



**Evaluation Support: Mid Hants ERDIP
Evaluation Report**

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1 BACKGROUND

1.1 Introduction

- 1.1.1 This report draws together the results of all evaluation conducted with users of the CHEHR developed in North and Mid Hampshire.
- 1.1.2 The CHEHR architecture comprises three elements:
- The EHR¹ developed for use in emergency situations, known as CHEHR, which went live at the beginning of February although it was not used in A&E until 21 February 2003;
 - The patient Personal Health Record, also known as the Patient Portal, which became operational during the last week of March 2003;
 - The Clinical Governance database.
- 1.1.3 This evaluation focuses mainly on the EHR, although two interviews with patients have also yielded some feedback on the Patient Portal. Evaluation of the Clinical Governance database sits outside the scope of the N8 Work Package.
- 1.1.4 The Project Board has recently been advised that the system can now be supported from the LIS programme so that it can be resourced and further developed over the next 6 months.
- 1.1.5 One of the key aims of the N8 Work Package was to examine the level to which ERDIP EHR products delivered those benefits expected of them. Another aim was to draw out the lessons learned from the ERDIP teams to inform the future direction of the development of an Integrated Care Records Service (ICRS), a key part of the National Programme for IT (NPFIT).
- 1.1.6 This report focuses on providing data that can be used to inform both the future of the North and Mid Hampshire EHR and NPFIT.

1.2 Evaluation Methodology

- 1.2.1 In addition to pulling together the Lessons Learned from reports and discussions with the ERDIP team, two aspects of the North and Mid Hampshire EHR were considered during evaluation:
- Were the expected benefits realised by users?
 - What functionality did users want from the system?
- 1.2.2 Given the wealth of anecdotal information already gained throughout ERDIP, it was felt that it was important to gather as much 'hard' quantitative data as possible.
- 1.2.3 Several **benefits** were expected from the introduction of the EHR, which are defined in **Figure 1-1**.

¹ This incorporates two products known as Patient Finder and Virtual Casenotes which are referred to by users later in this report

Figure 1-1 – Expected Benefits of the Mid Hants EHR

Benefit Category	Description of Benefit	Beneficiary	Described in:
Improved decision-making	Access to all clinical information in emergency situations will improve decision-making by enabling staff to provide the correct treatment sooner (e.g. insulin treatment for diabetics)	Patients Practitioners	CHEHR website
Improved efficiency	Access to all relevant clinical information on-line will free-up time currently spent phoning others and searching for records	Practitioners Managers	CHEHR website
Increased patient satisfaction	Access to all relevant clinical information will prevent patients making unnecessary trips for tests and consultations	Patients Practitioners	CHEHR website
	Access to all relevant clinical information will reduce patient distress which may be caused by making repeat visits for duplicate tests and consultations	Patients	CHEHR website
Improved confidence in health professionals	There will be increased patient confidence through knowing healthcare professionals have access to their medical history	Patients	Information for Health
Improvements for staff	The availability of up-to-date clinical data will improve staff safety, reduce staff stress and improve job satisfaction	Practitioners	Stakeholder workshops
			Information for Health
Improved aftercare	Passing information on to others will improve the quality of aftercare	Patients Practitioners	Project Initiation Document

1.2.4 Assessing the **functionality** of the system covered the three areas identified in **Figure 1-2**.

Figure 1-2 – The functionality of CHEHR

Aspect to be assessed	Specific area	Prime users
Usefulness, clarity and relevance of content	Clinical data	Practitioners
	Non-clinical data	Patients
	Data added by patients	
Electronic access (to record)	Frequency	Patients
	Usefulness	Practitioners
Accuracy of data	Clinical data quality	Patients
	Non-clinical data quality	Practitioners

1.2.5 Identifying the **Lessons Learned** with the ERDIP team was approached both top-down and bottom-up, in order that as much information could be extracted as possible. Firstly, the team were asked individually to describe: achievements of which they were most proud; disappointments they had during

the life of the project; and those things that would be managed differently next time. Secondly, a matrix structured to cover the areas of ICRS, consent and confidentiality and infrastructure was populated with information gleaned from reports already produced by the site. The team refined the list of lessons learned and worked to infer implications for ICRS.

N8 Evaluation Activities

- 1.2.6 Several activities were used to obtain data to inform these three aspects of evaluation. The N8 Evaluator conducted all conversations with staff and patients in order to ensure objectivity.
- 1.2.7 **Pre-implementation questionnaires** were completed by eleven staff, which focused on their expectations of benefits that would result from accessing the EHR, the functionality they would expect to find useful, and their fears and concerns about potential misuse.
- 1.2.8 **User logs** were provided for each user once they had been trained to access the system. They were asked to complete a log at the end of every shift. To date, 148 user logs have been received and analysed. One member of staff (a Senior House Officer in A&E) who accessed the EHR many times over a period of a month provided a useful **written summary** of her experience and recommendations.
- 1.2.9 **Semi-structured interviews** were carried out with staff who said that they were happy to discuss the EHR in more detail. These staff comprised:
- Two members of staff working in the Emergency Medical Assessment Unit (EMAU);
 - A GP;
 - A Consultant in A&E (who had not the system himself but managed the staff that did access the system);
 - A Service Manager within Hampshire out Of Hours (OOH) Social Services;
 - An NHS Direct Nurse.
- 1.2.10 Staff were asked to comment on their experience of accessing the EHR to date, the functionality they would or had found useful, to rate a set of benefits statements, and to outline any concerns they may have about the EHR. The rating scale for benefits statements ranged from 1 = do not agree at all to 5 = completely agree. These interviews were conducted by telephone at the end of March and beginning of April 2003. Unfortunately despite a great of effort by the ERDIP team, it was not possible to make contact with a member of staff from the Ambulance service.
- 1.2.11 **Semi-structured telephone interviews** were also carried out with **two patients** who were willing to discuss their experience of accessing both the EHR, and their Personal Health Record in more detail.
- 1.2.12 A **Lessons Learned workshop** with the ERDIP team held at the end of February 2003 with three members of the ERDIP team.

2 EVALUATION RESULTS

2.1 Structure of this Section

- 2.1.1 The presentation of results follows the same order as the methodology section and is therefore organised as follows:
- Information about access to CHEHR (taken from user logs and user telephone interviews)
 - A summary and analysis of the benefits delivered from CHEHR (using average scores from ratings)

- A summary and analysis of the functionality aspects of CHEHR
- A summary of the Lessons Learned from the Project Team with explicit cross-references to any quantitative evidence obtained

2.2 Summary of Access to the CHEHR

- 2.2.1 Information in this section draws on information obtained from user logs and semi-structured telephone interviews. Despite assurances from the system supplier that audit mechanisms identified as a requirement were available, repeated attempts to extract useful information by the ERDIP team were unsuccessful. Therefore, the ERDIP team were not confident about its validity and it has not, therefore, been included for analysis.
- 2.2.2 The 148 User Logs revealed that eight individuals had accessed the system on more than 260 occasions. These staff comprised two Senior House Officers (SHOs), a Senior Registrar, two NHS Direct Nurse Advisors, two Practice Managers, and two GPs. Of these eight staff, two SHOs in A&E used the system most frequently with their logs accounting for 92% of the total. Despite the fact that on 118 (80%) occasions the clinical record required was not found on the system, only on 6 occasions do users report being deterred from using the system again. One user who was interviewed reported that he felt he only needed to find one piece of useful information to make it worthwhile to continue accessing the system.
- 2.2.3 The six staff interviewed by telephone had been using the system for between two and six weeks. Over that period they had between them accessed the system on approximately 46 occasions, and tried to find records for approximately 55 patients. They estimated that they successfully located a record for just about 90% of these, but in most cases they did not find anything other than demographic and GP details. Just 29% of the 55 patients had more information.

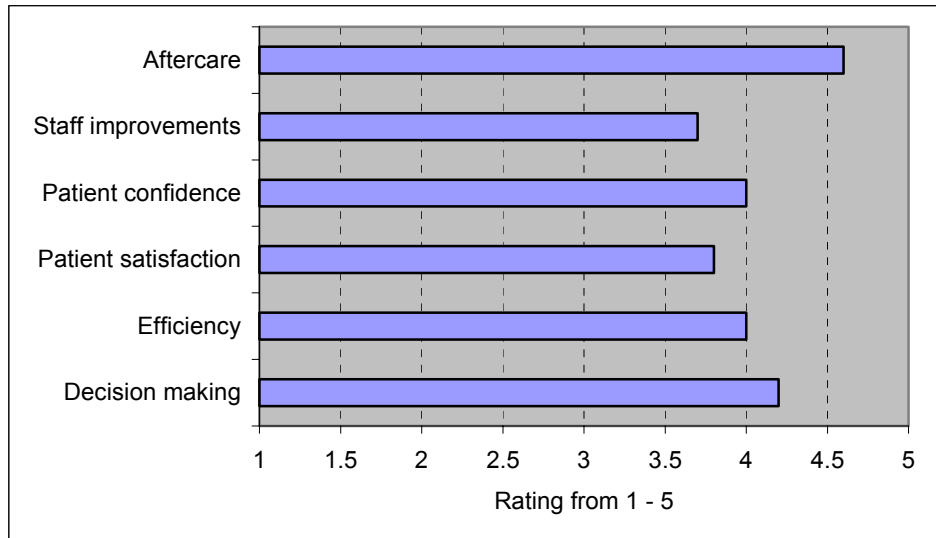
2.3 Benefits of the CHEHR

- 2.3.1 Benefits statements used in the telephone interviews were grouped to form the six benefit categories initially identified in **Figure 1-1**.

Staff views on CHEHR benefits

- 2.3.2 All six clinical staff interviewed rated the benefits of the EHR quite highly as illustrated by the results shown in **Figure 2-1**. The rating obtained overall was 4.0.
- 2.3.3 Particularly high ratings were obtained regarding improvements expected for quality of aftercare and decision-making, with the lowest rating obtained for improvements for staff (in terms of improving their satisfaction levels, reducing stress or improving staff safety). These results correlate well with the benefits expected from the system by users before the system was implemented.

Figure 2-1 – Summary of average user ratings on the benefits of the CHEHR



2.3.4 Several comments made during these telephone interviews relating to current and anticipated benefits are of interest and are mostly positive. They include a couple of observations on the potential use of the EHR in non-emergency situations.

- ‘Decision-making will only be helped if information is accurate’
- ‘I can see that patients may be encouraged to see there is continuity between services’
- ‘GPs may benefit from access to the EHR in non-emergency situations - at the moment they are reliant on receiving faxes from EMAU’ – the user went on to describe the time-consuming nature of sending faxes.
- ‘Waiting list and a record of outpatient attendances help to deal with patient queries or anxieties in non-emergency situations’
- ‘I can see the potential of the system but I was a bit disappointed there wasn't more information recorded on the patients I looked up’

2.3.5 The summary provided by the SHO in A&E had both negative and positive comments on the benefits of the system:

- Once (a record) in the EHR was found, the usefulness of it was widely varied. Frequently the only information entered was the patient details, or clinic letter, which gave no additional clue to past medical history. Likewise the Social Services input was very limited.’
- On three occasions, the EHR proved invaluable. In each instance, there was a large amount of information from hospitals and GPs, and it significantly speeded up diagnosis and treatment. It was therefore clear from these occasions that when adequate relevant information is supplied, the benefits to the patient are great.’

2.3.6 Despite asking specific questions about a number of possible concerns that staff may have about use of the EHR, all of those interviewed reported that they did not think they were any issues that needed addressing. One interviewee reported that he was ‘...very impressed by and feel very confident in the security features used’ referring to password procedures and use of the biometric mouse.

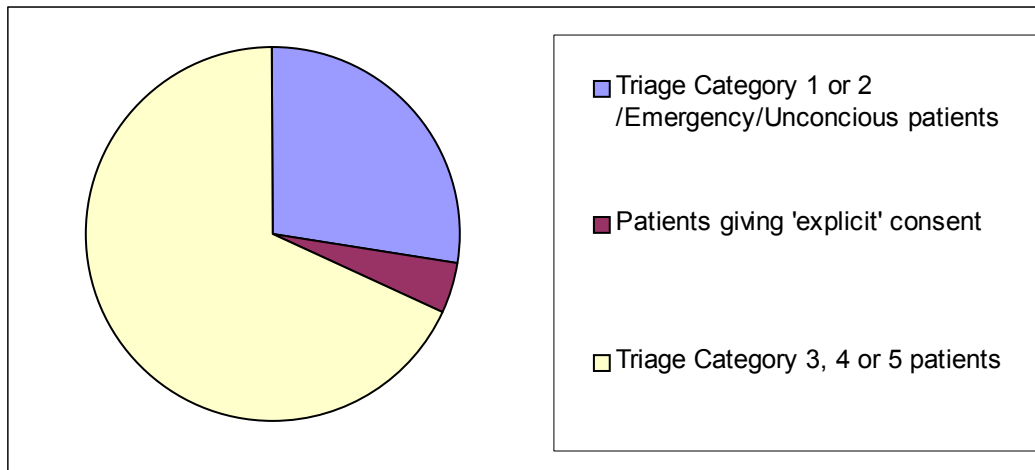
Patient views on CHEHR and Patient Portal benefits

- 2.3.7 Three patients have completed two questionnaires, one asking for their views of information held in the EHR and the Patient Portal. This data has not been presented graphically due to the limited number of responses. Two patients agreed to discuss their responses further with the Evaluator. They are referred to as Patient A and Patient B to preserve their identities.
- 2.3.8 Both patients recorded similar responses on the questionnaires. They reported that they found their record interesting (although both said that there wasn't anything there that they didn't expect), they felt that access to their record would be useful in an emergency, and they were happy that their records may be seen by others on a need-to-know basis. They also said they were satisfied that appropriate security and confidentiality measures had been put in to place. Both would only want to see their EHR on an occasional basis with Patient B reporting that he would like to be able to view his record in NHS locations.
- 2.3.9 However discussions over the telephone revealed views that were more diverse. Patient A remained very positive about the potential use of his record and thought that he may want to view his record (or his children's) to ensure that immunisations were kept up-to-date (for holidays, etc). Patient B on the other hand felt that they were not sure it was right for all patients to see their electronic record, quoting 'a little knowledge can be a dangerous thing', and was equally unsure about whether or not Social Services records should be shared. Patient B did go on to explain that her confidence in the quality of data in the system had been shaken somewhat by the appearance of someone else's details in their record. This matter has been investigated thoroughly and the reason for the error was identified within 24 hours. A system error occurred which caused 'all' GP medication summaries for a single day to be posted to the wrong record. Both Patient B and her GP were informed that the problem had been resolved and subsequently the GP continued to use the CHEHR. The Project Manager is satisfied that it would not be possible to duplicate this error.
- 2.3.10 Responses to the Patient Portal questionnaire were similarly positive. Both patients stated the idea of having a Personal Health Record (PHR) was a good idea, and that the one developed by the Mid Hampshire was easy to use and well designed. They both wanted doctors to be able to view their PHR and felt that the links to other sites were useful. Patient A however felt that there may be a danger in providing too much information that had the potential to confuse - he was particularly concerned about the elderly.

2.4 Functionality and usability of the CHEHR

- 2.4.1 Information as regards functionality is taken from user logs and telephone interviews.
- 2.4.2 **Figure 2-2** shows a summary of the category of patients for whom records were identified taken from the user logs. As can be seen, the vast majority (69%) relate to Triage Category 3-5 patients i.e. those with less serious conditions and this may account for some of the negative comments recorded.

Figure 2-2 – User Log Patient Categories



Triage	Condition	Treatment	Example
1	Patients in need of immediate treatment for preservation of life	Immediate resuscitation	Heart Attack RTA Allergy
2	Seriously ill or injured patients whose lives are not in immediate danger	Very Urgent	Fractured Femur
3	Patients with serious problems, but apparently stable condition	Urgent	Mild Asthma
4	Standard A&E cases without immediate danger or distress	Standard	Sprained Ankle
5	Patients whose conditions are not true accidents or emergencies	Non-urgent	Headache

2.4.3 Some of the comments entered by staff on these shift logs yield useful information and are shown below (only the most illustrative are included and have been chosen to reflect the balance of positive and negative remarks received). These have not been sorted into categories because it is felt useful to have comments in their entirety. They follow a chronological order and begin with comments recorded on 03 February 2003.

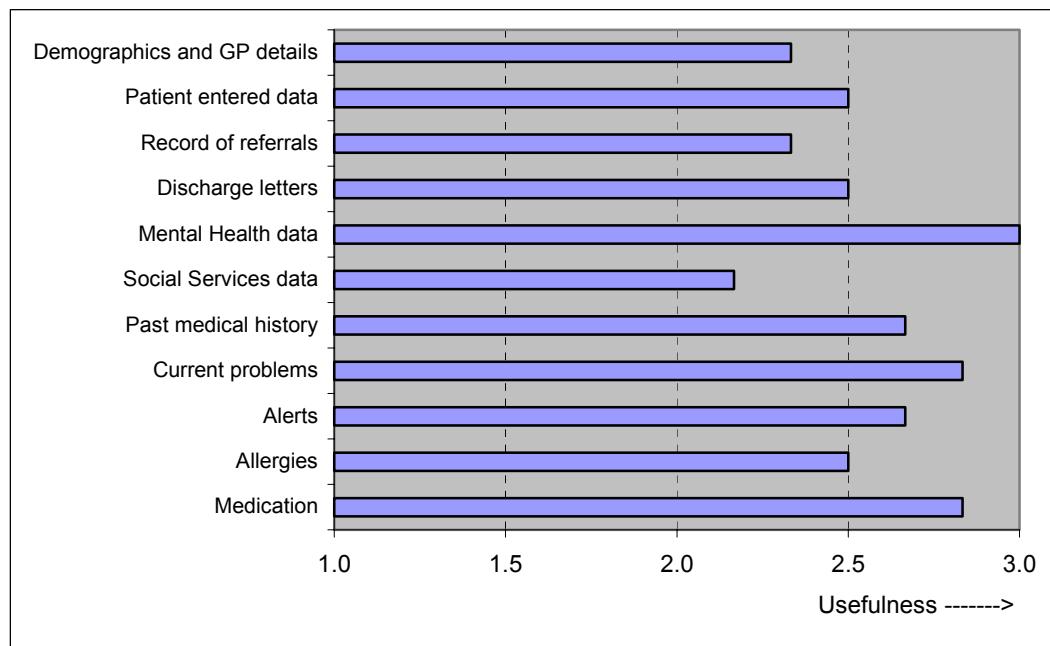
2.4.4 Three important points emerge from these comments. Firstly, the importance and relevance of data held in GP systems is mentioned frequently. In particular, staff want to know about the past medical history, medication and allergies. Secondly, users felt that there were significant advantages to having more information in emergency situations for those who were seriously injured and/or confused, but they questioned whether or not they required additional information for simple and/or minor cases. Thirdly, it was apparent that the SHOs were finding the low 'hit-rate' frustrating.

- 'Difficult to read at times due to layout of screen... confusion of different day/mth appearances. Able to print information for other people. Poor information from GP consultations. Size of screen makes it difficult to read information.'
- It would be useful 'to know which items are on system for specific reason other than 'standard' i.e. social services documents were often present but have no information (other than details) Need to know why patient is known to Social Services? Will be beneficial for frequent/recurring attendees.'
- 'More past medical history and social history' *would be useful*
- 'Currently, starting to use (*the EHR*) less. Selecting use for more appropriate patients, usually "majors"/incoherent patients. If more people/depts put more (information) in then a greater proportion of patients will be on system.'

- ‘The CHEHR was used to check whether a patient's ECG showed LBBB (a *form of heart block*) that was new or old. Records (a discharge summary) showed previous LBBB was noted and the decision NOT to give streptokinase was made. This was a few moments later then confirmed with paper records. Very useful!’
- ‘Having problems with searching for patients. Was not able to find on Patient Finder or Virtual Casenotes initially. Then tried with name and Date of Birth (discarding surname) and patient was found. Had to try several combinations to reassure myself patient was not on the system.’
- ‘Free text to supplement Read-coded GP information (*would be useful*) and include values found on examination ES, BP etc.’
- ‘Need more information, which is clearer and in a better format. Particularly clear current Discharge History & up to date Previous Medical History. It is confusing if have two different sources of same information e.g. Hospital Discharge History & GP Discharge History which can be different.’
- ‘Mainly minors seen on shift which can be managed without needing CHEHR. All in all can be very useful - especially if more sources allow more information to be put on system. In some instances, even now, its use has affected immediate management of potentially very ill patients.’
- ‘Used system non-specifically to see if any info was available. An old A&E Discharge Summary was helpful as it had provisional comments about radiography that was taken at time. Although formal radiology reports would have been useful here.’
- ‘Used system to see if any additional information could be obtained. There wasn't although the clinical case was simple. It highlighted that the EHR clearly does not need to be used for simple/minor cases in the A&E environment.’
- ‘Was able to use system to support history given by patient, including important negatives.’
- ‘GP records were not present and would have been useful. Social Services records were present but lacked detail as to why they were involved - care packages etc. Patient provided a poor history..... we were able to confirm personal details with paper records and establish that patient had been attending various clinics which hinted at past medical problems.’
- ‘Gave more detailed info about past medical history than given by patient.’
- ‘Information of why patient had GP tests done would be helpful.’
- ‘Only had information from this year, whereas information from further back was needed.’
- ‘All medical history was present from the GP.’

2.4.5 Telephone interviewees were asked to rate the usefulness of groups of data either held in the EHR currently or planned for the future. A score of 1 was given to all responses that considered the data ‘Not useful’, a score of 2 to any response rated as ‘Quite useful’ and a score of 3 to a response that considered data to be ‘Very useful’. A summary of the responses is shown in **Figure 2-3**.

2.4.6 There was considerable variation on responses depending on both role performed and current access to data currently. For example, nurses at the EMAU rated most groups of data highly (this may be because they only have access to very limited datasets currently) whereas the GP and Social Service manager were interested only in fairly specific groups. It is noteworthy that all six interviewees wanted to be able to access Mental Health data. Data collected prior to implementation showed a slightly different picture with current problems being identified as the most useful.

Figure 2-3 – Telephone responses to the usefulness of specific data groups

2.4.7 Comments noted about the current (or possible future functionality) of the CHEHR during these interviews include:

- ‘Social Services data would be very useful, particularly for the elderly’
- ‘Data is currently very acute oriented. Where available, medications and allergies should be pulled through from GP systems’
- ‘Carer information for the elderly would be very useful, especially during the winter’ ...the interviewee went on to refer to Winter Pressures.
- ‘Demographic information is useful in emergency situations as patients are often confused’

2.4.8 In addition, several interviewees made comments relating to the usability of the system (which echo comments on the user logs) as follows:

- ‘The nature of my work prevents me accessing the system easily’
- ‘The dates are shown back to front which made it confusing’
- ‘The front window isn’t user friendly’ referring to first screen which was described as confusing and cluttered
- ‘The Out Of Hours Services need access to the system desperately’
- ‘There is too little data on the system right now’
- SHO comments in her written summary include: ‘I was frequently unable to obtain an NHS number for patients. For those that could be obtained, it was often a drawn out process. The amount of data required to locate a patient was variable and inconsistent. As a result it was time consuming typing in the various combinations of patient details.’

2.5 Lessons Learned

2.5.1 The implications for ICRS development are organised into three categories (ICRS, consent and confidentiality, infrastructure) as requested by the NHSIA.

ICRS

2.5.2 The combination of a community-wide patient master index plus an interface engine has enabled Mid Hampshire to develop an operational solution, which is demonstrating a number of real and perceived benefits.

2.5.3 In many ways, CHEHR has become operational by using systematic and pragmatic solutions to a number of significant cultural and technological barriers:

- Clinical acceptance of the security and confidentiality framework
- The creation of a longitudinal record from a significant number of different NHS and partner organisations
- The extraction of data from GP practice systems
- The implementation and operation of a number of interfaces with legacy feeder systems.

2.5.4 The fact that CHEHR has addressed these issues and has now become an operational system is an impressive achievement.

2.5.5 The way that CHEHR has made progress provides a number of valuable clues to potential migration paths towards the ICRS vision:

2.5.6 The use of a community-wide patient master index that links the 'Exeter' system to the Social Services Client Index provides a platform that does enable information to be linked from different source systems. The use of a community-wide PMI has already been identified as an early component of the transition to ICRS.

2.5.7 The use of a single interface engine has enabled CHEHR to use existing interfaces from feeder systems rather than to create new interfaces from feeder systems. This has enabled CHEHR to make fast progress towards the creation of a single longitudinal record sourced by multiple feeder systems.

2.5.8 CHEHR used 'documents' to display information from the longitudinal record from feeder systems. This approach enabled CHEHR users to 'see' the different elements of the clinical history with clear provenance information. This approach has enabled users to have more confidence in the data that is seen, even though there are clear inconsistencies and data quality issues with the different types of information drawn from feeder systems. This approach has enabled benefits to be realised much earlier than the evaluation team would have expected.

2.5.9 CHEHR has shown that users are more aware of data quality once clinicians have meaningful access to relevant clinical systems, although no evidence of this has been provided in the user-focussed evaluation. There are indications though that peer pressure and recognition that there is a collective responsibility to contribute accurately to a patient's clinical record are important drivers towards improving data quality. Whilst data quality remains poor, devising a system, such as CHEHR, which makes the provenance of the data evident, helps to ensure that care is taken with its use.

2.5.10 The CHEHR system also draws information into a clinical governance repository. A number of pieces of analysis from this repository have shown that there is potential to gain a clearer picture of clinical outcomes and quality issues across the 'whole care system'.

- 2.5.11 The CHEHR architecture is based upon independent front-end and back-end ‘off the shelf’ components. The back-end systems of PMI and an interface engine are independent of the front end data ‘viewers’. This ‘client’ ‘server’ architecture enables each component or module to be changed or replaced as required without needing to re-develop the whole system.
- 2.5.12 The development of the ICRS spine should be informed by the CHEHR user requirements and the pragmatic approach to assembling the longitudinal record. While the use of legacy systems and document-based EHR structures might not provide a long-term solution to ICRS, it does provide a real opportunity to make quick progress towards the ICRS vision and early ICRS benefits.

Consent and confidentiality

- 2.5.13 CHEHRs approach to consent and confidentiality was inclusive, well-structured, systematic yet pragmatic. The CHEHR team worked hard to gain the confidence of the full range of stakeholders, took time to fully understand the concerns of clinicians and health care practitioners and then gained their confidence by systematically working through the issues together.
- 2.5.14 The resolution to the information sharing debate was a crucial element of the project that enabled the system to become operational. This debate centred on the meaning of ‘information sharing’ and when it takes place. By collectively establishing that information sharing doesn’t finally take place until the information from the EHR is accessed², the longitudinal patient records could be created without needing to gain patient consent. Patient consent could be achieved at the point of access to the EHR.
- 2.5.15 This approach and deliverables are extremely relevant to ICRS and needs to be more widely shared across the NHS.

Infrastructure

- 2.5.16 The CHEHR project also provides some clues to the infrastructure that will be demanded by ICRS users:
- The implementation of the ICRS vision will need ‘top drawer’ infrastructure performance. Users of the EHR will want to rely and depend upon the availability, performance and resilience of the underlying IT.
 - To ensure that maximum use is made of the data within ICRS, users will need to be supported by:
 - Change management to enable ICRS to facilitate new ways of working
 - Effective user training and development to ensure efficient system use.
- 2.5.17 ICRS implementation will also need effective project management and project assurance at all levels:
- National procurement
 - Local selection
 - Local implementation
 - Local change management
 - Local operation

² providing the data retains its integrity and there are proper access controls. There is more detail about the information sharing debate within T35 CHEHR deliverable

3 CONCLUSION

3.1.1 It is suggested that the CHEHR team should action some of the issues raised by its users. In particular:

- They should work with their new suppliers to make improvements to screen layout, the patient search facilities, date formats, and improving the feeds obtained from GP systems. Also ensure that audit trails can be extracted.
- They should consider extending the scope to cover feeds from a wider geographical patch of GP practices so that the 'hit-rate' improves. Although users appear happy at present to search for patients despite the low success rate, it is unlikely this will continue for much longer. In addition several users have requested access to Mental Health data which is not available at present
- Examine whether or not to focus access to the CHEHR in situations where most benefits are likely to be realised, such as Triage 1-2 patients. This however may be too simplistic a solution that does not provide the expected improvements, as there have been cases where people have inappropriately triaged patients into Categories 4 or 5 because of the limited history available. These patients are then often left to wait the longest before being treated, which subsequently leads to poorer outcomes for such patients. Dealing appropriately with this complex situation requires more consideration by local clinicians.

3.1.2 The team should continue to obtain feedback from users for two purposes. Firstly this feedback can be used to further improve the functionality of the system over the next few months. Secondly, quantitative data, if yielding positive results, can be used as evidence to persuade stakeholders to continue their support in the future. This support and active involvement from stakeholders is something that the Project Team has achieved very successfully so far.

3.2 CHEHR Benefits

3.2.1 The usefulness of the EHR is most recognised by clinicians for the more seriously ill patients requiring treatment in emergency situations. Some staff could see that its functionality may be helpful in other situations such as responding to patient queries about waiting lists or ensuring that GPs receive timely information on discharge. Users rated the system highly for improving clinical decision-making and improving the quality of aftercare.

3.2.2 Two of the key strengths of the approach taken to developing the EHR has been the decision to develop a system which extracts information from source systems that are used operationally, and retaining data provenance so that users can make informed decisions on the reliability of this data.

3.3 Implications for ICRS and NPFIT

3.3.1 A solution, which combines the use of a community-wide Patient Master Index with an interface engine, has been very successful. This architecture may be effective, not only as a component of ICRS in 2008, but also to facilitate the migration of existing solutions used by Trusts to ICRS.

3.3.2 The fact that the Mid Hampshire CHEHR has not suffered from performance problems may provide useful indications that either the architecture employed by Mid Hampshire or their network configuration is of a type that should be employed elsewhere.

3.3.3 The model developed by Mid Hampshire (Product T35) to deal with confidentiality and consent issues should be adopted nationally.

3.3.4 The authentication methods and solutions used by Mid Hampshire should be formally evaluated in order to determine their use within ICRS.

- 3.3.5 The coding issues raised by North and Mid Hampshire as regards mapping between Read V3 and ICD should be resolved as a matter of some urgency. Unless this issue is taken forward there will be little clinical data of any value with which to populate ICRS.
- 3.3.6 There is an urgent need to standardise the amount and coding structures used to capture primary care data on GP clinical systems, as it can provide some of the most useful information to support the provision of care in emergency situations. There is currently too much of a focus placed on the collection of acute data, which is useful but often does not provide a full list of medication, allergies and a full medical history.
- 3.3.7 Use of the Personal Health Record in Mid Hampshire should be evaluated over the next six months to determine how best to develop the Personal Healthspace on ICRS. The look and feel of the Mid Hampshire solution could provide a blueprint for this.