Avon and Wiltshire NHS
Mental Health Partnership NHS Trust

**'You matter, we care'**

| Trust Board (part 1 or 2) | Date: 26th March 2014 |
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| **Title:** | **Clinical Systems Strategy Report 2014-2019** |
| **Item:** | **BD/13/363** |

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| **Executive Director lead and presenter** | **Emma Adams – Head of Academy** |
| **Report author(s)** | **Mark Francis & Emma Adams** |

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| **History:** | |

| **This report is for:** | |
|---|---|
| Decision | x |
| Discussion | x |
| To Note | |

**Executive Summary of key issues**

The Quality Academy introduces the Clinical Systems Strategy for AWP 2013 to 2019 for your consideration and approval.

This strategy offers a framework which will ensure that the development of clinical systems over the next five years meets the needs of our clinical services, maximising quality and increasing clinical time available for the provision of care.

This strategy is not prescriptive about specific systems or technology. The framework guides choice through principles. Recognition is given to the probable need for some specialist systems where core systems are unable to meet need. Attention is given to the risk of loss of data quality as numbers of systems and interfaces increase.

This strategy is important as we look to replace our Electronic Patient Record (EPR) including electronic medicines prescribing and administration in the next year. Data quality, and the need to minimise the impact of recording and retrieval of information will be important drivers, alongside cost, in the decision making process.

| This report addresses these Strategic Priorities: | |
|---|---|
| We will deliver the best care | x |
| We will support and develop our staff | x |
| We will continually improve what we do | x |
| We will use our resources wisely | x |
| We will be future focussed | x |

Avon and Wiltshire NHS
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# Clinical Systems Strategy 2014 - 2019

## Document Information

| Board Library Reference | Document Type | Document Subject | Original Document Author | Scrutinised By | Review Cycle |
|---|---|---|---|---|---|
| | Strategy | Clinical Systems | Clinical Systems Manager | | 3 Years |

Note: This document is electronically controlled. The master copy is maintained by the author department within the document library on OurSpace. Once printed, this document becomes uncontrolled.

## Document Version Tracking

| Version | Date | Revision Description | Editor | Status |
|---|---|---|---|---|
| 1.0 | 16/09/2013 | First Draft | MA Francis | Draft |
| 2.0 | 25/11/2013 | Changes incorporated following review by E Adams | MA Francis | Draft |
| 2.1 | 06/12/2013 | Changes following review by Nursing & Quality | MA Francis | Draft |
| 2.2 | 27/01/2014 | Changes following wider stakeholder review | MA Francis | Draft |
| 2.3 | 11/02/2014 | Changes following last comments | MA Francis | Draft |
| 2.4 | 19/02/2014 | Change to the first bullet point regarding the Clinical Systems discussion page, on page 14 to remove reference to RiO on request of SMT. | MA Francis | Draft |
| 2.5 | 11/03/2014 | Minor textual changes to 5.4.1, 5.4.2 and 8, following executive review. | MA Francis | Draft |
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Report Sponsor: Nursing and Quality Directorate

## Table of Contents

# 1. Executive Summary

## *1.1. Introduction*

This document sets out the strategic direction for AWP Clinical Systems for the next five years. It aligns with strategic change within AWP, as well as changes to national clinical systems initiatives.

## *1.2. Background*

A rapidly changing business environment provides the trust with a number of challenges in the maintenance of a robust clinical record, whether by trust controlled systems or where partners systems are in use. In addition AWP wishes to share information with its partners and with service users and carers, as well as collect high quality performance data. These challenges provide opportunities to shape a clinical systems landscape which promotes high quality care in addition to meeting these needs.

A strategy is required in order that our response to these challenges is systematic and strategically aligned, and which best meets the needs of service users, commissioners, and the organisation.

## *1.3. Vision Statement*

The clinical care provided by AWP will be supported by high quality care records systems flexible enough to respond to the increasing sharing and interoperability demands of the next five years, to the local needs of individual commissioners, and to the needs of service users. This will include appropriate service user access and contribution to their record.

## *1.4. Core Principles*

In order to meet the challenges anticipated over the next five years driving principles have been devised in respect of clinical systems used by AWP. These have been consolidated in to principle statements under the headings of:

- Clinical Focus – Clinical systems will be informed by, and managed primarily to assist, care service staff.
- Accessible and Intuitive – Clinical systems will be user friendly and available at the point of need.
- Flexibility – Clinical systems will be locally configurable and able to meet changing needs
- Sharing – Systems will facilitate appropriate sharing of information via local and NHS ITK interoperability standards
- Information Quality and Review – Clinical systems will demonstrate due attention to the management of concept definition and semantics, and guidance and training.
- Interface Control – AWP will facilitate a single user interface which meets the needs of care staff regardless of the system they require access to.
- National – Further national and local information needs such as the NHS England target for an Integrated Digital Care Record (IDCR).

The principle statements are care orientated and will be fully recognised by the end of the strategy period. This will be a graduated recognition however as some principles are dependent on deliverables.

## 2. Introduction

This document sets out the strategic direction for AWP Clinical Systems for the next five years. It aligns with strategic change within AWP as a whole as well as changes to national clinical systems initiatives. As such it should be read in conjunction with the following documents:

- Safer Hospitals, Safer Wards; Achieving an integrated digital care record. (2013) NHS England. Crown. http://www.england.nhs.uk/wp-content/uploads/2013/07/safer-hosp-safer-wards.pdf
- AWP IM&T Strategy 2012-16
- The power of Information: Putting us all in control of the health and care information we need. (2012) Department of Health. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213689/dh_134205.pdf

This document identifies challenges which a clinical system strategy must address, and principles which will assist the trust in addressing them. The resulting principles are consolidated into seven principle statements which describe the clinical systems environment expected in 2017.

### *2.1. What is a Clinical System*

For the purposes of this paper clinical systems can be categorised under two headings. Those of 'Core' clinical systems, and those of 'Enabling clinical systems'.

Core clinical systems are those systems used directly by practitioners and the extended care team to assist in decision making in relation to the care of a service user or in recording the care provided.

Enabling Clinical Systems may be 'Business Systems' which enable practitioners and the extended care team to provide high quality care as effectively and efficiently as possible.

### *2.2. Background*

Presently within AWP around 40 different clinical systems are used, excluding unofficial Access databases and Excel spreadsheets set up on workgroup drives. Integration between these systems is minimal. Increasingly commissioners of services request that their own information system is used to document care. In such cases AWP must still attend to its responsibility under the Data Protection Act (1998), it's responsibility to maintain full health records, and it's need for accurate performance information. At present the Trust finds these needs difficult to address without asking users to enter information multiple times. This is not acceptable or sustainable.

It is recognised that the version of RiO presently available via CCN4 of the National Programme does not fully meet all of the Trusts clinical information/data needs. Some desirable functionality is not available, and some aspects of the software functionality are contrary to AWP processes. The Trust intends to exit this contract in March 2015 and procure a new system. It is noted that it is unlikely that any single system will meet all of the organisations clinical information/data needs all of the time.

The number of partners requesting access to our information systems, and whose systems we might wish to access is growing fast. This rapidly changing business environment

provides the trust with a challenges in the sharing of information, the maintenance of a robust clinical record, and the collection of high quality performance data.

### *2.3. Strategic Context*

The present trust strategy highlights five areas of priority. This Clinical Systems Strategy aligns with the Trust strategy as demonstrated below.

……..about delivering the best care

It is important that users of AWP clinical systems can access the full clinical record of a service user from one system interface. This should be available at the point of care. Systems should be intuitive to staff and follow normal workflow.

……about our staff

System users should be central to all clinical system development. They will be trusted to act in a professional manner and be provided with the most appropriate tools to support them in their roles. Staff will be supported in the use of clinical systems and formal training and guidance on standards, operation and system changes will be available.

……about continually improving what we do

The AWP approach will be continually reviewed using Clinical Systems User Group, Clinical IT workshops, Clinical Systems discussion board, and IQ feedback amongst other routes. Service Users will have appropriate access to their mental health care record, and to internet resources, via Trust systems by 2018

……..about using our resources wisely

It is important that AWP employs its staff wisely by ensuring processes are efficient as well as representing high quality. The Trust will welcome new ways of creating quality records which capitalise on best opportunity and skills

……..about the future

In order to be able to offer a high quality service to all commissioners AWP requires clinical systems which will be accessible across organisational boundaries. The Trust must be able to share information with its partners where it is appropriate in order to meet the needs of both organisations and the service users of each. The Trust will achieve a paperless Integrated Digital Care Record (IDCR)by 2018.

## 3. Principle Statements

In response to the challenges identified, and following consultation with system users and stake holders as documented in section 6, a number of operating principles have been designed. These in turn have been consolidated into seven principle statements which represent AWP clinical systems strategy for the five year period. As will be identified in the road map below, some individual principles are dependent on realisation of other objectives such as the exit from CCN4.

By the end of the period of this strategy document, all of these principle statements will be recognised in full.

The individual operating principles are listed in Appendix III

The following principle statements represent the end state for AWP clinical Systems Strategy 2014 - 2019

**Clinical Focus**

**Clinical involvement will be the cornerstone of clinical systems development . Practitioners will be actively engaged and staff will be encouraged to suggest and innovate. Ideas will be championed and developed in a safe way.**

**The professional conduct of clinical services staff will be assumed in regards to information systems, and tools will be provided for the management of this at profession or locality level. AWP will continue to develop a workplace support network to assist staff in the use of clinical systems in addition to the availability of more formal training.**

**Accessibility**

**The full clinical record will be accessible for both reading and recording at the point of care, and as a single interface. Users should have to record information only once, and in one system. Systems will be clinically intuitive, fast, user friendly, and compliment normal**

**Flexibility**

**The core AWP clinical information system must be configurable locally, by Trust staff, to meet the requirements of the organisation. This includes the ability to collect new data sets and to organise this in a user friendly manner. Where performance information is sourced from clinical systems, recording will not impact normal care processes.**

**Sharing**

**Clinical Systems will be accessible across organisational boundaries and facilitate inter-organisational exchange and use of information. New externally sourced clinical systems will be NHS ITK accredited. Internally developed systems will meet internal interoperability standards. Clinical systems and interfaces between them will access live data. Where AWP uses databases controlled by external partners, roles under the data protection act and the manner by which AWP is able to receive a live copy of all information recorded by AWP staff will be specified.**

**Information Quality and Review**

**A robust on-going review of concept definitions, interface clarity, and guidance will be maintained and evidenced for existing and developing systems. Any changes to standard system processes will be subject to a clear change process involving stakeholders from the delivery units and central services. Guidance on standards, operation, system changes and plans will be clearly available to users.**

**Interface Control**

**Where information can be collected effectively in the Trust core system, and there is a desire to collect that information, it will be collected in the Trust core system. Requests for new clinical systems will be appraised against the risks and benefits of using the main 'Core system'.**

**National**

**Achieve a paperless Integrated Digital Care Record (IDCR). Where paper is recognised as providing a most appropriate medium this should be justified and centrally registered. Infrastructure must be capable of achieving the highest possible speeds for any clinical system, as promoted by the supplier. Service Users will be able to have appropriate access to their mental health care record, and to internet resources, via Trust and external systems.**

## 4. Road map

This strategy addresses the delivery of clinical systems over the next five years. Known changes place dependencies in the timeline and the most significant of these is the Trust exit from the CCN4 contract in March 2015. Until this time and the subsequent go live of the replacement system, opportunities for live interoperability are very limited. As a result a number of the principles identified cannot be applied in earnest. For example, 'Users of clinical systems should have to record information only once, and in one system'. It will be difficult to achieve this without live interoperability. A graded introduction of principles is therefore recommended. Principles not yet introduced should be considered though it may not be possible to uphold them. New systems proposed should have double entry impact assessed against this principle and decisions made in light of Trust plans

Appendix IV lists the strategy principles in accordance with the periods below in order to give guidance on the sequence in which they may be considered live.

### *4.1. Period One - Until exit from CCN4 Contract*

This period will be headlined by effort to exit the CCN4 contract arrangement as well as the procurement and implementation of a replacement system. Continued efforts should be made in streamlining present system processes to fit more closely with care processes. This is with an aim of releasing practitioner time in order to make this available for provision of care, as well as increasing compliance and consequently, information quality. The organisation should take this time to identify pathways and define concepts in order to meaningfully design information collection screens in the replacement system in 2015.

This work has been organised under three broad headings of 'Clinical Information System Replacement', 'Care Pathways and Clinical Standards', and 'Maximising Effectiveness'. Each will be a programme of work, synchronised under the umbrella of the Academy. The Clinical Information System Replacement Programme, originally sponsored by the Director of Nursing is underway and the majority of its work will be in this period. The Care Pathways and Clinical Standards Programme will be the province of the Academy and work will start as soon as possible. The Clinical Systems team will coordinate the Maximising Effectiveness work stream. In year one this will focus on the reduction of time required to maintain quality care records using the CCN4 version of RiO, and the engagement of users. A representation of this project structure can be found in Appendix VI

During this period requests for new systems and technology should be assessed against the expectation of interoperability or a move back into the core information system in period two. Internal configuration of the new system will make the collection of new datasets available at that time. Systems which will not interoperate should be seen as very short term solutions.

User engagement processes should be developed during this time so that they are able to assist in the delivery of AWP content for the new system. The urgency of this task can only be assessed once a new system is chosen. For example, should RiO be chosen AWP could feasibly start with the CCN4 content and change this as content was ready. If a new system is chosen the suitability of the 'off the shelf' content will dictate the need for change.

On-going user engagement processes will be required in order to ensure users remain central to clinical systems processes. In year one this should be initiated by the creation of a clinical systems user group which meets at least two times per year.

Choose and Book and/or other e-booking solutions should be appraised.

The principles listed in wave one (Appendix IV) will be considered live.

### *4.2. Period Two – End of CCN4 to July 2016*

In period two it is expected that a replacement clinical information system will be in place. Initial implementation is expected to present a system as familiar to users as possible. Using standards and pathways articulated by the Academy, effort will be concentrated on the efficient creation and maintenance of AWP content within the new system, and associated guidance.

During this period fully integrated solutions to electronic prescribing and medicines administration will be implemented.

Technical solutions will be assessed and plans for interoperability of clinical systems, based on the new core system and data centre solution agreed. Implementation of this plan will begin.

The principles listed in wave two (Appendix IV) will be considered live.

### *4.3. Period Three – July 2016 to December 2018*

Period three is focussed directly on the end point of a paperless Integrated Digital Care Record (IDCR). Production and maintenance of AWP system content will be integrated into normal business processes. Interoperability plans will be actioned. Choose and Book and/or other e-booking solutions should be fully implemented. If not implemented already, integration with laboratory systems will be achieved Any exceptions to the 'fully digital' target will be ascertained, investigated and work-arounds identified.

## 5. Challenges which inform the strategy

There are a number of challenges which must be met by any clinical systems in use within AWP. These were considered in the formulation of the strategy principles and the subsequent principle statements. These are discussed below.

### *5.1. National Challenges - Fully Digital IDCR*

AWP will need to move from the current 'paper light' AWP Health and Social Care Record to a paperless Integrated Digital Care Record (IDCR) (NHS England 2013), identified and indexed by the NHS number, by 2017.

AWP use of RiO, and other systems has provided a digital format for some clinical notes. Implementation of RiO was completed in 2011, and depending on clinical service the estimate is that around 50% of clinical records remain paper-based. Sometimes these are either scanned and uploaded to RiO, or kept in the blue secondary folder, but the reality is that a substantial portion of clinical notes are not yet digital.

The use of the word 'integrated' in the IDCR name enables local organisations to choose their path through the 'single system' versus 'Best of Breed' dilemma whilst looking for the same benefits to patient care. An organisation may have one or two systems or they may have many. They must however be integrated and offer a single view of the whole record. Integration offers many benefits but also offers opportunity for risk where rigour has not been applied to context and meaning of language across system interfaces.

## 5.2. Organisational Challenges

### 5.2.1. Locality Delivery Units

AWP has recently reorganised services around the six CCG geographical areas plus SDAS and Specialised and Secure. These are known as Delivery Units (LDU). It is expected that these delivery units will be able to tailor services to the requirements of their locality, set within a Trust wide quality framework. Clinical Systems strategy needs to account for this flexibility whilst maintaining strategic direction and high quality. The expectation is that this will involve the use of commissioner owned clinical systems, requests for Trust developed bespoke systems, specialist purchased systems and use of RiO in a different way to the Trust standard.

### 5.2.2. Information sharing

Where AWP works in partnership with other care organisations there is a need to share information. This may involve providing persons from other organisations access to AWP clinical systems, as well as providing access to the records systems of those organisations to AWP personnel. This will involve effective governance processes as well as technical solutions. It is expected that over the life of this strategy that this sharing requirement will grow with a proliferation of care partners.

### 5.2.3. Information exchange or integration

In order to truly consolidate the use of clinical systems for users, multiple input of information must be stopped. Where more than one organisation has an interest in information being recorded, measures should be put in place to populate each information system from a single input. The goal should be integration of systems, however regular downloads may surfice should the delay imposed by this method be of low risk.

### 5.2.4. Data Quality

Threats to data quality exist both within systems and between systems. Within systems the ability to configure new screens and consequent data sets also provides the danger of duplication of concepts. An example of the dangers of duplication might be the creation of specialised ward assessment form which ask for blood glucose results. Should this not access the same database field as the 24 Hour Physical Monitoring Form (which also contains a blood glucose field), and add to that form, there is the risk that a reader will miss the most recent reading. This would introduce risk. Between systems the opportunity for duplication proliferate as system designers attend to the requirements of their own system. In addition it can be expected that many assessment systems in mental health will have fields for ‘Mood’ or Affect’, ‘hallucinations’, or ‘sleep pattern’. It can also be expected that the set of responses available in each may be different. Any interface which tries to resolve this semantic misalignment is liable to dilute the quality of the data.

Data quality issues can also arise from non-standard patterns of use. Should one LDU decide not to complete a data field that all others complete, the value of the

information collected is decreased. The reader must conclude whether the lack of information means that the service user has not been asked/assessed, or whether the assessor worked in an area which did not use the field.

Quality information can only arise out of clear definitions. The user can only log that a contact has been made if they are clear as to what a contact is. Where one group of staff believe a contact is one thing, and another group believe it is another, comparisons or aggregation cannot be achieved without loss of quality.

### *5.3. User Challenges*

AWP has around 4000 clinical system users. Each of these needs to be:

- Engaged. Their views are represented in system choice, design or use.
- Trained, in order to ensure the quality of information
- Updated (Training), in order to maintain the quality of information. Discussion of evolving pathways and clinical theory to inform best recording practice
- Aligned. Staff should understand how systems fit with Trust objectives and wish to work towards these.
- Informed. Staff need to know about upcoming changes to systems or how they are used. They need to be able to ask questions and receive appropriate responses.

### *5.4. AWP Systems Challenges*

#### *5.4.1. Many local data stores*

Due to present contractual restraints the Trust is unable to respond to requests from services wishing to collect new data sets by incorporating these into RiO. Consequentially the Trust suspects it has a number of local data stores on workgroup drives containing clinical information. This information may not be replicated in the Clinical Record in order to inform care, is not available to other care staff or those responsible for servicing Subject Access Requests, and is not backed up. It is recognised that there may always be an argument for quick and effective solutions to service needs and that we should not rule out the possibility of properly controlled short term use of Access databases. However, as a principle information should be collected in the Trust core system in order to facilitate integration, access, governance and quality.

#### *5.4.2. Many controlled but non-integrated systems*

AWP uses a number of systems which might be seen as forming part of the clinical record. These include specialised assessment tools, the Trust clustering tool, an e-prescribing system in SDAS, and the pilot of an e--prescribing solution in Community and Outpatient settings. The choice of these systems is largely appropriate to the expressed needs.

Clinical risk can be introduced where a user needs to check more than one system in order to access the full clinical record, or where there is a lack of clarity as to the location of reliable information about a particular subject. As a result, in order to provide quality care staff should only have to access one system to access the full clinical record.

Presently some information must be manually transcribed between systems so that it is available in the designated prime clinical record. This manual transcription places undue workload on care staff as well as providing another opportunity for the introduction of error. This is a clinical risk.

There is no clear answer to the 'Single System versus Best of Breed' systems debate, which contrasts the single 'generalist' system model with one employing a number of more specialist systems. It is unlikely that any single system would provide the required functionality or flexibility to meet the needs of the Trust in the coming years. However, as noted above under the heading of data quality, whilst integration is the key to success in a Best of Breed model it is also the point of caution. Where information from more than one system is displayed together, language definition and context become very important in avoiding risk. This strategy recognises the necessity and value of specialised systems whilst offering caution in the proliferation of integration instances. In order to minimise the opportunity for introduction of risk through systems integration, requests for new clinical systems should be appraised against the risks and benefits of using a single 'Core system', if the opportunity is available.

This strategy will allow specialty and departmental information systems to continue to be deployed, provided:

- The proposed departmental system can fulfil the strategic interoperability standards
- The additional investment to deploy these systems is properly evaluated, including the capacity needed to develop the business case, pay for all of the technology, deploy the system and then maintain it once it is live;
- The benefits of using this system over the Core System can be clearly demonstrated.

It is important that the Trust Identifies system interoperability standards which all clinical systems should comply, whether purchased or built in-house. This may be separate from ITK standards and targeted in the main towards clarifying interoperability of internally produced systems.

### *5.5. System Architecture Challenges*

It is recognised that clinical systems in mental health care are still a developing area. Through engagement with front line staff a number of themes relevant to present and future functionality have emerged.

Within RiO, functionality is often split in an artificial way in relation to real world processes. This gives the impression of a difference between administrative and clinical information as well as providing unnecessary workload for the care team in servicing these system pathways. For example diary maintenance includes an unwieldy process for the booking of an appointment and a separate process for the recording of an outcome to that appointment. The recording of process notes is a separate and disjointed process regardless of the need to write one for each and every appointment. Clinical processes will be different for a practitioner booking an assessment for the following week to a practitioner recording an ad-hoc appointment retrospectively for a service user who had called in crisis. System processes should make the practitioners task of recording information as aligned with their

own working processes as possible. In addition information requirements should be integrated and aligned to flexible real world care processes. There should not be separate processes to collect 'administrative' information.

### *5.6. Infrastructure Challenges*

Much of the IT infrastructure strategy will be in the IM&T Strategy. It is included here in order to recognise that infrastructure will play a part in meeting the challenges raised in this document.

As noted under the heading of 'Organisational Challenges' above, the need to provide access to AWP Systems, and to gain access to the systems of other organisations will become increasingly important in the coming years. Systems will have to be accessible across organisational boundaries.

In order to make the sharing of clinical information appropriate to clinical care it is important that that information is live and complete. Presently integrated clinical systems at AWP rely on incomplete records which are fourteen hours out of date at the point they are first displayed and thirty eight hours out of date at the point they are replaced. They are incomplete as BT hold AWP clinical documentation and do not supply it as part of the back-up download.

In order to maintain the type of flexibility the Trust will require in order to flourish in the changing environment in which it operates it will be important that systems are able to integrate, communicate, and exchange information. The NHS has specified an Interoperability Toolkit in order to introduce standardisation in this area and offers accreditation to systems that meet requirements. It may not be commercially viable to expect Trust developed systems to achieve accreditation. However all new externally sourced clinical systems must be NHS ITK accredited. Internally developed systems should be built 'in the spirit' of this toolkit in order to integrate with other systems. Internal standards should be developed and maintained.

A major frustration expressed by users is the speed of response in RiO. Page load times can be many seconds. This is unacceptable and will be having a negative effect on use of the system in respect to uptake, compliance and information quality. AWP infrastructure must be capable of achieving the highest possible speeds for any clinical system in use taking into account software limitations. Speed of response should be a major factor in choice of systems for the future.

## 6. User Engagement informing the strategy

AWP clinical system stakeholders were consulted via online survey and consultation workshop during February and March 2013. The stakeholders were staff including RiO champions, service users and carers and they were asked about current and future clinical systems and technology. Full documentation of this engagement can be found here. As a result of that consultation a number of recommendations were made:

- Increased clinical engagement in systems development.
- Equipment to enable mobile access to computer systems for record keeping and data entry.
- Reduced duplication of data entry through integrated clinical systems.

- Make supervised or restricted access accounts and equipment available for service user internet use.
- Address the culture of mistrust regarding internet use.
- Facilitate computing skills development and support.
- Enhance communication with other health professionals.

Discussions on the Clinical Systems discussion board suggest a few more themes

- **The system should work for AWP** - Participants on this page express no appetite for a change of system. However there is recognition that the system needs to be configured to meet the needs of AWP.
- **System should complement workflow** - This recommendation arises from numerous comments about the lack of usability of editable letters or Care Plan documents. For example the ability to save a draft document but not to edit it.
- **Better communication about changes, developments and guidance** - Users do not always feel up to date on recent guidance or changes to the system due to upgrade or maintenance release.

## 7. Governance Issues

There has been an increasing trend for commissioners to stipulate the use of a non AWP database for the collection of care information in contract negotiations. This raises issues for AWP in free access to care information and the ability to share it across the organisation, as well as meeting obligations as a data controller as defined by the Data Protection Act 1998.

Where AWP is obliged to use databases controlled by external partners it is important that as part of contract negotiation that roles under the data protection act are identified. In addition the manner by which AWP is able to receive a live copy of all information recorded by AWP staff must be specified.

The quality of recorded information and of guidance as to the use of systems depends on clear definition of terms, and an absence of ambiguity in the software. It is important as systems multiply and interoperate that a robust review of concept definitions, interface clarity, and guidance is maintained for existing and developing systems.

As the numbers of systems in use proliferate alongside existing paper records it becomes more challenging to define the constituents and boundaries of the clinical record. This has relevance to legal responsibly in areas such as Subject Access Requests and to Records Management processes such as retention and disposal. Cross referencing of records of all mediums as well as clear definition of terms will be important in decision making in this respect.

## 8. Enabling Technology

In addition to the provision of core clinical systems there is a need to leverage other areas of technology in order to help care teams provide quality care. For example the use of Skype like solutions for supervision and training may decrease the time taken for this and the travelling costs incurred; Instant communicator solutions may enable groups of colleagues to offer advice without telephone calls; Digital dictation devices and voice recognition software may reduce typing time and cost. In addition to these the more recent growth of 'apps' for mobile devices is clearly in the health field and AWP should be ready to take advantage of these where appropriate. Social media may offer a number of advantages in the ability to reach audiences which other means of communication may not. Processes must exist for staff to suggest and innovate and for ideas to be championed and developed in a safe way.

## 9. Conclusion

This document sets out the Clinical Systems vision and challenges that the trust will face over the next five years. It should be read in conjunction with the IM&T Strategy 2013-16. The document does not stipulate a rigid plan but offers individual principles and consolidated principle statements to shape clinical systems decisions alongside the IM&T Strategy. It is of note that this strategy concentrates on clinical value, whilst recognition is given to the importance of performance information. As the trust transitions from NPfIT and faces new business challenges, flexibility in solutions, and a maintenance of high standards will be crucial to success.



## Appendix

**Appendix I – Glossary of terms**

**Appendix II – The Clinical Systems Team**

**Appendix III – Principles – by section.**

**Appendix IV – Principles – by wave.**

**Appendix V – Deliverables**

**Appendix VI - Clinical Systems/CCN4 exit strategy programme structure**

## Appendix I

**Glossary of Terms**

| | | |
|---|---|---|
| **AWP** | | Avon & Wiltshire Mental health Partnership NHS Trust |
| **CCG** | | Clinical Commissioning Group |
| **CCN4** | | The Change to the National programme contract which offered a standardised configuration of RiO to Southern Trusts |
| **Champions** | | Individuals in teams who act as specialists in RiO and other systems, as a conduit between the clinical systems team and the care team and as support to other team members |
| **IM&T** | | Information Management and Technology |
| **IDCR** | | Integrated Digital Care Record |
| **ITK** | | Interoperability Tool Kit |
| **NPfIT** | | National Program for Information Technology |
| **SDAS** | | Specialist Drug and Alcohol Services |

## Appendix II - Clinical Systems Team

The Clinical Systems team currently comprises of the Clinical Systems Manager and the RiO Clinical Lead. Both are currently registered practitioners. Broadly this team represent the clinical interest in management of clinical systems. In actuality they do not 'manage' each of the individual clinical systems but offer an advisory and synchronisation role. The goal is to facilitate an information eco-system which encourages high quality clinical records and performance information whilst helping to maximise the amount of time practitioners have for care giving. The following list is indicative rather than exhaustive

- To act as the clinical 'customer' in respect to the trust core care records system and in general in terms of clinical systems strategy. To manage the core system for the trust.
- To manage the processes by which clinical systems are requested and agreed in order to fit with trust aims and objectives.
- To provide governance in decisions regarding the use of clinical systems
- To encourage and facilitate change where required in the promotion and maintenance of high quality care, care records and performance information.
- To encourage, support and participate in discussion of evolving pathways and clinical theory in order to inform best recording practice
- To coordinate customer response from Clinical Applications (IM&T Application Support team), IT Training (Learning and Development) and Clinical Systems to ensure system users have clear training, written and electronic guidance, technical support and clinical support when required.
- To provide guidance on clinical systems processes in a variety of forms in order to reach maximum numbers of users.
- To engage users in a variety of mediums in order to represent their views as accurately as possible. Including team visits, workshops, user groups and project work
- To manage and promote the Clinical Systems Champions. Run workshops, encourage and support those staff taking this role and to ensure they have access to information they require.
- To support the localities in meeting their information needs
- To act as clinical information systems experts on associated projects.
- To champion care teams in advocating systems solutions to operational challenges

## Appendix III – Principles by section

**Principles (Challenges)**

- Achieve a paperless Integrated Digital Care Record (IDCR). Where paper is recognised as providing a most appropriate medium this should be justified and centrally registered
- New externally sourced clinical systems must be NHS ITK accredited. Internally developed systems must safely meet interoperability requirements
- Changes to standard clinical information system processes will be subject to a clear change process involving stakeholders from the delivery units and central services
- Delivery Units must be able to meet the information requirements of their commissioners whilst also meeting those of the Trust.
- Systems will be accessible across organisational boundaries
- The core AWP clinical information system must be configurable locally, by Trust staff, to meet the requirements of the organisation. This includes the ability to collect new data sets and to organise this in a user friendly manner.
- Where information can be collected effectively in the Trust core system, and there is a desire to collect that information, it will be collected in the Trust core system.
- Users of clinical systems should be able to access the full clinical record from one clinical system
- Requests for new clinical systems should be appraised against the risks and benefits of using a single 'Core system', if available.
- Where performance information is sourced from clinical systems, recording will not impact normal care processes.
- Clinical systems and interfaces between clinical systems will access live data.
- Infrastructure must be capable of achieving the highest possible speeds for any clinical system, as promoted by the supplier.

**Principles (Engagement)**

- Clinical involvement will be the cornerstone of clinical systems development . Engagement to be demonstrable.
- Core clinical systems will be accessible for both reading and recording at the point of care, and as a single record.
- Users of clinical systems should have to record information only once, and in one system.
- Service Users will have appropriate access to their mental health care record, and to internet resources, via Trust systems.
- Information technology principles serving clinical services in AWP will assume the professional conduct of staff, and provide tools for the management of this at profession or locality level.
- AWP will develop a workplace support network to assist staff in the use of clinical systems in addition to the availability of more formal training.
- Core clinical systems must allow, and facilitate, inter-organisational exchange and use of information
- Systems will be Clinically Intuitive and compliment normal workflow. They will be 'user friendly' for practitioners
- Guidance on standards, operation, system changes and plans will be clearly available to users.

**Principles (Governance)**

- Where AWP uses databases controlled by external partners roles under the data protection act must be identified. In addition the manner by which AWP is able to receive a live copy of all information recorded by AWP staff must be specified.
- AWP should have primary ownership of information recorded about AWP Service Users.
- A robust on-going review of concept definitions, interface clarity, and guidance must be maintained and evidenced for existing and developing systems.

**Principles (Enabling Technology)**

- Processes must exist for staff to suggest and innovate and for ideas to be championed and developed in a safe way.

## Appendix IV – Principles by wave.

**Wave One Principles**

- Clinical involvement will be the cornerstone of clinical systems development . Engagement to be demonstrable.
- Processes must exist for staff to suggest and innovate and for ideas to be championed and developed in a safe way.
- Delivery Units must be able to meet the information requirements of their commissioners whilst also meeting those of the Trust.
- Where information can be collected effectively in the Trust core system, and there is a desire to collect that information, it will be collected in the Trust core system.
- Requests for new clinical systems should be appraised against the risks and benefits of using a single 'Core system', if available.
- Changes to standard clinical information system processes will be subject to a clear change process involving stakeholders from the delivery units and central services
- Guidance on standards, operation, system changes and plans will be clearly available to users.
- AWP will develop a workplace support network to assist staff in the use of clinical systems in addition to the availability of more formal training.
- Where performance information is sourced from clinical systems, recording will not impact normal care processes.
- Systems will be accessible across organisational boundaries
- Where AWP uses databases controlled by external partners, roles under the data protection act must be identified. In addition the manner by which AWP is able to receive a live copy of all information recorded by AWP staff must be specified.
- A robust on-going review of concept definitions, interface clarity, and guidance must be maintained and evidenced for existing and developing systems.
- AWP should have primary ownership of information recorded about AWP Service Users.
- Information technology principles serving clinical services in AWP will assume the professional conduct of staff, and provide tools for the management of this at profession or locality level.

**Wave Two Principles**

- The core AWP clinical information system must be configurable locally, by Trust staff, to meet the requirements of the organisation. This includes the ability to collect new data sets and to organise this in a user friendly manner.
- Achieve a paperless Integrated Digital Care Record (IDCR). Where paper is recognised as providing a most appropriate medium this should be justified and centrally registered
- Core clinical systems will be accessible for both reading and recording at the point of care, and as a single record.
- Users of clinical systems should have to record information only once, and in one system.
- Core clinical systems must allow, and facilitate, inter-organisational exchange and use of information
- Users of clinical systems should be able to access the full clinical record from one clinical system
- Systems will be Clinically Intuitive and compliment normal workflow. They will be 'user friendly' for practitioners
- Clinical systems and interfaces between clinical systems will access live data.
- New externally sourced clinical systems must be NHS ITK accredited. Internally developed systems must safely meet internal interoperability standards
- Infrastructure must be capable of achieving the highest possible speeds for any clinical system, as promoted by the supplier.

**Wave Three Principles**

- Service Users will have appropriate access to their mental health care record, and to internet resources, via Trust systems.

## Appendix V - Strategy Path – Key deliverables

*This list of deliverables is intended to be **indicative** not exhaustive.*

| Deliverable | Active/ New | Delivery | Notes / Contribution to the strategy |
|---|---|---|---|
| Mobile working – full rollout of 3G tablet devices to all appropriate staff. | Active | 2013 | Availability of digital record wherever staff are<br>Identification of limitations of solution and participation in the identification of solutions |
| Identification of systems interoperability standards which all clinical systems should comply, whether purchased or built in-house | New | 2013/14 | This will provide a checklist (which should be reviewed on a regular basis, according to the update of national standards) that will form part of the evaluation checklist for bought solutions, or that is a standard 'non-functional ' requirement to be built in house. |
| Clinical Systems user group | New | 2014 | On-going engagement of users in order to inform future policy, practice and strategy. To meet two times per year. |
| RiO upgrade to version RiO2 | Active | 2014 | Though this release has little direct benefit to users this offers two potential advantages in terms of Strategy:<br>1. Should AWP choose RiO as a replacement system, migration of data should be less complicated from a RiO 2 platform.<br>2. RiO 2 electronic prescribing may offer a credible eprescribing solution, removing the need for a separate system and another interface. |
| e-prescribing Solution | Active | 2014 | Assess potential of available systems, choose one and either pilot or implement.<br>Assess benefits of systems and risks & benefits of integration potential. |
| Convert departmental systems, to conform to interoperability standards | New | 2014 | Example – PCLS Access database. The architecture of the system providing this requirements needs to be reviewed and updated to meet inter-operability requirements |
| Service user / carer endorsement by physical signature | New | 2014 | Explore digital means to show 'approval' |
| RiO exit and replacement project | Active | 2015 | CCN4 Contract ends. Need to procure replacement system and put in place.<br>This incorporates the need to find a data hosting solution |
| Interoperability solution identification | New | 2015 | This will be lead by IT but representation of the service will be required. |
| Identification of document management system with send and retrieve capabilities | New | 2015 | A solution ids required to the storage of electronic documents. This should be fully integrated with the clinical systems. It would have ability to send documents such as discharge letters electronically to external systems such as GP systems. |

| | | | |
|---|---|---|---|
| Incorporate Interoperability (ITK) standards | New | 2015 | National Standards |
| Internet provision for Service Users at AWP sites | New | 2015 | Service User focused – recovery of service user in the 'outside world' of technology – part of everyday life. |
| Assess non core digital record keeping for adherence to standards for interoperability and incorporate into main records | New | 2014-17 | Interoperability solutions must be identified and put into action for all systems |
| Convert remaining paper based records to digital format. | New | 2017 | All non digital records should be identified, reviewed, requirements articulated and solution proposed in priority order. |

**Appendix VI - Clinical Systems/CCN4 exit strategy programme structure**

Avon and Wiltshire NHS
Mental Health Partnership NHS Trust

**Programme Manager - Academy**

**Academy**

Care Pathway and Clinical Standard Programme

What are National/AWP quality standards and pathways

Agree framework of Care Pathways e.g. PBR Clusters?

Agree essential minimum standard interventions

Decide whether to use agreed clinical knowledge in the clinical IT "view" to improve clinical practice. Knowledge Management e.g. prescribing formulary

Clinical Business Intelligence (Dashboard)

What is a good Care Plan / Assessment / Formulation / etc.

Academy work plan prioritisation 13/14

**EPR Programme Board**

Clinical Information System Replacement Programme

What are the considerations in pursuit of a Clinical Information System to Replace BT RiO

Clinical Systems Strategy

Clinical Information System re-tender (December 2013)

Interoperability

Decision on AWP Data Centre

Decision on Bristol tender

IT System response

How to capture and store/analyse essential clinical data not held in new CIS

Very specific focussed work

Short term outcomes

Resource and skill matrix

**Clinical Systems - CSMG**

Maximising Effectiveness

What can we do now to improve the way we use BT RiO

Clinical Admin

Review existing system interfaces to avoid double entry

RiO Training best practice

Review CPA and records Management procedures

Review where to input data to RiO

Voice Recognition Software

Other IT System productivity gains

Review other clinical IT systems e.g. CAST, Pharmacy

Report Sponsor: Nursing and Quality Directorate