborative care planning and citizen access are planned components of the programme.

• The data available in DCR at present is supplied by 84 out of the region’s 87 GP practices, as well as from the three local acute hospitals: Dorset County Hospital, Poole Hospital and Royal Bournemouth and Christchurch Hospitals.

• The dataset available will be expanded in breadth and depth over time as the solution matures.

FOCUS ON: COORDINATED PERSON-CENTRED CARE

As we build the Integrated Care System, more multi-agency teams will have to co-ordinate around the needs of the person. The Dorset Care Record will support this.

For us, it’s not a question of simply digitising existing processes. We want to really change the way teams work – allowing them to make collective decisions using digital technology to help them.

It is early days in our delivery of DCR, but it is starting to have an impact already. On the first day it went live, a member of staff from one of the early adopter social care teams was able to make an informed decision about an adult on their caseload when heavy snow prevented care workers visiting them at home. The team thought the adult might be in hospital and so not at risk, but looking at DCR they quickly established that this wasn’t the case and were able to take appropriate action.

Andy Hadley, Solution Architect for Dorset Care Record
**THE DORSET CARE RECORD SUPPORTS...**

### INDIVIDUAL PATIENT CARE

- Dorset Care Record supports individual patient care by giving staff a more holistic view of the current status of a person’s health and care, and improving their ability to make informed decisions about people’s treatment.

- The record currently provides access to patient demographics including name, date of birth, address, next of kin, NHS number and ethnicity, as well as diagnosis, events, examinations, investigations, medication and allergies from the GP record.

- DCR has been made available to a broad range of organisations early in the programme. This was a deliberate move intended to build momentum. Staff from the three local authorities, three acute hospitals, the combined mental health and community provider, and GP practices across Dorset CCG can all access the record, with the South Western Ambulance Trust due to gain access as the rollout continues.

### CARE PLANNING AND COORDINATION

- As the data in DCR becomes richer and the solution becomes more embedded, it will drive more coordinated working practices and allow multi-agency teams to plan care collaboratively.

- DCR will also support pioneering projects such as the Weymouth and Portland Integrated Care Hub, which currently aims to deliver more joined up care for elderly patients with long term conditions. The Hub assesses people’s needs and ensures the right support is provided, as well as coordinating the different care professionals involved. Early indications show that the Hub is impacting the number of people admitted to hospital, and the length of their stay. DCR are also exploring creating shared care plans to enable collaborative sharing of care between organisations and ensure patients have a seamless care experience.

- In order to enable more streamlined working across organisations, the DCR programme is keen to ensure standards are adopted. For example, partner organisations are in the process of developing letters to the Academy of Medical Royal Colleges (AoMRC) standards. Similar work is ongoing in order to establish collaborative care plans that are meaningful for all contributing teams.
**TECHNICAL SOLUTION**

**CENTRAL REPOSITORY MODEL**

### SOLUTION FEATURES

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<thead>
<tr>
<th>FEATURE</th>
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<tbody>
<tr>
<td>Coded data</td>
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<tr>
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</tr>
<tr>
<td>Role-based access</td>
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<tr>
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<td>Alerts</td>
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</tr>
<tr>
<td>Citizen Portal</td>
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</table>

- DCR is delivered through a portal solution based on Orion Health technology.
- It uses the MIG to provide a view of data from GP systems.
- End users request data through the DCR portal. This request pulls the data either directly from the system, or from the central repository using the Integration Engine and Enterprise Master Patient Index.
- The Master Patient Indexes between the three Acute hospitals has been reconciled, and work is progressing on adding those of the other organisations too.

### SYSTEMS IN SCOPE

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### OPEN STANDARDS

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### HIGH LEVEL TECHNICAL ARCHITECTURE

- Data Sources
  - GPs: EMIS, SystmOne
  - Acute Hospitals x3

- Data Integration
  - MIG
  - Integration Engine

- Data Storage
  - CENTRALISED DATASTORE
  - Dorset Shared Care Recordaccess

- Data Access
  - GPs
  - Acute Hospitals x3
  - Community
  - Mental Health
  - Social Care (Local Authorities x3)
  - Ambulance Trust PLANNED

Further data sources to be added over time
IMPLEMENTATION & FUNDING

The DCR is being implemented in a phased approach. The project was initiated with an initial 100 users onboarded as early adopters. Phase 1 functionality and datasets went live in February 2018 with information available from three acute hospitals and 84 GPs. Phase 2 will go live in May 2018 with additional data from the acute hospitals added. Further functionality and data will be released in three-monthly phases, enabling continuous development and incremental benefits over an 18 month period.

The Dorset partner organisations will each contribute to the overall cost of the DCR programme, which is estimated at £20 million over 10-years. Some of the funding has come from the NHS England Integrated Digital Care Fund.

The contract with the solution supplier is for an initial five years with the option to then extend in increments.

CONSENT MODEL & GOVERNANCE

A clear governance structure has been put in place to oversee the region’s key programmes. The DCR Project Board is chaired by a GP with a Community Mental Health Consultant as the Clinical Safety lead. The Board reports to the Dorset Informatics Group, which oversees all digital transformation. This in turn reports to the System Leadership Team.

Dorset’s partner organisations have worked together to create the Dorset Information Sharing Charter (DiSC). This provides the top level framework for access to the information within the DCR by all providers.

The principles of the DiSC determine that identifiable data will only be used for direct care purposes. People are opted in to the DCR automatically, with explicit consent to view the record at point of care. Emergency access can be obtained in accordance with a strict set of guidelines. Full audit trails are maintained.

KNOWLEDGE SHARING

- The DCR team has worked closely with neighbouring areas who have implemented local shared care records, for example Hampshire and Bristol.
- In turn DCR have shared their business case and experience with other teams.
- One notable mechanism for this has been the Southwest CIO network.
- The DCR team has also found it useful to actively participate in debates as part of the INTEROPen initiative.
COMMUNICATION

Building the brand

The DCR team recognised the importance of engaging the public in the programme. They knew it was important to raise awareness about the record and develop specific communication and engagement strategies.

One strategy in particular was getting young people on board and working with them to co-design literature and material. An external communications agency then assisted with the final branding and design.

The resulting leaflets and posters are being made available at various healthcare and community places. The campaign is backed up by regular updates on the dedicated DCR website and twitter feed, and through videos and news releases. Testimonials from early adopters of DCR are also a prominent feature.

Out and about

A series of face to face sessions and roadshows were organised when DCR went live. Ambassadors for the DCR programme attended public meetings and citizen and staff engagement events around the region, as well as manning stalls in high street and supermarket locations. Radio, newspaper and TV were also used as channels for sharing key messages.

“We would like people to find out more about why we need a Dorset Care Record, its benefits and issues such as security and consent so that they will be informed when asked by the person dealing with their care if they are happy to have their records shared.”

Peter Gill, Director of Informatics at Royal Bournemouth Hospital and SRO for DCR

Easy-read

The DCR team has focused on making messages easy to understand for all stakeholder groups. An easy-read leaflet explaining people’s consent options was developed in conjunction with People First Dorset. It is available in multiple languages. A new summary leaflet entitled 10 things you might want to know about the DCR has recently been launched.
SUCCESS FACTORS

PROMOTION
• Establishing and promoting the Dorset Care Record brand to raise awareness and educate the public was an important exercise.
• Delivering key messages face to face in community places and at events has been particularly successful.
• Working with members of the public and organisations such as People First Dorset has enabled the team to create a set of materials that caters to a broad range of needs, as well as ensuring key groups were given a voice in the process.

CONNECTATHON AS PART OF PROCUREMENT
• As part of the procurement process the DCR team held a “connectathon” with suppliers to test their interoperability and compliance with standards.
• This ensured that the chosen suppliers would meet the various standards based messaging required for the DCR programme.
• The “connectathon” approach has been promoted by IHE (Integrating the Healthcare Enterprise) for more than a decade.

LEARN FROM OTHER SITES
• Mature sites have learned many lessons and can offer valuable learnings on what to do, and what not to do.
• The DCR team has engaged with more mature local shared care record sites around the UK at each stage of their planning and implementation.
• This has reduced the risk for Dorset and enabled the team to build on the valuable lessons learned elsewhere.

FUTURE AMBITIONS

The next phase of the Dorset Care Record programme will focus on:
• Expanding access and datasets to provide more care planning and coordination capability, including sharing documents and storing care plans.
• Adding the master patient indexes from Community, Mental Health and Local Authority to enable them to share their data too.
• Giving citizens access to DCR. The first phase is planned for maternity pathway patients. Work is underway with midwives and patient representatives on the early design which will allow patients to self-refer, book antenatal appointments and update their birth plan.
• Collecting information from wearables and feeding this into DCR (planned for the latter stages of the programme).
LESSONS LEARNED

**FUNDING**

**Challenge:** There were funding shortfalls following changes to the availability of central funding. This risked hampering the project unless alternative funding sources were found.

**Lessons Learned:** The project identified other funding sources and mobilised the appropriate senior stakeholders to make decisions to prevent delays to the project.

**APPROVAL PROCESS**

**Challenge:** Project timescales were compressed by long central and partnership approval processes, and contract clarifications.

**Lessons Learned:** Ensure that adequate time has been built into project plans to allow for approval processes. Map out the approval processes and ensure key stakeholders are identified and roles are clear.

**SKILLED RESOURCES**

**Challenge:** Given the large number of interoperability and shared care record programmes locally and across the UK, skilled integration resources are stretched over many projects. This causes delays in project progress. Co-ordinating across programmes is also challenging.

**Lessons Learned:** Work with the chosen supplier early to ensure there are resources available. Consider building internal team capability to support the implementation.

**STAFF CONTINUITY**

**Challenge:** Changes in key supplier personnel have caused discontinuities which have impacted the programme’s progress.

**Lessons Learned:** Manage key teams to make sure they are sufficiently resourced and able to smooth any changes in partner personnel.