Appendix 2 – GP to GP record transfer

This appendix is a supplement to the Good Practice Guidelines and particularly to the section on Data Transfer whose general provisions and discussion provide throughout the following part. The appendix was constructed on the basis of the experience of the GP2GP record transfer project validation exercises and the clinical involvement therein. It is to be expected that this appendix will form a core part of the good practice guidelines (following any necessary modifications) after the actual introduction of widespread GP electronic record transfer.

Specific advice on GP to GP transfer will be made available as a supplement to these guidelines at www.connectingforhealth.nhs.uk/programmes/gp2gp/ and Scottish Reference needed.

A2.1 The rationale for electronic GP-GP record transfer

The overwhelming majority of U.K. general practices (>96%) are computerised in some way or other. A sizeable proportion of these practices (probably the majority – but there is no evidence more recent than 1996) use their computer systems for recording patient record information in whole or in part. The GP electronic record was "legitimised" in 2000 following the construction of a previous version of these Good Practice Guidelines.

Paradoxically, the widespread use of electronic patient records has resulted in deterioration in the completeness and integrity of patient record information at the point of transfer of care between practices. This results from a variety of causes whose main headings are;

- Patient records that are an unpredictable mix between paper and electronic.
- The inability to transfer the electronic part of the record except as a print-out and the consequent need to re-key information (with its associated error factors).
- Variable professional skills and assiduity in recording information within both paper and electronic versions of the record.

The net effect of the above is to place difficulties on new practices in identifying salient information in transferred records and in incorporating that information within the new record. This is to known to have significant (but unquantified) resource implications for practices. There is also widespread anecdotal evidence of resulting adverse effects on patient care.

The rationale for the electronic transfer of records is therefore;

- As a support for electronic records in general practice and their general benefits in terms of decision support and audit/governance abilities.
- To obviate the need, as far as possible, for re-keying of paper-based information for new patients and thus reduce resource implications
- To reduce the risks to patients arising from the transfer of confusing records

A2.2 The nature of electronic GP-GP record transfer

Electronic patient record systems in general practice in England are provided by the commercial sector. At the time of writing this annex to the Good Practice Guidelines, eleven different commercial suppliers are known to be involved in this provision. In Scotland, the majority of practices use GPASS but there is still a mixed economy of systems, with at least four commercial suppliers having significant numbers of users.

Each of the systems so provided is designed differently and, until recently, none of the systems was constructed with the requirements of clinical data interchange in mind. In consequence, the data structures and data views are heterogeneous (see discussion in the Data Transfer chapter) and so there is no single simple mechanism that can be constructed that will allow the passage of structured clinical data of 100% accuracy and integrity between these different systems.

GP-GP record transfer is carried out using an electronic message which specifies a common "architecture" into which the various systems concerned may map their data structures in a form which is mutually comprehensible. What this means in simple terms is that there is a common convention for the representation of;

- Record Encounters; what constitutes a single transaction with the record such as a surgery consultation, a letter received from outside the practice, an investigation result etc.
- Names for these encounters; e.g. Home Visit, OOH Consultation, Surgery Consultation etc.
- Headings within these encounters
- Complex clinical constructs; e.g. Investigation batteries, Blood Pressure Results etc.
- Code mappings; e.g. from various sets of medication codes
- Codes and associated text
- Major modifiers of clinical meaning; e.g. Uncertainty, Allergy, Family History

In addition, there are rules which require the degradation of structured clinical information to text where, in any instance of a record transfer, it is not possible for a system to safely map into or out of this common structure.

The net effect of the above is to allow records to be transferred in a form which is 100% human readable and preserves as much of the structure of the record as possible thus reducing the need to re-key information.

There remain, however, some elements of current electronic records which cannot currently be transferred in completely structured form in every case because of different conventions for describing them on different systems or different coding schemes used.

A2.3 The limits of electronic GP-GP record transfer

There are four particular aspects of current GP-GP records where the transfer process of that record information needs to be supported by additional rules or processes if fully safe and usable records are to be reconstituted on receiving systems.

A2.3.1 Medication information

There are currently three different coding schemes for the representation of medication information on G.P. systems. Transfer of that information can be achieved by adherence to a combination of rigorous mapping rules and associated automated machine checks against those rules. Experience within the GP-GP record transfer project showed that adherence to those rules allows for a very high degree of reliability of transfer – approaching 100% but, crucially, not actually reaching that point.

The principal reasons for failure to reach 100% reliability are;

- The multiple coding schemes used and
- Failure of previous code mapping exercises (see Data Transfer chapter)

The multiple coding scheme problem cannot be overcome until the NHS implements a common coding scheme for drug information on all electronic record systems. Even then, however, there can probably never be a guarantee that legacy medication information held on computer systems was always reliably coded, particularly when those codes resulted from a historical code mapping exercise. While this is a problem that will reduce over time following the introduction of a common coding scheme, it has effects on record transfer expectations and associated good practice which are discussed below.

A2.3.2 Allergy information

Partly as a result of the multiple medication coding scheme problem and partly because different suppliers represent medication allergies differently for the purpose of prescribing decision support, it is not currently possible to exchange this information in every case in a way which allows for different systems to mutually understand it.

Within the GP-GP record transfer project a set of rules have been constructed which allow for every instance of a recorded allergy to be clearly identified as such and, when the associated information cannot be incorporated directly into a different receiving system, for this information to be presented to the user so that they can modify it into a form which conforms to that on their own system – thus preserving the ability to use that allergy information as a warning during future prescribing events.

This has effects on good practice which are discussed below.

A2.3.3 Business specific information

There are and will be from time to time, aspects of G.P. electronic record keeping that are designed to support specific business processes relating to terms and conditions of service and/or remuneration such as, currently, IoS payments and cervical cytology call/recall/targets.

For most of such processes, either different systems have different conventions for their representation or users create idiosyncratic methods for handling them or both. This has two broad consequences at the point of transfer of the information.

Firstly, while it is always possible to transfer the raw data that supports, for instance, cervical cytology call and recall between systems, it may not be the case that that information can be recreated on a receiving system so that it supports that system's

own call and recall functions. During the course of the GP-GP record transfer project, a general template for handling cervical cytology information was proposed but this has not yet been implemented and, until such a common view is held, practices will continue to have to do additional work to make such information completely useful when received from a different system.

Secondly, individual practices may create internal reports to support things like target payments based upon an internal practice agreement as to what codes will be used. These code-lists will not necessarily be the same as those used by a receiving practice following transfer.

The good practice effects of this are discussed below.

A2.3.4 General record view

As discussed in the Data Transfer chapter, transfer of information between different systems will result in an alteration in the way that information is viewed and navigated by the receiving system. This does not necessarily have any adverse effect upon the process of patient care, provided that clinical users of the systems understand that this is the case and interpret the record accordingly. Once again, this is discussed below.

A2.4 General clinical safety

Systems engaging in GP-GP record transfer will be required to adhere to some processing rules on receipt to reduce the potentially adverse effects of the above limitations.

A2.5 Electronic and paper GP-GP record transfer

The transfer of paper G.P. records alongside electronic ones will continue for the foreseeable future for a variety of reasons which include;

- The variable penetration of use in general practice of electronic records for direct patient care
- The majority of patient information from outside practices remains paper-based
- The variable degree to which such external information is incorporated into the electronic record
- The variable degree to which historical patient information native to practices has been incorporated into electronic records

The net effect of this is that, while electronic record transfer will reduce the need to re-key information, it will not remove the onus on practices to enter historical information present in old paper records.

A2.6 GP electronic record quality

However assiduously electronic records are kept, errors in their content will sometimes be present. The following examples are already known to have occurred;

- Erroneous codes added by a secretary from an inbound letter
- Erroneous diagnostic code added by a doctor on “hearsay” from a third party

- Erroneous codes added as a result of a flawed data transfer mapping exercise
- Automatic code entry as a result of software misinterpretation of inbound electronic messages
- Missing or incomplete significant data
- Data summarised from Lloyd George notes that relates to a different patient's clinical information

The general issue of good record keeping is detailed elsewhere in these guidelines. Some particular matters relating to transferred electronic records are discussed below.

A2.7 GP-GP record transfer good practice guidelines

The following guidelines apply to the electronic transfer of GP records in current technical and organisational circumstances. As practices increasingly move to full electronic records, the NHS moves to an e-commerce basis, and NHS computer systems are supported by common terminologies and architectural principles, these guidelines will change (and will become less onerous).

A2.7.1 Workflow

The precise workflow mechanisms for delivery of G.P. electronic record transfer by the NHS remain unclear at the time of writing this appendix. However, there are some general workflow principles that will apply which are as follows;

- The originating practice should at a minimum of once daily respond to requests for the transfer of electronic records
- The receiving General Practice should at a minimum of once daily collect and process requested electronic records
- The received record should be held in an “in tray” until reviewed by a GP or other appropriately trained member of staff and authorised, matched and filed within the clinical system as the accepted patient record
- All associated paper records should be sent to the responsible authority (PCT or PSD) as soon as possible after receipt of a request for those records
- The practice should have a procedure in place for dealing with electronic records received that relate to patients not currently being cared for by the practice.

A2.7.2 General Organisational

When practices receive electronic records, they will be provided with functionality on their systems that will allow them to review and, in some cases alter the information in those records at the point of filing. When doing so, the responsible user should ensure that;

- Any interim record information on the receiving system is checked against the incoming record
- Any current medication or allergy information is checked for accuracy

- Incoming record information is not modified beyond what is necessary to make it safe and usable on the receiving system
- Incoming record information is never deleted unless deemed to be unsafe in terms of its accuracy or comprehensibility.
- Notwithstanding the above, practices will need to ensure that business specific information (such as cervical cytology call/recall information) is modified on the host system to allow for its use by host reporting functions.
- When paper records are received they should be reviewed by a GP or other appropriately trained member of staff and amendments made to the electronic record where appropriate

A2.7.3 Training

- A responsible member of staff and a deputy should be identified and trained in the processes involved in GP to GP record transfer
- All users of the practice system should be trained in what to expect from electronic record transfer and, in particular, from the limitations outlined in section 1.3 of this Appendix.
- More generally, all members of the clinical team and relevant members of the administrative team should be familiar with these good practice guidelines prior to commencement of GP to GP record transfer
- Practices should identify a date from which they will implement GP to GP record transfer
- All members of the practice should be informed of the date of commencement of GP to GP record transfer

A2.7.4 Non-computerised practices

At the time of writing this appendix, it is not clear how many, if any practices remain non-computerised. Clearly, such practices will not be able to receive external electronic records. In such cases, practices will need to liaise with their PCOs to ensure that, at the very least, a system is put in place that will allow them to receive external electronic record transfers in their textual form which can then be printed and included in their own paper records.

It should also be noted that practices whose system suppliers have not made themselves capable of delivering full electronic record transfers will only be able to receive the textual versions of external electronic records in a similar fashion.

A2.7.5 Validation

The quality issues identified in section A2.6 above require practices to have in place mechanisms aimed at reducing or eliminating the impact of externally received erroneous data. The following guidelines are suggested;

- The practice's native record should be maintained in line with these "Good Practice Guidelines for General Practice Electronic Patient Records".

- Practices should follow the guidelines identified in section A2.7.2 of this appendix on receipt of an external record.
- When the patient consults for the first time their past medical history and medication history should be reviewed and verified against the received electronic patient record.
- Practices should recognise that patients themselves are generally the most competent to judge the accuracy of their own historical information, and should consider making a printed version of the record available to their patients for comment at specific points in their experience such as their first visit after registering, on the point of referral to hospital etc.

Further information on GP2GP record transfer will be available as an update to these guidelines from the GP2GP website47