

The Prison service is undertaking a review of IT. It is making a number of suggestions that would move clinical systems in prisons away from NHS practice.

Our experience is limited to at HMP The Mount, a CAT C Training prison. Our main Surgery, Archway Surgery, is in the local village. The Mount's turnover is very low compared to local prisons. The Mount's Health Unit did well in the recent Prison Inspector's Report (i.e. green).

Archway Surgery installed a clinical computer system at HMP The Mount. Twenty years' use of a computer made Archway's clinicians feel that it was unsafe not to use a computer in day-to-day clinical care. Putting in a system was urgent, so we did so at our own cost. We used a standard RFA-accredited system, the same as the one we use at the surgery. We used Microtest because it remains the fastest system for getting data in and out. At one time we used Microtest for a clinical data warehouse service covering 350,000 patients. Dacorum PCT is now taking over the system at The Mount and funding extensions to it. We have made minor modifications to the system while keeping it in line with NPfIT and RFA accreditation.

Many of the functions outlined in the Draft Specification Document have already implemented at HMP The Mount:

- Appointments system
- Disease register
- Drugs prescribing using sticky labels to go on the current charts.
- Chronic Disease Templates.
- Specialised "encounter screen" registration template for HMP
- Path Links up and running.
- Dispensing module (modified, ready but not currently used).
- QOF/QMAS returns (need to invent our own QOF to include HepB and C etc)
- Profile printouts to go in paper records or TTA
- Referral form printouts/letters with Read code and drug details.
- Photographs
- Scanning (not used presently)
- Email consultations
- New searches for Prison Specific QOF
- And more

**Prison Health Information Systems Statement of User Requirements:**

The document could make a clinical system rather dry and not user-friendly, if a system was designed from scratch on that specification alone. Attempts to introduce an all-singing all-dancing system from top down may be doomed.

*Tweaking a variety of current G.P. systems in prisons towards the user requirement goal is the right approach.*

Excessive security zeal can make the system unusable. Nurses and doctors have a duty of confidentiality. Security does become a greater issue if (or when) there is access to national data bases and data about patients which could be seen outside the department; that is the ability to see data on patients other than those with whom clinicians have direct clinical responsibility. At present G.P. systems cannot look outside their own lists. Access via NHS links runs in the background by encrypted email transfer. There is no user intervention nor are there user-known passwords for that purpose. The clinical systems do NOT have direct connections to central data bases under the current arrangements. They use authenticated store and forward. GP2GP transfer will work in a similar way. Security can be measured against current paper systems. Standards of confidentiality have been weak between prison healthcare staff and prison officers. The current computer systems and their current security is less of a problem than other more human factors as regards confidentiality within health departments. Prisoners do not have free movement with health departments.

### **Biometrics**

The NHS will be using swipe cards and pin numbers for authentication. The prison health should not have a different system. Biometrics has its problems too. Notably any biometric is reduced to a row of numbers. Numbers can be copied. A pin number remains in my head. A critique of biometrics is on <http://www.heise.de/ct/english/02/11/114/> and [http://www.theregister.co.uk/2005/04/04/fingerprint\\_merc\\_chop/](http://www.theregister.co.uk/2005/04/04/fingerprint_merc_chop/) A prisoner too could remove a finger. One finger has been lost already.

### **Culture change: Cannot use computers to drive change.**

Getting data onto the prison systems and getting the staff to enjoy using the systems is the number one priority. Most prison healthcare staff were trained and worked in hospitals, and to date expect administrators alone to use computers. G.P.s and their staff have been using computers for many years. A culture shift is needed. All G.P practices use computers, 70% of them have done so for more than a decade, and most practices are now paper-light.

### **NHS Numbers**

I have enquired on NHS Net bulletin boards about NHS numbers for prisoners, and caused a few furrowed brows. Prison Service health systems should have NHS numbers, even for illegal immigrants, as we are making NHS referrals to hospitals which require them, and Path links may not work on in some pathology labs without NHS number identifier. We need a limited form of Links “registration” process whereby the current GP/HA link process is used to get NHS Numbers for prisoners WITHOUT registering them at a practice, or de-registering them from the prisoners’ home practices, if they had any.

### **The Single Data Base vs Data Transfer**

Data on the National Spine is limited. The prison service cannot rely on the NHS NPfIT being able to transfer data from one prison to another, except for the limited spine data. This is because full patient data is only held within each region i.e. LSP area. The Mount’s system, when housed by the LSP, would not be able to share data with any of the London prisons (which are only 40 miles away) as we are different LSPs. However by using standard G.P. systems, transferring the full data between

prisons will be possible through GP2GP. This is now being trialled and should start fully in August 2005. That service will go via N3 as a background secure email transaction.

Is the prison service thinking of establishing its own central database? That would also cause problems and remove, once again, the prison population from the NHS. A separate system would fossilise.

### **Confidentiality and NPfIT.**

Changes have already been made to the NHS IT programme in that current G.P. systems are to stay.

[http://www.dh.gov.uk/PublicationsAndStatistics/PressReleases/PressReleasesNotices/fs/en?CONTENT\\_ID=4106839&chk=wHRoXk](http://www.dh.gov.uk/PublicationsAndStatistics/PressReleases/PressReleasesNotices/fs/en?CONTENT_ID=4106839&chk=wHRoXk)

Promises have been made by Ministers to the effect that patients will have the right to refuse that data their goes onto the National system. But doctors have a duty to keep full medical records. There is a conflict here unless G.P.s can continue to hold data locally. In other words retain clinical servers within their practices, which posts data to the spine and LSP. The original model was that G.P.s' data would automatically be held on servers outside their practices (In Hertfordshire, they would be in Derby). It is not clear from the Prison User Requirements if they are looking at local servers, LSP servers, or indeed a prison-wide server. Local servers are safer, give fewer security concerns, and allow for local implementation. Also local servers give flexibility. Accenture. The Eastern Region LSP would NOT ALLOW G.P.s to define their own templates. Under NPfIT at present, we would not have been able to create our own prison specific template. The trick in having local services and servers is to have a common communication medium, which exists with Path links, HA links and now GP2GP electronic transfer.

The Americans have their own NPfIT and started with a different tack.

Crucially, for G.P.s, data in the USA will be decentralized - stays where captured; quite the opposite of the original NHS vision. They do expect regulated and agreed forms of data transmission and communications standards between systems.

[http://www.connectingforhealth.org/resources/collaborative\\_response/collaborative\\_response.pdf](http://www.connectingforhealth.org/resources/collaborative_response/collaborative_response.pdf)

### **Quantum and NHS and Healthcare**

Quantum refused to allow the NHS Clinical system that we installed to use the same Ethernet wiring used for their system and LIDS at HMP The Mount. We put in our own wires. In the end I have sympathy for their stance.

It will complicate the relationship between PCT IT departments (who are at the very least involved in servicing clinical systems and their funding) and NPfIT, if Quantum/EDS has any role in Health. Perhaps Quantum/EDS could be convinced to share the Ethernet wiring, using a different network IP range, but that is the limit to their role.

Prison Healthcare departments need to have their own N3 NHS funded connection to the NHSNet(N3) and hence internet.

### **Working on the Wings**

The Quantum computers on the wings SHOULD NOT have NHS or healthcare connectivity. To do so requires such security measures as to make the systems unusable. We should maintain the current “air gap” between the systems.

Nurses working on the wings could bring NHS supplied small portable computers. We would use the PDA or laptop module for home visits, which I use at the surgery (both EMIS and Microtest have such modules). PDA/laptop system could be used in busier prisons for wing visits. PDA/Laptop modules do not need a live connection as they store and update the main server on return to health/surgery.

At The Mount we are installing one computer in a locked Healthcare room in reception; that computer will be the only healthcare unit in a fixed in place outside health. That clinical machine in reception has its own Ethernet cabling to healthcare server and can be shutdown remotely. Its activity is logged via proxy servers.

### **Prescribing and Chronic Disease Management**

By chronic disease I include personality disorders, drug dependency, chronic hepatitis, HIV, COAD, Asthma, Diabetes, IHD and more.

The simplest approach to manage Chronic Disease is to have a tight repeat prescription policy. For example a patient may be prescribed 28 days supply, can be repeated once, and then their condition and medication reviewed, alternating between nurse and doctor. In some cases this can be more or less frequent, and the clinical systems cope with this. Data is automatically gathered for QMAS and QOF using this approach (Archway Surgery itself with 2,660 patients, scored 1007/1049 points with little new effort because of such a repeat prescription policy).

Current G.P. systems on the outside print out an FP10 prescription. This has a tear off slip which the patient keeps. In the prison setting something similar could be used and have a small picture of the prisoner on both halves. The prisoner sees on the tear off slip (repeat card) when to seek more medication by returning the slip, and when he needs to be seen again by nurse or doctor. It does not need a new design to do this now. (We work in a special PMS drug dependency surgery in Watford, and can assure you that all patients and ex-inmates understand the system, no matter what their literacy level is).

**The current chart F2255** cards are hospital based. They do not understand the difference between acute, one off prescribing, and repeatable prescribing, nor review dates. The cards attempt to do all of the following functions at once and does them all badly:

1. The doctor's prescription
2. The mechanism to order the drug
3. The mechanism to count the patient has taken the drug.

What it does not do

1. Understand this is a one-off prescription
2. Repeat prescription and review date not indicated.
3. Does not inform patient anything about when to put in a repeat and when he should be reviewed.

The single form muddles the G.P. function of prescribing, pharmacy functions and issuing functions. The F2255 should only be used for issuing functions. It could remain a paper exercise, since according to “Pharmacy in Prisons” few patients would be on short supplies of drugs.

Prisons could use FP10 type prescription, indeed use green FP10 but overprint them in RED “Not for outside use, not for PPA payments”. The patient has the prescription and it is taken in confidence to the prison pharmacist who keeps it as the record. Electronic prescribing would work in this way. It would not expect a prescription directly onto a chart. Computers would not easily cope with a chart. Any new script would precipitate a new chart. It would not be able to add or cross out as on current manual charts. My current clinical system can print out a copy of the current prescribed drugs onto a chart format, but that is not prescribing.

Once the pharmacist has an FP10 (electronic or otherwise) he can dispense. If needed, an F2255 is opened up, if the patient medication can be given as less than the prescribed total. Say 7 days or even daily, out of 28 days. By using FP10 clinical systems need less modification; but also the patient (and hence the wing) has a copy of the current prescriptions, a repeat date and review date. Prisoners are used to this system on the outside.

Another advantage of using FP10s is that one could ask the National Prescription Authority (nicely) to put the prison “FP10s” though their systems (not for payment) to produce PACT drug usage reports that we have at surgeries but not at prisons.

One of the huge problems I have encountered is the lack of follow up of patients with all conditions. Enforcing a sensible repeat prescribing system via the computer is essential. Re-signing F2255 charts is messy and anything akin to it must stop. We need to emphasise the need to maintain follow up and repeat prescriptions, and chronic conditions.

**Risk assessment issuing smaller supplies.** The doctor in his clinic is not always in the best position to assess the risk, other than by nature of the tablets. That assessment requires a team effort and input from the nursing and pharmacy staff. It may not be possible to score that patient at the time of prescribing.

### **QOF for Prisons**

Current G.P. systems look at the current list size in QOF/QMAS reporting. This would grossly underestimate the work undertaken by prison health departments, because of their large turnover of prisoners. At The Mount we need to look at 1,500 patients a year, not the 700 currently with us, in order to gauge our work in a year.

Some of the QOF targets will not be attainable as patients are not with us for 15 months, nor would they fit in with the “6 months prior to reference date”. Many QOF indicators the systems are looking at what happened in the 6 months prior to April 1<sup>st</sup>, Also QMAS excludes people who have only been registered for three months. High turnover prisons would seem to have poor figures on these criteria.

It will still be fun to run these reports; somehow with minimal data on the systems by my standards, we are achieving 55% of the total clinical points in QOF at HMP.

We need to establish PCT/Prison QOF to include:

Reports on prescribing

Heb B and C status

Drug dependency scores; discharge planning, outpatient cancellations...

Any new QOF target is possible. Primis/Miquest can concoct any standardised search for all the current G.P. systems. Miquest is common to all.

### **FS2052s**

These forms are a prison function and little to do with health. Quantum should handle. G.P.s need to use better tools for managing depressed or impulsive patients.

### **Seg Round**

Prison service requirements: Quantum should handle.

The clinical system still has a place to deal with risk and suicide prevention, as in normal clinical practice.

### **Choose and Book.**

We have asked if HMP The Mount can be a pilot for this scheme. While Choose may not be an option, the ability to Book and CHANGE outpatient appointments would be very useful, and prevent much grief in the prison service from patients, and in hospitals who see the prison service as always cancelling appointments late. This too will require NHS numbers.

### **Risk of using paper and computer together for a long time. Need to have paper-light deadline in mind.**

At Archway Surgery we were pulling notes and using the computer, having used computers for twenty years. We invited The Medical Protection Society Risk Assessment Unit to visit our surgery. The main risk MPS identified as that we were using a mix of systems, i.e. paper and computer. We were advised that we should go paperless to reduce risk, and scan in documents. We did so in 2004 and life has been much easier all round since. It is not clear from the User Specification if the Prison service is to follow NHS G.P.s and go paper-light...and not pull records, only writing on the computer, but printing out details only when patients leave.

### **Summary**

Tweaking current G.P. systems is the best option. Designing a different system, or making such demands on G.P. systems that software houses would have to take a different path just for prisons, would force major re-writes of the software. That would create new costs. The Statement of User Requirements, whilst expecting G.P. systems to be the basis of Prison Healthcare IT, then goes on to make such changes and demands that the software would in effect be a different system. Updates would be difficult to apply nationwide. Specific prison only software would fossilise. Developments will be made for the populations at large and prisoners trailing behind.

Current G.P. systems can be tweaked to do nearly all of the current functions without major modification, and would be updated in the usual manner. We have shown at The Mount that a current G.P. system can do most of the functions required.

The Development of a different system for the 150,000 patients who use the prison service a year, would divide a wedge, once again, between the NHS and the Prison Service. It could deny prisoners NHS services. Tweak current clinical systems and use NHS GP2GP transfer.

G.P. systems within prisons should be standard NHS G.P systems with a few user defined tweaks that current software allows. Security and communications will develop along with the NPfIT. Do not cut prison service health computing adrift from the rest of the NHS.

#### Reading list:

- <http://www.heise.de/ct/english/02/11/114/> Critique of Biometrics
- [http://www.theregister.co.uk/2005/04/04/fingerprint\\_merc\\_chop/](http://www.theregister.co.uk/2005/04/04/fingerprint_merc_chop/) Biometrics can lose your digit.
- <http://www.dh.gov.uk/assetRoot/04/06/57/07/04065707.pdf> Pharmacy for Prisons
- [www.careprovider.com](http://www.careprovider.com) Dr Bulger's blogs including prisons
- <http://www.chooseandbook.nhs.uk/> choose and Book
- [http://www.ringholm.de/docs/00970\\_en.htm](http://www.ringholm.de/docs/00970_en.htm) One of the best descriptions of NPfIT structure. Written abroad!
- <http://www.nhsia.nhs.uk/nnp/pages/goodreasons.asp> The NHS Number virtues. Not mentioned in sec to date.
- [www.microtest.co.uk](http://www.microtest.co.uk) Clinical system supplier

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