System C
Connected Care

CareFlow

A comprehensive, ICS ready EPR. Supports workflows and care co-ordination within an acute hospital and out across the wider health and care community.

CareFlow

System C & Graphnet
Care Alliance

CareFlow

System C is part of

System C &
Graphnet
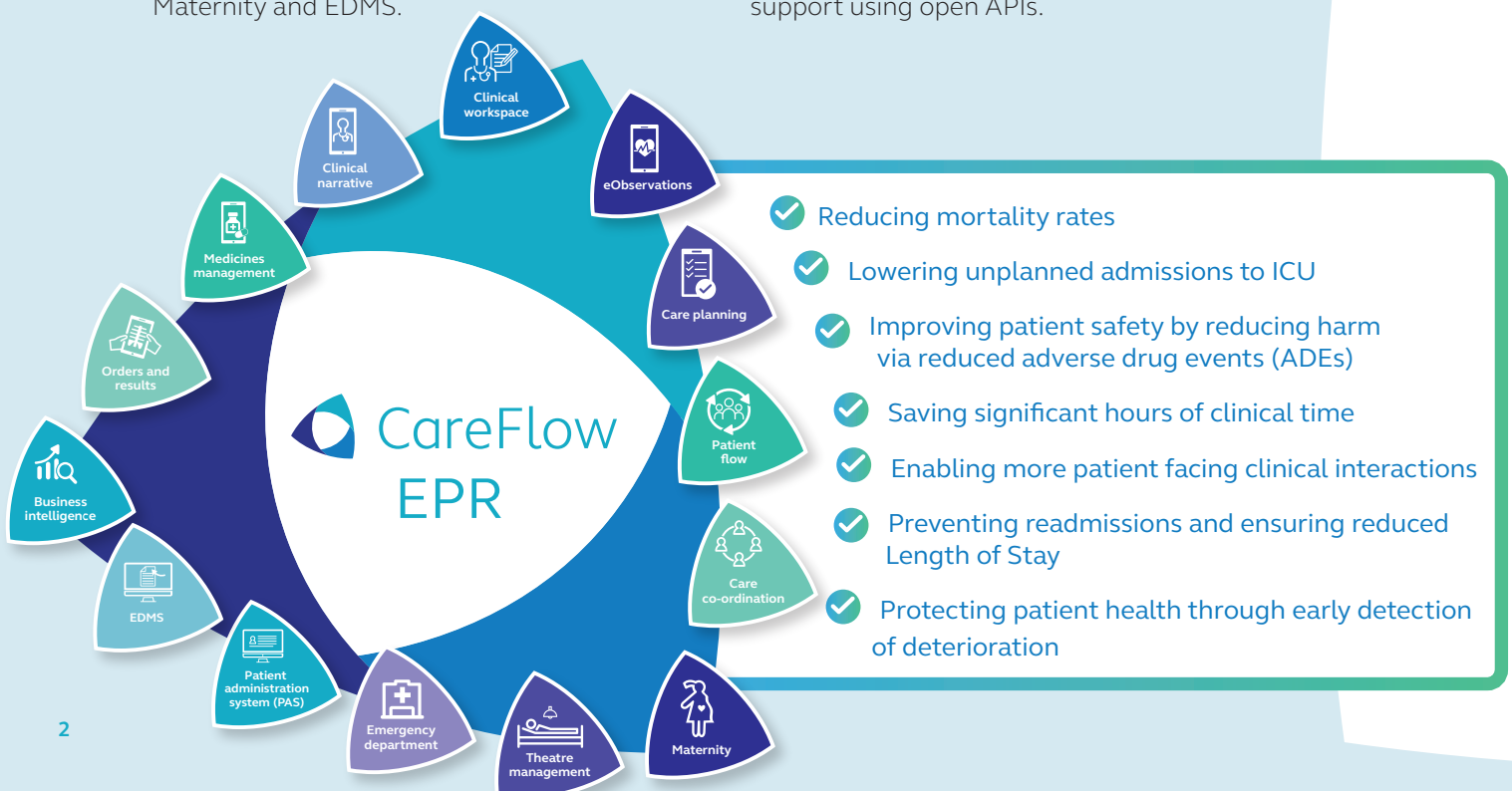### Care Alliance

Electronic patient record

CareFlow is a mobile, cloud-based, interoperable electronic patient record (EPR) platform, designed to digitally transform the UK's acute care services. It provides clinicians with the intuitive digital workflows, decision support and care planning capabilities they need, extending out beyond the confines of the hospital, to integrate with the wider care community.

As CareFlow can be deployed in a modular way, it has the flexibility to align with local priorities – whatever the existing level of digital maturity. At the same time, it provides the power and capability to deliver wholesale service transformation, maximising the potential for benefits realisation.

It is our 'blueprint' for digital excellence. A single solution, with a clinical core, which works within a Trust and across a whole care community, integrating health and social care.

Key features:

- **Clinical workspace** offers a single point of access to a patient's entire clinical record, delivering comprehensive support for clinical workflow at the point of care.

- **Workflow-based care planning** supports nursing staff and health professionals to deliver care built on an individual's needs and goals.

- **Patient flow management** allows an organisation to better manage patient journeys from pre-admission through to discharge.

- **Orders and results** offers powerful requesting features and flexible result views to better support clinicians, all available on mobile.

- A single **task orchestration** function used across our solution set, ensures requests can be managed, monitored and actioned efficiently.

- **Departmental** support is provided by our fully integrated solutions: ED, Theatres, Maternity and EDMS.

- **Care co-ordination** supports team-based collaboration, enabled by our secure and mobile clinical communication solution.

- **Clinical narrative** allows healthcare organisations and their clinicians to capture and share information with colleagues in real time.

- **eObservations** improves the recognition and response to the deteriorating patient, including NEWS2, sepsis and AKI management.

- **Medicines Management** offers a closed loop solution that works across a wide range of care settings including acute, mental health and community.

- **Business intelligence and analytics** are provided through our comprehensive suite of data reporting and interrogation tools.

- **Interoperability** capabilities include the very latest technologies to not only deliver third party integrations (for example PACS, EDMS etc.) but also enhanced workflow support using open APIs.

CareFlow EPR

Clinical workspace · Clinical narrative · eObservations · Medicines management · Care planning · Orders and results · Patient flow · Business intelligence · Care co-ordination · EDMS · Patient administration system (PAS) · Emergency department · Theatre management · Maternity

- Reducing mortality rates
- Lowering unplanned admissions to ICU
- Improving patient safety by reducing harm via reduced adverse drug events (ADEs)
- Saving significant hours of clinical time
- Enabling more patient facing clinical interactions
- Preventing readmissions and ensuring reduced Length of Stay
- Protecting patient health through early detection of deterioration

Clinical care

Our integrated clinical care portfolio is designed to give clinicians access to a wide range of applications that will transform the delivery of care.

Modules available are:

Clinical workspace – the beating heart of our EPR. A clinically optimised and consolidated view of the entire CareFlow clinical product suite, as well as single sign-on integration with third party aapplications such as PACS, EDMS and other specialist departmental systems. Clinicians can capture information at the point of care, review records remotely, receive alert notifications and communicate via instant messaging.

Accessed via desktop, web and mobile, Workspace provides clinicians with a comprehensive summary of the most relevant, useful and actionable clinical information. At the same time, it provides team-based clinical workflow, decision support, requesting, prescribing and care planning functions, helping the co-ordination of care between colleagues within a single organisation and across a care community.

Care planning – a workflow-based solution that supports health professionals' working practices. The care plan workflow engine delivers real- time decision support, as well as role and function based access to care plans.

Orders and results – a comprehensive toolset to manage a range of catalogues (including Radiology and Pathology), providing an efficient and safe mechanism for electronically requesting and result alerting and review.

eObservations – proven to deliver improvements to patient safety and care outcomes, our market-leading system covers electronic observation, assessments and screening, alerts, fluid management, sepsis and outbreak control.

Our **Medicines management** solution draws upon decades of expertise and prioritises patient safety, operational efficiency and financial sustainability. Key modules include EPMA, Pharmacy, Chemotherapy, hospital wide Controlled Drugs Manager, a Critical Care Suite and a mobile suite of apps supporting closed loop care. It offers an integrated workflow with easy links to EPR, PAS, ADT, financial and other related applications.

Clinical narrative – a toolset to create tailored clinical data capture workflows, which share information across a patient's entire record, eradicating paper notes, assessments and charts. Analytics and dashboarding adds further value to clinical and operational efficiency.

Care co-ordination – an integrated communication and collaboration platform for team-based care co-ordination. Clinical functions include patient messaging, clinical photography, handover, event alerting, task management, hospital-at-night and team-to-team referrals.

Patient flow – a web-based tool providing an accurate, real-time picture of capacity, clinical status and operational needs. Our solution helps a hospital better manage its patient throughput from pre-admission to discharge.

Patient flow draws live information from multiple clinical and operational systems (including PAS) and presents a consolidated real-time view of essential flow-related information - such as bed status, outstanding tasks, clinical narrative and discharge plans. It creates a dynamic picture of hospital resource usage and demand, all in real-time.

CareFlow Medicines Management

The market leading, built-in medicines management solution.
Right out of the box, as standard.

Covering all aspects of a patient's medicines management journey in secondary care and beyond, CareFlow Medicines Management is a vital requirement to achieve a truly closed-loop EPR.

Made with patient safety in mind, our medicines management suite is the perfect solution to the biggest opportunity for error and waste reduction in the NHS. The overall NHS drugs bill is £16.8 billion a year and rising by 8% p.a. With 1.1 billion medicines dispensed in primary care each year, estimates are that at least 10% of the current volume of medicines may be overprescribed. Between 5 and 10% of all hospital admissions are medicines-related, with two thirds of medicines-related hospital admissions being preventable. As well as this, a 2010 report updated in 2015 and 2018 estimates the national figure for pharmaceutical waste to be £300 million p.a.

Our suite covers all touch points for medicines throughout the hospital setting, meaning that care providers can track and trace medication through the full patient journey, avoiding errors, waste and loss at all stages. From pharmacy stores to the bedside in critical care, maternity, paediatrics, cancer care and even homecare, it provides a comprehensive and proven solution for medication that saves time, money and lives.

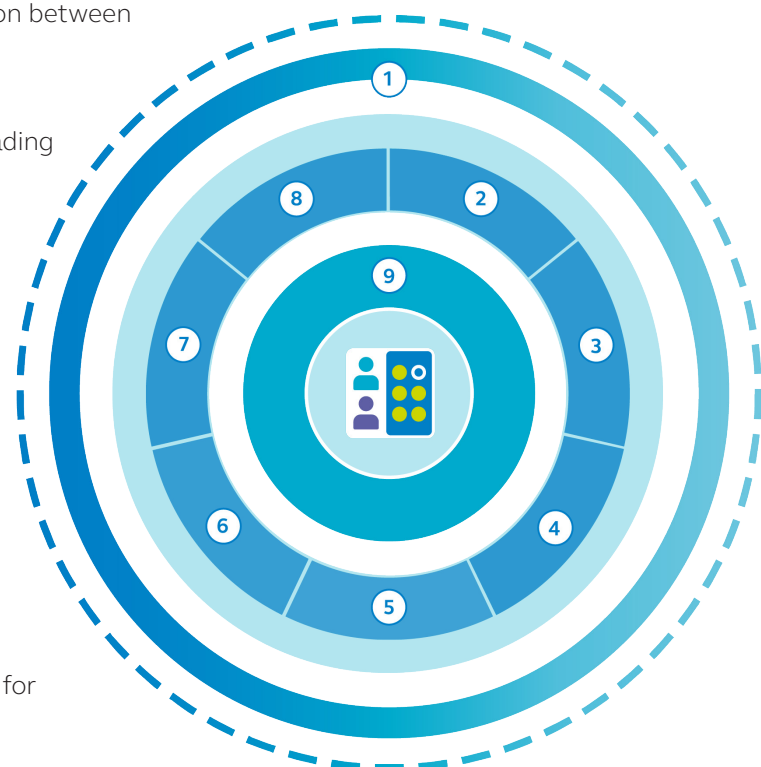5500 hours of annual manual transcription time saved

Over 150 organisations internationally

75% of Acute pharma spend goes through a CMM system

4 months to deploy – our implementation services can provide delivery at record speed

1. **Pharmacy & supply**
   Bedrock of the ecosystem, ensuring safe, and continuous supply of medicines
2. **Web services**
   Enables safe, secure and seamless exchange of information between systems
3. **Manufacturing & trading**
   Supports the local or outsourced manufacturing of medicines (including aseptic services) and commercial trading
4. **Closed-loop devices**
   Working with our partners to provide closed-loop administration and stock control
5. **ICU**
   Prescribing and administration of medicines for the Intensive Care Unit
6. **Emergency department**
   Comprehensive Clinical Information System for the ED covering prescribing and clinical records
7. **Theatres**
   Complete Theatres and Recovery Information System with prescribing and monitoring
8. **Chemotherapy**
   Prescribing and administration services specifically for chemotherapy services
9. **EPMA**
   Backbone of prescribing and administration of medicines for inpatient, discharge, outpatient and short-term leave

CareFlow EPR

Patient administration system (PAS)

The most modern, advanced and flexible PAS on the market, CareFlow is designed specifically to meet the needs of the NHS, making life easier for clinical, operational and clerical staff. It is built on System C's four decades of experience in PAS design and development. It is the core PAS in over 30 acute organisations, ranging from smaller specialist hospitals with a few hundred beds, to large teaching hospitals with over 20,000 users.

The solution is interoperable with existing hospital systems and provides a single patient record for use by clinicians and administrators alike. It can be implemented either stand-alone or as part of a fully integrated EPR, with CareFlow clinical systems from System C or third parties.

Features include

- Full workflow support from the point of referral, through diagnosis and treatment and on to follow-up and discharge.

- Live bed state, flexible multi-disciplinary scheduling, patient tracking throughout and activity/casemix management.

- Designed to 'collect once and share' data across the patient's record, ensuring high standards of data quality, including embedded national and local data collection functions.

- Complete with integrated management, operational and statistical reporting.

- Complies with English NHS Care Records Services such as eRS, PDS and CP-IS.

- Highly configurable screens, providing users with the information displayed in their preferred format.

- Patient kiosks in Outpatients and ED.

Contact management

CareFlow PAS now includes an optional module to support acute provided services which deliver care outside of the traditional Outpatient Clinic setting.

These services require a number of key administrative functions on top of the clinical tools which CareFlow already provides. Contact management allows clinical teams to record referrals and book appointments in either real-time or retrospectively, supported by the powerful worklist functionality embedded within PAS.

All data is available for reference alongside the patient's wider electronic record, as well as being part of the Business Intelligence data warehouse.

Other hospital care settings

System C's CareFlow EPR also includes comprehensive modules for key specialist departments, providing bespoke patient care functionality which has been fully integrated with all other CareFlow clinical functions. As well as providing the necessary departmental specific features, we have ensured that workflow is also supported which means users in these departments can interact seamlessly with PAS and clinical modules without having to log out of their native solution.

Modules available:

Emergency department

Our solution manages all clinical and administrative aspects of emergency care. The system supports the efficient management of patients, whilst collecting clinical data throughout the ED episode. This includes medical history, incident triage details, diagnoses, medications, investigations and treatments. It tracks patients as they move through the department and externally to theatre or for investigations and generates discharge summaries which can be transmitted directly to the GP. A&E whiteboards show the status of individual patients and the overall department, as well as feeding the patient flow module, ensuring capacity is managed with the utmost clarity.

Theatres

System C offers full theatre management functionality with an unprecedented level of interoperability with Bluespier's established theatre management software. A common look and feel across both systems is delivered throughout.

It provides hospitals with up-to-the-minute information; about where patients are on their surgical pathway, current theatre usage and rich clinical content and functionality.

Users can launch the theatre module from within CareFlow or have it automatically launched as part of a workflow, for example when wait-listing a patient and booking a theatre slot. All this is achieved seamlessly without the user being inconvenienced in any way.

Maternity

A specialist maternity system that provides complete support for documenting a woman's obstetric journey – from early pregnancy and the first booking visit, through to all aspects of labour management, postnatal care and discharge information.

The system also provides comprehensive support for recording newborn postnatal care up until final community discharge.

Care continues beyond the hospital and out into the community with the 'off-line' module. This allows Community Midwives to record the care they provide without requiring connectivity to the hospital's network.

Business intelligence, reporting and analytics

CareFlow Business Intelligence is a healthcare business intelligence and data warehousing solution. It is fully integrated within CareFlow EPR and includes a range of preconfigured reports, as well as contracting & commissioning and CDS capabilities which can complement or replace existing information management systems. It has been designed exclusively for the healthcare domain and is optimised to provide a rich and flexible reporting solution. Data can be integrated from the other databases, cross linked with EPR data, stored, analysed and presented according to local and national requirements.

For fast changing critical data, such as ED and current inpatients, high frequency feeds keep the warehouse updated and facilitate real-time dashboards. This allows Business Intelligence to be used to create, manage and maintain highly configurable reports and dashboards. Thus allowing an organisation to adopt proactive ways of working, and intervene far sooner when demand changes.

The traditional NHS statutory reporting, data quality reporting and commissioning data sets can be automated to reduce the burden on information teams. Bespoke reports can be created and published to the front-end user community, allowing greater flexibility for managing reporting needs.

Interoperability

System C is fully committed to interoperability and open standards. We have over 40 years' experience of integrating health systems across the NHS and Social Care.

Our EPR supports a range of interoperability capabilities which either allow for full integration of third party systems for example single sign-on with a PACS, or provides access to data and workflows exposed by third party systems, using a variety of data exchange techniques.

These include:

- Application Programming Interfaces (APIs) supporting open standards such as FHIR, OAuth and FIDO
- HL7 data messaging in near real-time
- Linking to national systems (PDS, CP-IS, eReferrals)
- Portal style click-through integration (with user and patient context passing)

CareFlow users can reach out beyond the hospital setting with single-click access to information stored about patients, brought together from external health and care providers, using CareCentric.

Shared care record

Our CareCentric record-sharing solutions can be embedded directly in CareFlow, giving acute users direct access to records held across the care community.

Having access to a fuller care record allows clinicians to make better informed decisions, promoting improved clinical outcomes.

As well as record sharing, CareCentric offers support for electronic workflows, event-driven cross-community care co-ordination and clinical dashboards.

Remote patient monitoring

Our remote patient monitoring system helps the care systems, Trusts, and councils meet their long-term goals of preventing avoidable hospital admissions by supporting people to better manage their own care at home. The system also supports virtual wards and care homes.

Benefits of using the system across Bexley, Sussex and Kent:

60% ↓ reduction in GP visits

35% ↓ reduction in A&E visits

69% ↓ reduction in hospital admissions

40% 🕐 community matron time saved

65% ↓ reduction in conveyance

Liquidlogic social care solution

The Liquidlogic social care system is designed to be used by social workers, professionals in partner agencies such as health providers, the 'third sector' and service users and carers alike.

By integrating Liquidlogic with CareFlow EPR, admission and discharge notices are sent direct into the social care workflow, in real time. This helps ensure that discharge processes are managed efficiently and that individuals are well-supported as they move between care settings.

National Immunisation Management Service

NIMS is the software provided by the System C & Graphnet Care Alliance to support the management of the influenza and Covid-19 vaccination programmes across England.

It supports almost every aspect of the national vaccination services, from identifying prioritised patients through to recording vaccinations as they are given.

It can also be used as a powerful analytical tool to interrogate and report vaccination data at local, regional, and national level in real-time.

Proudly British, System C is the only UK IT supplier that can provide an end-to-end package to ICSs, covering the entire health and social care community.

Our product range includes:

- **Electronic patient records (EPR)**
- **Immunisation and child health**
- **Social care for adults and children**

- **Shared records**
- **Population health**
- **Patient engagement**

We are part of the System C & Graphnet Care Alliance, bringing together five of the UK's most innovative and experienced providers of integrated IT solutions for the health and social care market: System C, Graphnet, Liquidlogic, Docobo, and Clevermed.

Together we are:

No. 1 supplier in shared care records with over 20m citizens' data held

The national provider of the Covid and flu vaccination system NIMS

Fastest growing supplier in social care with 60% of councils

No. 1 supplier in population health analytics with over 17.3m citizens covered

A pioneer in electronic observations with over 32 Trusts using our system

A leading supplier in acute EPRs with 30 NHS trusts

No. 1 supplier in child health covering over 6.4m children

Remote monitoring over 50,000 citizens

Supporting £6bn+ / annum medications across 400+ hospitals in the UK and abroad

An estimated 45% of UK pregnancies are recorded on our maternity system as well as being used by nearly every neonatal unit in the UK

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