Introducing a Computer-Based Anticoagulation Management System

FACTORs TO CONSIDER

What objectives and/or concerns can be addressed with decision support and monitoring software?

- Increase quality of care
- Improve the consistency of dosing practices
- Enable shared care across primary and secondary care
- Improve record keeping and audit procedures
- Gain better control of patients therapy
- Reduce administration time
- Increase productivity and efficiency
- Reduce patient waiting times
- Achieve standardisation of care

Questions to consider when selecting software

General
- Is the software easy to use with maximum use of visual presentation to highlight potential problems, enable early detection of problems and make errors easy to discover and to correct?
- Does the software make it easy to reverse actions and recover from error?
- Is the software backed by a top class after sales service and support team?
- Does it use state of the art technology (web based/SQL server) delivers fast, reliable performance?
- Has it been proven clinically in randomised trials?
- Is the software quality assured as per ISO 9001:2000 and TickIT quality management system requirements?
- Will your customer’s data security be assured by an ISO 27001 accredited Information Security Management System?

Configurability
- Does the software easily configure to fit in and support your workflows?
- Are you able to alter and adjust the dose instruction readily?
- Do Hospitals, GP practices, nursing homes and laboratories all have access to their own patients?
- Can patients be given read only access to their own record?
- Is the software scaleable to meet a range of care model requirements from small practice to district wide, region wide or even nation wide systems?

Shared Care
- Does the software support a shared care model? I.e. is it a web based technology with security profiles that support a wide variety of shared care and out-reach clinic models without the need to book out sensitive data on to vulnerable laptops?
- Is there a full correspondence log to view all messages, letters and call summaries for a patient?

Communication
- Does the software have the ability to coordinate automatic messaging and correspondence, e.g. dosing instructions to patients by post/mail or telephone, exception reports to consultants, regular updates to GPs by post/mail?
- Are you able to communicate via fax, email, letter, SMS straight from the system to ensure productivity?

Guidelines and Reporting
- Can you produce necessary Quality Assurance Reports directly from the software?
- Can ad-hoc Research and Management Reports be readily produced?
- Are you able to Benchmark your performance against similar service providers?
Control and Risk Stratification

- Is the software capable of powerful exception flagging and individual risk assessment (interacting drugs, adverse events, risk factors, procedures) to enable easy identification of patients with complications?

Clinical Auditing and Quality

- Is National, Regional and local quality audit and benchmarking available?
- Is there a comprehensive audit trails allowing you to track all changes?
- Is it possible to chart individual Time in Range?

Success factors in setting up a computer based anticoagulation service

When setting up any new service, it is important to assess the factors that will influence the long term success of the project.

At 4S DAWN, we have gained extensive experience helping sites start and maintain different models of computer based anticoagulation service delivery.

Through this experience we have been able to identify some common factors that have contributed greatly to the long term success of these models.

- Support and understanding of Lead Clinicians and Business Managers determined to make their service a success
- Support and assistance when required from the local Information Technology staff
- Good, thorough communication between all parties involved in the service delivery, including patients
- Appointment of a competent, computer literate project manager
- Visit/talk to other sites to learn from their experiences in establishing a system
- Keep it simple and small to start with and expand in a controlled manner
- Well thought out Standard Operating Procedures to guide the day to day operations of your service
- Ensure that there is not a significant time delay between the training and ‘Go Live’ date. Only users who have undertaken formal training should commence the operation of the system
- Ensure all users have at least basic computer skills
- Ensure all staff are well trained in the general principles of anticoagulation therapy monitoring and that they feel they have good clinical support and reliable procedures
- Select only well tried and tested software. The software suppliers development procedures should ideally be validated against an external standard like ISO 9001
- The software supplier should have a reliable Security management System in place that is validated against an external standard such as ISO 27001
- Choose a software supplier that understands your needs and can demonstrate to you good support and training services. The supplier should also be able to offer you help in solving your logistical problems based on their knowledge and experience
- Adequate, reliable and properly specified computer hardware and operating systems
- Good and reliable data backup and recovery procedures