

Derwentside Clinical System

Introduction

The Derwentside Clinical System (DCS) is a way of sharing and collaborating within SystemOne. It is based on the SystemOne function called the 'organisation group'. This allows member organisations to share elements such as reports, templates, protocols, letters, proformas, automatic consultations, questionnaires etc. Any changes in the elements are made centrally and are instantly available to all member organisations.

History

The Derwentside Clinical System (DCS) originated at Leadgate Surgery in Derwentside, County Durham around 2012. Leadgate Surgery had just moved to using SystemOne and needed to rebuild all their clinical templates and recall systems. The ability to share this new work with local practices led to a small practice network forming. As confidence in and understanding of the system increased, the number of practices involved grew, as did the scope of the shared work.

Principles of the DCS

- A bottom-up approach. Design of the system is led by clinicians who deliver the work that the systems support
- Continual improvement. Feedback from end users is taken into consideration and changes are made. The system evolves gradually and incrementally. Large step changes are avoided wherever possible.
- The system is free to use for all NHS organisations.
- An expectation that if an organisation finds a better way of doing something, they share it freely with the other members
- Organisations can pick and choose which elements of the system they use
- Use of information within the patient record is maximised to drive quality of care, safety and productivity.
- Integration of patient care is paramount
- Involving patients in their care is a key driver to improving health outcomes.
- A ruthless focus on removing processes that are not necessary e.g. pointless box ticking.
- Routine processes are automated wherever possible.

Aims of the DCS

Implementation of Quality Health Care

Clinicians are faced with a myriad of guidelines, protocols, targets and other instructions. Details of how these will be implemented on the ground is often lacking. As a result, implementation is often left up to individual organisations with inevitable wide variations in performance and massive duplication of effort. In addition implementation systems are often created by people with no experience of delivering health care which leads to inefficient and ineffective system. Often different schemes or projects overlap, again leading to duplication, waste and frustration for patients and clinicians. Clinicians also struggle to navigate their way

around the maze of information with numerous websites, organisations, documents and computer logins to remember. This leads to wasted time, frustration and sometimes just not bothering.

The DCS offers an opportunity to deal with some of these problems. Designing the 'front end' of the implementation systems with frontline staff ensures that it is workable and efficient and there is more 'buy-in'. Integrating the pathways of care directly into the clinical system means that clinicians do not need as much information. Creating links to external resources within the clinical system means that they are more likely to be used and access to useful information will be much faster and more efficient.

Creating the implementation system once and sharing it via the group means that a unified approach is taken and saves an enormous amount of effort.

Improve Patient Engagement

The system includes elements to encourage patient involvement in their care. For example, systems to allow patient preferences to be recorded in a way that can then feed into care planning and decision making.

Improved Safety

The electronic medical record is an extremely valuable opportunity to improve patient safety. This can occur in two main ways:

- Systems that help or guide clinicians as they are using the system e.g.
 - Advice or recommendations as medication is added
 - Support in making appropriate referrals.
- Systems that support clinical audit. These can be built once and then shared instantly with all member organisations. The guidelines and material that is needed for the audit can be built straight into the clinical system. A record of the audit taking place can be left in the patient record. Monitoring of the performance of the audit can be done within the clinical system. Examples might include:
 - Systems that check for medication that could be stopped like the STOPP protocol
 - Support for QoF
 - Quality and accuracy of clinical coding

Integration of Health Care

Having a common framework for delivering care means that new processes and pathways can be integrated into what is already being done. This ensures that work is not duplicated and patients' care is joined up. For example processes to prevent cardiovascular disease, diabetes and fragility fractures can be integrated; recall systems for long term conditions are tailored to the specific combination of LTCs that a patient has.

Cost Saving

The potential for cost savings by integrating care is very great. Areas for savings include:

- Reduced staff time by avoiding duplication of work (both designing systems and delivering care)
- Fewer clinical errors
- More effective use of medication
- Better targeting of resources: using the information in the medical record to target those at particular risk e.g. identifying frail patients, those at risk of diabetes.

- Ensuring that unnecessary work and interventions are not undertaken e.g. protocols to inform clinicians which blood tests are needed at an annual review based on the information already within the record.
- No contracts are needed with external companies to use additional applications

Improved Performance Management

Since each unit is using a standardised method of delivering care it is much easier to monitor performance both within and outside member organisations.

More Effective Working Across Organisations

By using standardised systems it is much more likely that information flows between organisations will be more efficient and effective. Each organisation will not necessarily use identical systems but the way that the data is recorded and used will be designed to maximise effectiveness and efficiency. It is also hoped that by developing joint systems, different organisations will need to develop a shared approach to care delivery and understand each other's needs i.e. will lead to a bottom-up, federated approach driven by frontline workers.

Better Data Protection

Building systems and processes within the clinician system means that there are no additional data protection concerns. No data needs to leave the clinical system where it is already subject to appropriate safeguards. No data sharing agreements are needed.

Promote Skills and Innovation

By expecting all the member organisations to contribute their best ideas the system can gradually improve by a system of evolution. By providing the background systems and platform, this system could help local NHS staff (clinical and non-clinical) develop their skills in designing and creating implementation processes.

Provide Flexibility

Although all the DCS systems are available to all members, they can choose not to use any particular element. They can choose to build their own system or they can copy the DCS element and amend it for their own purposes. This gives clinicians and organisations greater confidence that they are not going to be forced to do things in one particular way that they disagree with.

Practicalities

IMPORTANT INFORMATION BEFORE JOINING THE DCS GROUP

First, joining the group does not give any access to any of your organisation’s data (patient or otherwise) to any other organisation .

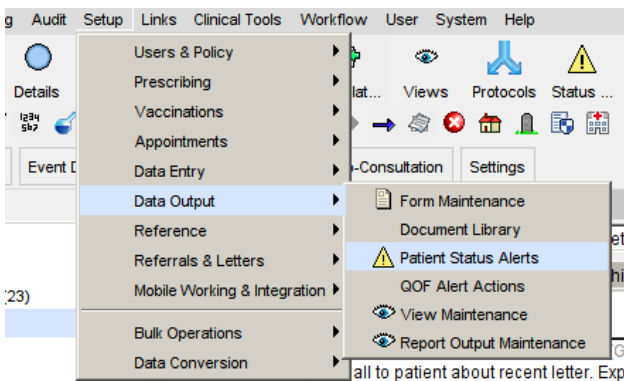
Second, it is important that at least one person in your organisation is included on the mailing list for the DCS. This will ensure that you are made aware of changes and updates as they occur. Email Gareth.forbes@nhs.net to be included.

Third, all the elements of the DCS group are optional. However when you join the group two elements will be active automatically on your system:

- Patient status alerts – these drive the icons that appear at the top right corner of the screen and other parts of the record. Many of the DCS PSAs are designed to replace the SystmOne PSAs or might be specific to a certain type of organisation.
- Any protocols that can trigger automatically. A protocol is a SystmOne process that can perform certain actions such as display a message, add a medication or Read codes to patient records. Some are designed to run automatically e.g. a protocol to check if the ‘exacerbation of asthma’ should be added if an asthmatic patient is prescribed prednisolone.

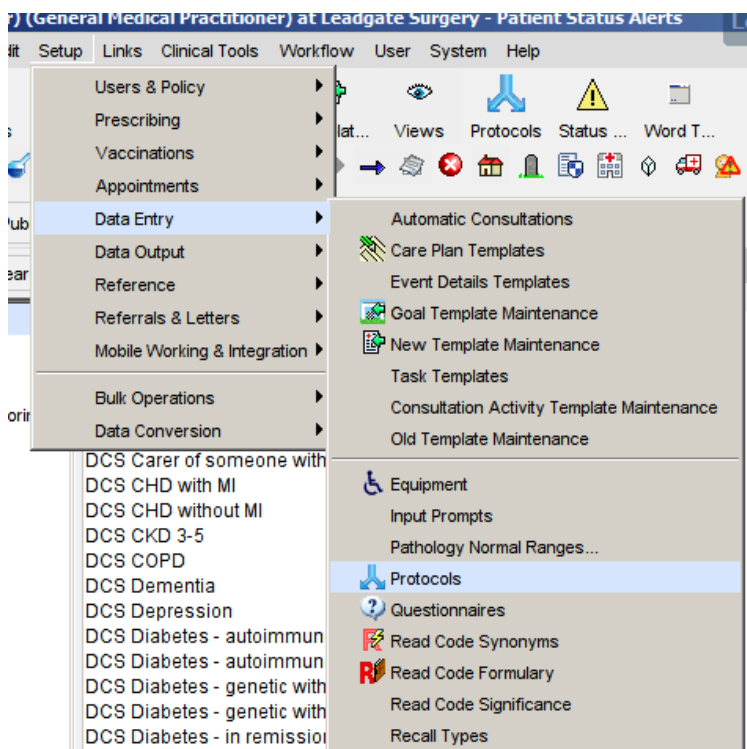
It is very easy to disable both these elements.

To disable PSAs, navigate to the PSA management area and untick the ‘enabled’ box for the PSAs that you do not want to use.



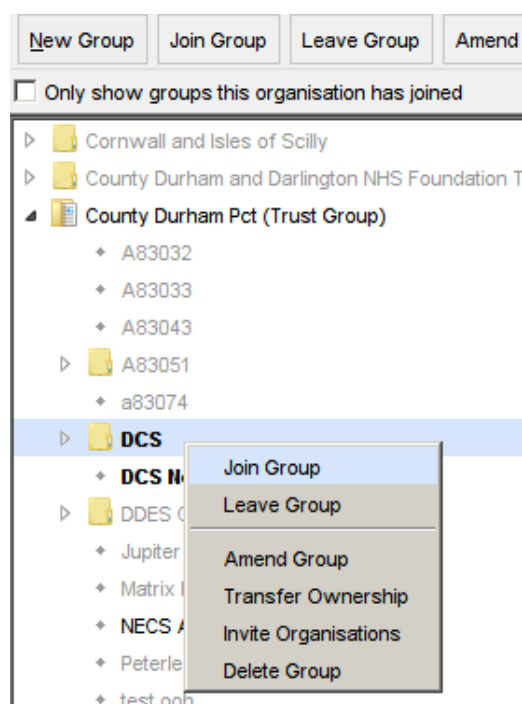
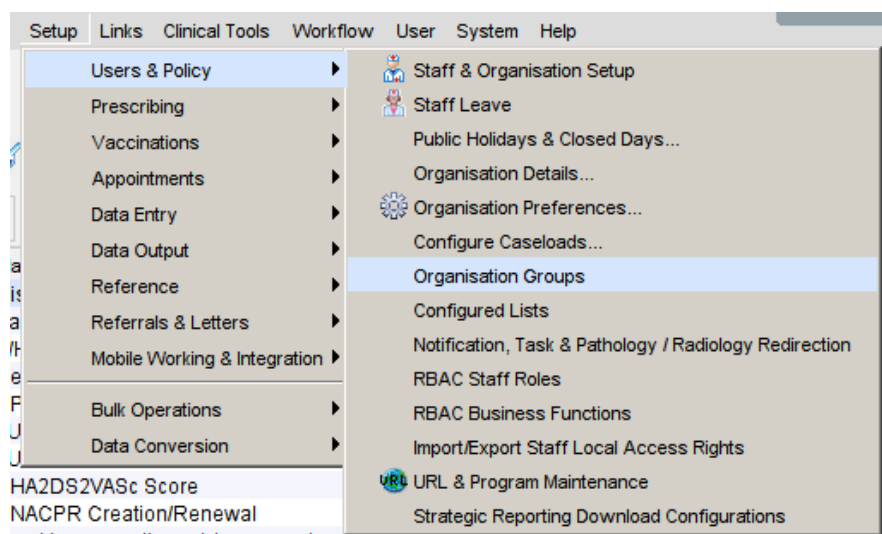
Available Alerts					
Name	Icon	Category	Availability	Enabled	Mobile V
DCS At high risk of diabetes	⬆	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Atrial Fibrillation	AF	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Bronchiectasis	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Cancer	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Carer	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Carer of someone with dementia	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS CHD with MI	❤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS CHD without MI	❤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS CKD 3-5	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS COPD	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Dementia	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Depression	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Diabetes - autoimmune with proteinuria	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Diabetes - autoimmune without proteinuria	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Diabetes - genetic with proteinuria	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Diabetes - genetic without proteinuria	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Diabetes - in remission with proteinuria	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Diabetes - in remission without proteinuria	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Diabetes - secondary with proteinuria	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Diabetes - secondary without proteinuria	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Diabetes - type 2 with proteinuria	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Diabetes - type 2 without proteinuria	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Diabetes - type not specified with proteinuria	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DCS Diabetes - type not specified without proteinuria	👤	Patient Status Marker	DCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

To disable protocols, navigate to the protocol management area and untick the 'active' box for any protocols that you don't wish to use.



Name	I...	Category	Active	Availabili
Discharged from hospital		DCS / AUA	<input checked="" type="checkbox"/>	DCS
Karnofsky Performance Status		DCS / Care Planning	<input checked="" type="checkbox"/>	DCS
WHO Performance Status		DCS / Care Planning	<input checked="" type="checkbox"/>	DCS
Dementia Screening DES		DCS / Dementia	<input checked="" type="checkbox"/>	DCS
NPT Satisfaction Survey		DCS / DRM	<input checked="" type="checkbox"/>	DCS
AUDIT		DCS / General	<input checked="" type="checkbox"/>	DCS
AUDIT 2		DCS / General	<input checked="" type="checkbox"/>	DCS
CHA2DS2VASc Score		DCS / General	<input checked="" type="checkbox"/>	DCS
DNACPR Creation/Renewal		DCS / General	<input checked="" type="checkbox"/>	DCS
Smoking cessation advice prompt		DCS / General	<input checked="" type="checkbox"/>	DCS
STOPP Protocol 2		DCS / General	<input checked="" type="checkbox"/>	DCS
Teetotal		DCS / General	<input checked="" type="checkbox"/>	DCS
Herpes Zoster Vaccination		DCS / Imms	<input checked="" type="checkbox"/>	DCS
Herpes Zoster Vaccination Elsewhere		DCS / Imms	<input checked="" type="checkbox"/>	DCS
Herpes Zoster Vaccination Refusal		DCS / Imms	<input checked="" type="checkbox"/>	DCS
Influenza Vaccination Elsewhere		DCS / Imms	<input checked="" type="checkbox"/>	DCS
Influenza Vaccination Fluarix Tetra		DCS / Imms	<input checked="" type="checkbox"/>	DCS
Influenza Vaccination Fluenz		DCS / Imms	<input checked="" type="checkbox"/>	DCS
Influenza Vaccination Fluvirin		DCS / Imms	<input checked="" type="checkbox"/>	DCS

To join the DCS group navigate to the organisation groups management area. Navigate to County Durham PCT, expand this node and right click on DCS and 'Join group'. Then do the same for the DCS New Word Letters if your organisation has the New Word functionality enabled. Once your request has been accepted you will have access to all the DCS elements.



Amending DCS Elements

You will not be able to amend any of the DCS elements from your unit. If you wish to make changes you can do this in two ways.

- Recommend changes to the centrally held element
- Create a local copy the element and amend this as you wish. Be aware that doing this creates a copy that is no longer linked to the central copy. Any central changes will not be reflected in the local copy.