ICT Strategy

NHS Greater Glasgow

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making a greater difference with technology

Contents

NHS Greater Glasgow ICT Strategy

Note: The term 'clinician' has been used throughout this document as 'shorthand' for all medical, nursing, AHP and direct care staff, be they male or female.

1 | Executive Summary - The Vision

This 2004 - 2007 Strategy Refresh remains rooted in, and focused on, the ideas, hopes and ambitions originally set out by our clinicians (in both Primary Care and Hospitals) to improve patient care and modernise services through the use of technology.

The first 2 years, 2002-04, delivered major improvements in infrastructure: the goal for the next 2 years is to see a "step change" in achieving those clinical ambitions. That "step change" will be delivered by providing:

> **Improved access to easy to use, more fully "joined up" patient information through the creation of an electronic, integrated care record, available whenever and wherever required.**

The Electronic Care Record will be available to all authorised staff (doctors, nurses, AHPs and so on) via the enterprise-wide Clinical Portal providing:

- single log-on access to multiple sources of data about each patient;

- a user-friendly means of navigating and organising patient information that can be tailored to specific clinical teams' requirements, but retaining a common "look and feel" across all Glasgow sites; and

- protocol-driven workflow process monitoring to help staff track care provided to patients and progress along the care pathway.

We will thereby extend the opportunity for all our clinical staff (doctors, nurses, AHPs and so on) to:

- make better decisions, based on more immediate access to diagnostic results combined with the ability to easily view the trends in past results (labs, radiology, ECGs etc.);

- save time lost in chasing results, telephone queries or physically delivering requests;

- access clinical research databases, local protocols, medicines formulary and do so electronically;

- view all diagnostic results, including X Rays, regardless of whether the patient is seen on the ward, in a GP's surgery or at home; and

- improve the patient's experience by eliminating repeated requests for demographics and ensuring relevant information is exchanged between clinical care team members, including Social Workers.

This vision, however, will only be achieved by getting both the technical environment and, more crucially, the clinical and culture environment "fit for purpose".

Major investment in technology alone will not create the eClinician: only the right attitude will!

eAttitude embraces, with willingness and confidence, a need to be skilled in using technology, a desire to work in a more "modern" way and an approach that accepts working differently, more flexibly, to realise the benefits from investment in new technology.

Our vision, therefore, needs to incorporate these processes associated with getting the eAttitude and eTechnology right as fundamental to delivering the effective eClinician.

The complex inter-relations so created will drive the "how to get there" "road map" and the organisational arrangements that will create the partnership working with clinical staff required for success.
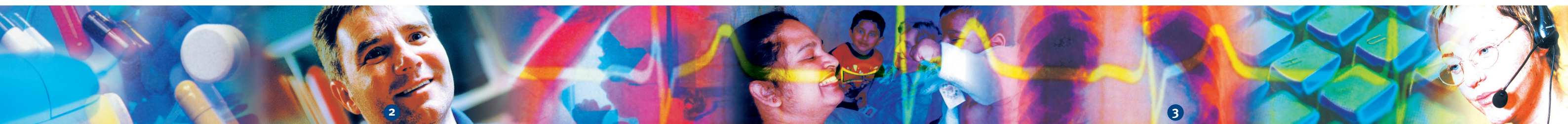
2 | Creating Electronic Records with the Clinical Portal Toolkit

Clinical staff across NHS Greater Glasgow continue to emphasise the need for "joined up" patient information. This Strategy Refresh restates that objective as a key priority and this section sets out how that "joined up" view will be created across Glasgow.

What is an "Electronic Record"?

Details of staff contacts and consultations with patients are generally recorded electronically. In most clinical departments there is a "data capture" computer system available to uniquely record "who did what to which patient". As a consequence, we have many different computer systems and applications operating in the various Glasgow Divisions.

We recognise that there are still gaps, and that not every member of the clinical team yet has a computer on their desk. We spent over £10 million in 2002/03 addressing these issues, improving day-to-day support and upgrading the Glasgow-wide network.

Useful as such clinical information systems are, particularly to support clinical governance reviews and audits, the full benefits are only achieved when those details can be seen alongside the patient's lab results, drug medication details, radiology reports, clinical letters and so on.

Hence the demand for "joined up" electronic records to provide a complete "view" of each patient.

Put from the clinician's perspective, he or she wants to be able to log on once and be provided with access to all computer-held information relating to that patient. This process must be secure, ensuring authentication of the user's "right to see" particular information. A robust and reliable way to identify that patient is a key requirement as the "joined up" record is assembled.

Following a procurement exercise, a clinical software supplier has been identified to work with us here in Glasgow to pilot this approach to creating Electronic Health Records (EHRs).

That Clinical Portal software will eventually provide a technical gateway to all data currently held for each patient. All of that information will be abstracted from existing departmental computer systems and much will be archived variously in the SCI Store, the eCare Store, the Diabetes Store and so on. The portal will enable easy and integrated access to the patient data now held in those multiple store for lab results, Joint Assessment, Diabetes and GP summaries.

The essential point being that previously each user, doctor, nurse or AHP had to log on and off each of those operational systems to get a full set of the patient's results and so on. In the future, the Clinical Portal will build the view of that same data and thereby offer single log on access to clinical staff together with a host of "user friendly" techniques to navigate and interrogate the data.

Such an approach, however, relies crucially on being able to uniquely identify each patient as being the same person, so that results can be meaningfully aggregated. We have consequently made improving the use of the CHI number (Scottish Health Identifier) a major priority together with supporting the national development of a SCI Multi-index approach to cross referencing CHI and hospital PAS numbers for each patient.

Behind this simply expressed aspiration to create an "Electronic Patient Record" are myriad complex and interdependent technical processes, which are set out schematically overleaf.

2 | Creating Electronic Records

Security and Confidentiality

Consent, appropriate access rights, and a full audit trail are central to a safe, robust electronic record. We must be sure that:

- The patient consents to the use of their information
- Users can see all appropriate information
- Users are prevented from viewing inappropriate information
- There is a robust record of "who viewed what and when"

There is a balance between ease of use and strict security. We must identify security measures that are appropriate, maintainable and affordable, and that allow clinical staff to carry out their work without disruption or delay.

Choosing the right security measures requires close co-operation between clinical and technical experts.

Clinical Information Flows

The ECCI Project will put in place a number of services for exchanging patient clinical information between sectors of the NHS in Greater Glasgow, especially flows of information between GPs and hospitals. Key examples

- Referral
- Discharge
- Lab results

NHS Greater Glasgow will use a number of techniques to incorporate this information into the patient's complete record. These will include:

- Secure email
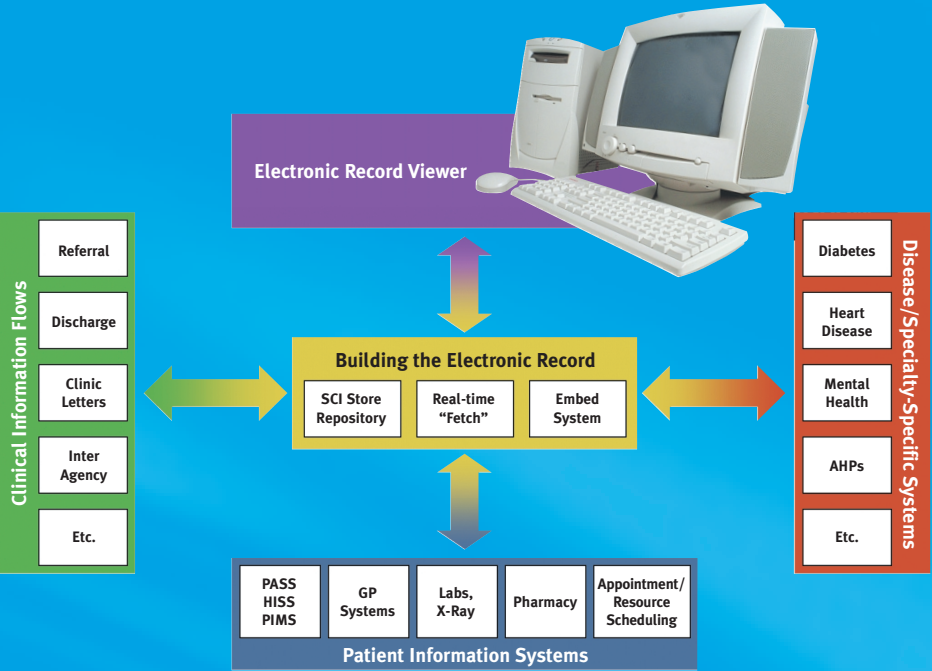- SCI Store
- SCI Gateway

SCI Store

SCI Store is the clinical data repository for NHS Greater Glasgow. It will contain copies of structured clinical information that tends to change little over time:

- Laboratory Results
- X-Ray Results
- Patient Demographics

Electronic Record Viewer

The electronic record viewer will be the single point of entry for all clinical staff to access relevant information about their patients.

- All patient information in once place
- Login once only
- Flexible - presents the information you need, in the way you want it
- Easy to use
- Fast
- Full audit trail for security and governance

Building the Electronic Record diagram

Electronic Record Viewer

Clinical Information Flows
- Referral
- Discharge
- Clinic Letters
- Inter Agency
- Etc.

Building the Electronic Record
- SCI Store Repository
- Real-time "Fetch"
- Embed System

Disease/Specialty-Specific Systems
- Diabetes
- Heart Disease
- Mental Health
- AHPs
- Etc.

Patient Information Systems
- PASS HISS PIMS
- GP Systems
- Labs, X-Ray
- Pharmacy
- Appointment/ Resource Scheduling

Real-time "fetch"

For information that has a short "lifespan" or that changes rapidly, this approach will be used. When the user wishes to view information for a patient, the electronic record will "call up" the relevant system and ask for patient information in real-time. Permanent copies of this information will not be made.

Embedding Clinical Systems

For some clinical systems, the best approach is to "embed" the system within the viewer.

The viewer will log you in and automatically find the correct patient. From that point on the viewer "hands over" to the clinical system itself, allowing access to the full range of specialist functions within that system.

Patient Information Systems

Every hospital in NHS Greater Glasgow has its own suite of systems that contain patient information.

The on-going IT strategy is already making progress in standardising systems where appropriate (e.g. Ascribe Pharmacy, HSS Radiology). The GPASS system is used by approximately 95% of GP practices in the city.

Nonetheless, a variety of core systems will exist for the foreseeable future, and a key aim of the NHS Greater Glasgow electronic patient record is to seamlessly combine information from each system into a cohesive and accessible complete electronic record.

Patient Identification - CHI/UPI

Possibly the biggest challenge to NHS Greater Glasgow's Electronic Record programme is correct patient identification.

When building an electronic record for a patient, from several sources of information, it is vital that we can be sure at every stage that we are "talking about the same person". High quality patient demographics information is essential.

In particular it is vital that the CHI number is used wherever possible. This is the best way to safely match patient records from different systems, hospitals, Divisions or even NHS Board areas.

Disease/Specialty-Specific Clinical Systems

Many specialties have specific requirements for collecting information; producing letters and patient information leaflets; and reporting (clinical governance).

To date these systems have often been designed and purchased in an "ad hoc" manner, leading to the situation where clinicians have systems that "do the job", but are often poorly documented, supported by very small companies, don't link with other clinical information systems, and do not offer robust security and backup.

NHS Greater Glasgow will provide clinical and technical standards to help make the design of future systems more appropriate and efficient.

Standard mechanisms for linking to existing systems (e.g. patient demographics link to PAS/HISS systems) will be put in place.

Finally, a "clinical systems toolkit" will be prepared that will meet the needs of most specialties; this will allow clinical systems to be developed quickly, while still meeting the required clinical and technical quality.

Clinical Governance

While the key aim of the electronic record is to support the care of individual patients, there is also a need to enable clinicians to analyse the

- Clinical governance
- Clinical research projects
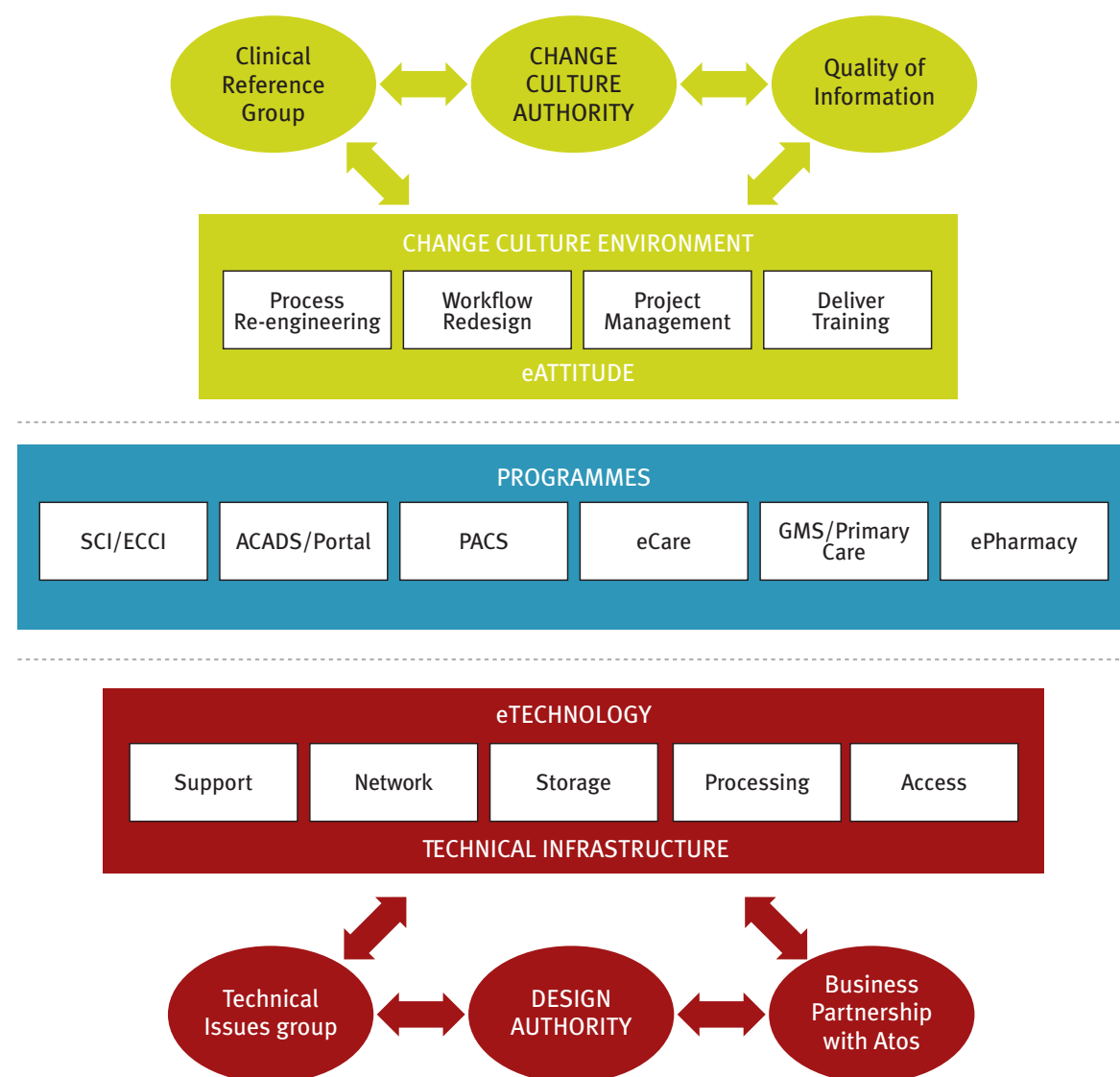- Management and statistical reporting

The reporting system must be easy to use, and must not slow down the "live" electronic record.

3 | Delivering The Vision

4 | Getting Attitude and Culture Right:

How then do we deliver the "step change" required in access to 'joined up' electronic patient records, described in the previous section, on a wide enough scale to "really make a difference" here in Glasgow?

To deliver the vision of our eClinician, with eAttitude, working in an environment, we must do all of the tasks on the "road map" below.

PROGRAMMES

- Clinical Reference Group
- CHANGE CULTURE AUTHORITY
- Quality of Information

CHANGE CULTURE ENVIRONMENT

| Process Re-engineering | Workflow Redesign | Project Management | Deliver Training |

eATTITUDE

PROGRAMMES

| SCI/ECCI | ACADS/Portal | PACS | eCare | GMS/Primary Care | ePharmacy |

eTECHNOLOGY

| Support | Network | Storage | Processing | Access |

TECHNICAL INFRASTRUCTURE

- Technical Issues group
- DESIGN AUTHORITY
- Business Partnership with Atos

The tasks on our 'road map' designed to deliver eAttitude include:

- **Formulate and deliver ICT Strategy Communications Plan ensuring all clinical staff have an awareness of planned new developments.**

- **Revitalise Clinical Reference Group and agree work plan to reflect Strategy requirements, including:**

  Policies agreed for:

  Patient consent

  Confidentiality and data protection

  Freedom of Information Act.

  Design 'look and feel' of Clinical Portal user screens.

  Agree access privileges for clinical users, 'who is allowed to see what'.

  Agree format of templates for clinical protocol screens.

  Agree relevant coding structures to ensure comparability of data.

- **Work with relevant clinical groups to significantly improve data quality and increase the use of the CHI number to National requirements.**

  Develop pan-Glasgow Information Governance Framework.

  Undertake initiatives to improve data quality.

  Ensure information requirements for day-to-day operational purposes, monitoring of national targets including wait times and strategic service planning are met.

  Build on the work of the Change Culture team to:

  Deliver relevant training and development to ensure clinical workforce has confidence and competence in using technology.

  Develop project management and leadership skills in a wide range of clinical and support staff.

Support specific groups of clinical staff during systems implementation to change workflow processes thereby deliver the benefits of the new technology.

Support strategic change projects, particularly in the ACADs, with processes to deliver major process re-engineering benefits in the use of clinical staff time and more flexible working.

- **Work with target staff groups, particularly junior doctors and ward-based nursing staff to implement Phase I of the Clinical Portal and thereby ensure:**

  a step change in access to, and use of, 'joined up patient information'.

- **Work with agreed "early implementer" care pathways across primary care and hospitals:**

  Stroke
  Heart Disease
  Cancer
  Inter-agency Child Protection
  ACAD
  Mental Health

  to identify information needs for incorporation in disease-specific 'extended' electronic health record. Use the 'Ready to Implement Electronic Records?' Toolkit to establish 'preparedness' and plan next steps.

- **Ensure effective programme and project management arrangements are in place to support implementation of this strategy and to identify risks and their resolution.**

- **Work collaboratively with SEHD to extend this approach across other NHS Board areas.**

5 | Getting the Technology Infrastructure Right

The tasks on our "road map" designed to create an eTechnology "fit for purpose" include:

- **Appoint Design Authority to advise on overall technical infrastructure needs.**

  Undertake systems architecture review and develop migration plans as appropriate.

  Agree work programme for Technical Issues Group:

  Follow up recommendations of Design Authority.

  Agree and implement pan-Glasgow relevant technical standards and related policies.

  Harmonise pan-Glasgow policies affecting all aspects of computer security.

- **Confirm requirements for multi-index and clarify release date for SCI store/Index with National team.**

  Review requirements to support PACS.

  Develop interfaces to PAS and other relevant applications.

- **Plan future electronic processing and storage requirements, particularly to support PACS requirements.**

  Develop data centre concept for Glasgow to rationalise hardware and back-up arrangements etc.

  Review and rationalise applications software and operating systems in use.

  Agree and support technical requirements of ECCI Project to ensure national targets are met.

- **Develop local network strategy (voice and data) to reflect National decision on replacement of NHS Net.**

- **Improve overall pan-Glasgow support arrangements by:**

  Introduction of specialist IT teams.

  Pro-active business partnership with NHS Scotland IT Support Organisation, Atos Origin.

  Finalising business continuity planning.

  Moving to 24x7 support, where required.

  Review help desk arrangements and extend to 24x7.

- **Complete development of SCI Letters Store and implement.**

  Provide clinical portal access to all previous clinical correspondence of relevance to the patient's history.

- **Work with Clinical Reference Group to define system "privileges" and other data access protocols governing staff using the clinical portal.**

  Implement user directory, with reliable arrangements to track starter and leavers.

  Implement NHS Mail and extend remote access.

- **Continue to work collaboratively with SEHD to:**

  Define and deliver SCI Store as a multi-index.

  Improve the quality of CHI-based patient data.

  Develop and implement clinical coding standards.

  Pilot electronic data exchange across NHS Board boundaries.

  Develop the operational requirements for Generic Clinical Information Systems in Cancer, Mental Health and other clinical areas.

- **Undertake a clinical systems baseline audit refresh to:**

  Progress the harmonisation of data capture applications across Glasgow.

  Identify "gaps" in data collection that could be filled by the national "generic clinical information system".

  Ensure that timely, robust and reliable information is available to support both clinical and management information requirements.

- **Upgrade GP computing to reflect requirements of GMS contract including:**

  Supporting "quality payments" requirements.

  Implementing SCI Gateway for electronic referrals.

  Implementing SCI Lab results into GPASS.

  Implementing GP to GP patient record exchange (GPEX).

  Replace eSMTP email (national mandate).

  Undertaking hardware refresh.

  Finalising business continuity and disaster recovery plan.

- **Review Community Pharmacists' and Dentists' IT requirements in light of revised national contracts.**
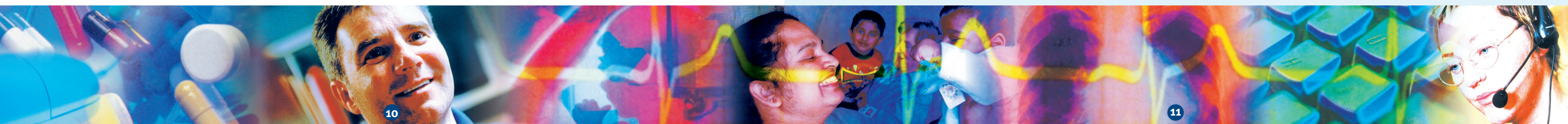
6 | Delivering Key Strategy Projects

The "road map" has defined in Sections 4 and 5, how we will get eAttitude and eTechnology right: both are key to delivering the major programmes designed to support our eClinicians and thereby ensure "a step change in joined up patient information"

SCI/ECCI

- **Achieve National ECCI targets, including:**

    Ensuring 100% of GP practices have lab results in GPASS by March 2005.

    Ensuring all GP practices can make electronic referrals of patients to hospitals using the SCI Gateway by December 2004:

    So that 30% of Glasgow's GP practices are sending referrals through SCI Gateway to a minimum of 5 specialists by March 2005; and

    Each of Glasgow's Acute Hospitals can accept "out of area" referrals from SCI Gateway by March 2005.

    Ensuring Immediate Discharge Letters (IDLS) are sent, preferably via SCI Gateway to Primary care from at least one specialty by March 2005.

    Developing clinical protocols enabling clinical email consulting across a number of specialties by December 2004.

- **Ensure that the work of every clinician is supported by immediate and convenient access to a computer/workstation or mobile device to allow access to appropriate clinical information available via the clinical portal.**

eCARE

- **Work in partnership with Local Authorities to deliver National eCare Project, particularly to support the joint assessment process for the elderly, and with wider partners to deliver Child Protection recommendations:**

    Progress development of Community Nursing System to deliver eCare targets.

    Awaiting outcome of MGF3 Joint bid with Glasgow City Council.

PACS

- **Complete PACS procurement and plan implementation, thereby enabling:**

    Image management software to archive and retrieve radiological and other complex clinical images, including multi-slice CT, MRI scans and cardiological investigations.

    Electronic storage to hold archived images.

    Multi-index capability to identify and retrieve all images relevant to each patient.

    High resolution viewing monitors/workstations to enable radiologists to work more efficiently.

ePHARMACY:

- **Continue to support ward-based prescribing and related ePharmacy projects including:**

    Supporting ward-based pharmacists.

    Progressing intranet based prescribing guidance (eg eBNF etc).

    Specifying requirements for electronic prescribing and medicines administration on wards.

    Implementing electronic transmission of prescriptions between GPs and community pharmacists.

    Developing an eFormulary in Primary Care.

GMS/PRIMARY CARE

- **Support the new requirements of the GMS contract, together with other priorities in Primary Care including:**

    Providing applications and technology to GP practices to ensure Quality Indicator reporting, Chronic Disease management, electronic transmission of records.

    Achieving ECCI targets.

    Developing community nursing system to assist in the management of caseloads and ensure joint assessment requirements can be achieved.

    Supporting the Modernising Mental Health Strategy.

    Supporting clinical governance.

PORTAL

- **Implement Phase I of Clinical Portal Project to provide:**

    Single log on access to range of diagnostic results:

    Laboratory

    Radiology reports

    Medication

    Clinical correspondence/letters

    Local intranets, drug directories, eg eBNF, and other databases including NeLH.

    Agreed local "look and feel" to "home page" and other navigation screens to satisfaction of clinical users.

    Community nursing system to fully capture all aspects of their work and contribute to Joint Assessment process.

    Disease management/patient pathway tracking for "early implementers" in Heart Disease and Stroke services.

    Solution for requirements of Orthopaedic clinical team.

    Capability to provide "simple"/fast track solution to remaining care pathway data "gaps", in anticipation of the National Generic Clinical Information System.

    Appointments booking and scheduling requirements to the specification of the ACAD clinical teams. Ensure ACAD IT reflects the workflow and service redesign requirements of those new hospitals.

7 | Bringing IT Together - Supporting the ACADs

The two new Ambulatory Care and Diagnostic Hospitals (ACADs), planned for Stobhill and Victoria sites, represent major milestones in redesigning and modernising the way in which patient care is delivered in Glasgow. Much of the inspiration behind this Strategy Refresh is rooted in supporting the ACADs with equally modern and 'fit for purpose' technology. In that sense, the ACADs will be both the flagship implementation sites for this Strategy and the ultimate test of whether the vision is right.

So, how will the plans and proposals set out in this document come together to successfully support the ACADs?

Characteristics that make ambulatory care different include:
- High level of patient throughput.
- High proportion of elective work, planned in advance.
- High levels of service integration and co-operation to deliver a "single visit" diagnostics service.
- High levels of service integration and co-operation between Primary Care/GPs and Hospital Services.

The supporting IT must, therefore:

Requirements:	Delivered by:
Ensure that test results and other relevant patient information, continually updated, are available to authorised clinical staff throughout the day of visit and beyond.	Enterprise-wide Clinical Portal will provide single point of access to all patient identifiable data, user friendly ' home page' can be customised to specific service requirements, and all information will be accessible via single log on. Support all test requesting with agreed arrangements for electronic order/ communications.
Provide complex scheduling/appointments booking facilities to co-ordinate times of all tests/investigations that the patient requires during the "single visit".	This requirement was included in the Clinical Portal Specification: the software proposed will be fully reviewed and tested during the Phase I pilot. Current appointments/booking arrangements rely on existing out-patient modules on PAS systems. Need to consider whether this approach will be augmented or replaced by Portal software. Detailed analysis of current status of individual departmental appointments diaries and booking procedures in place: project proposed to implement electronic diaries in each clinical service transferring to ACADs. Need to develop more fully role of "clinic co-ordinators" and "booking clerks" in this respect.
Enable associated resource management to confirm that the right equipment/facilities staff are available to undertake the diagnostic test/investigation.	Needs more investigation of current arrangements within each clinical department transferring to ACAD to identify and plan resources including rooms, equipment and staff. Review should be linked to electronic diary implementation.
Provide patient tracking to monitor progress and times during the day, making adjustments as appropriate to ensure that all planned investigations/consultations are completed on the day.	This requirement can be met by Portal Supplier together with electronic "white board" providing convenient update on each patient's progress. Need to agree mechanism for patient identification eg. bar coded bracelet, etc.
Provide a streamlined interface with GPs and other Primary Care services, using electronic referral systems, protocol-based referrals, direct booking and ready access to results and other clinical information.	ECCI Project targets set out elsewhere in this document are focussed on ensuring electronic communications in place between GPs and hospitals for: • Referrals, preferably protocol driven • Discharge letters • Clinic letters • Lab results All results and previous letters will be retained in SCI Store, accessed via Clinical Portal. Issues in relation to GPs' practice systems, GPASS need national resolution.
Speed up patient throughput, particularly in Radiology Departments, by eliminating the use of film and providing electronic access to archived digital images, available to all authorised clinical users.	This requirement drives ongoing PACS procurement. Proposal will provide Glasgow-wide image management software allowing the electronic storage and retrieval of all images (X-rays, cardiology videos, MRI and CT scans etc) PACS and associated RIS will be viewed by Clinical Portal thereby becoming a component of the integrated electronic record.
Provide "disease management" tracking to monitor progress of patients through their care pathway.	Once disease management templates have been agreed with relevant clinical staff, care pathway protocol will be available to clinical team via the portal. Portal software will enable "pre-population" of templates from appropriate clinical systems together with sophisticated capability to provide "prompts" to clinical staff on "what next" for the patient and cross referring to other clinical alerts.
Provide necessary computer equipment, cabling and business continuity arrangements to support the day-to-day operation of the ACADs, thereby ensuring day-to-day operational processes are "paper-lite".	Initially will work with PFI contractors to specify building technical requirements. As overall design of ACAD technology requirements defined, will finalise detail of supporting computer equipment requirements. Link requirements to ongoing document management project to provide access to scanned medical records. Link requirements to agreed migration to 24x7 support and single pan-Glasgow Help Desk.

8 | Delivering The Plan

Working Differently with eAttitude

As emphasised throughout this Strategy, all of the clever technology planned for the ACADs will not deliver in itself more efficient and effective working.

The ACADs will provide modern and 'fit for purpose' new buildings designed by clinical staff. The real focus of the project will be to work closely with those same clinical staff to ensure that the technology available is used to support the way clinical staff will work. That redesign of clinical workflow will ultimately drive the technology vision for ACADs.

This approach not only underpins the new ACADs but is fundamental to all aspects of this ICT Strategy Refresh. The programme in its entirety will only succeed if we can match the "step change" planned in providing "joined up" patient information with a "sea change" in attitude and willingness to work differently using modern technology.

How will this ambitious Strategy be planned and managed?

Organisational arrangements to manage and deliver the ICT Programme remain as set out in original Strategy. Overall responsibility rests with ICT Programme Board.

The core of the operational team remains:

Chair of Clinical Issues Group.

Clinical Portal, ECCI and other major projects leads.

Divisional IT Managers, with both Divisional and specific project lead responsibilities.

The ICT Programme Support Office and the associated strict adoption of the agreed project management methodology (ELMP) has over the past 12 months resulted in major improvements in arrangements for reporting and monitoring progress with individual projects, together with processes for reviewing risks, change control and new project proposals.

The increasing sophistication and effectiveness of these processes are fundamental to the delivery of the ambitions of this Strategy Refresh.

Reference has already been made to the catalytic impact of the current programme.

The pace of learning and the consequent understanding of the interdependencies between projects remains challenging.

To provide effective opportunity to fully debate and develop correct solutions/ways forward, there needs to be a strengthening of the roles of:

• **The ICT Programme Board - meeting bi-monthly to**:

Deliver the ICT Strategy Refresh

Manage the scope of the project and inter-dependencies

Resolve escalated issues

Manage change control

Manage budget

Act as highest decision-making body with authority to manage all risks.

9 | Resourcing The Plan

- **The Clinical Users/Reference Group - meeting weekly to:**

  Agree Clinical Portal user requirements

  Define Clinical Portal user priorities

  Agree user "rules of road" for day-to-day use of Clinical Portal and other applications, including users privileges.

  Ensuring compatibility with Caldicott requirements, Data Protection, Freedom of Information Act and related aspects of patient consent and confidentiality of information.

  Ensure the quality of data available from all operational systems to be viewed via the Clinical Portal.

  Define staff awareness and communication requirements.

- **The Clinical Portal Project Steering Group - meeting weekly to:**

  Deliver Clinical Portal project on time, within agreed scope of each phase and within budget.

  Manage all change control, risks, issues and project planning aspects.

  Ensure effective liaison with all team members and leads for "dependent" projects.

  Liaise effectively with Clinical Issues and Technical Issues Groups to ensure project reflects user requirements.

- **The Technical Issues Group - meeting weekly to:**

  Define the pan-Glasgow technical infrastructure to support this Strategy.

  Agree relevant underpinning technical standards and compliance with national requirements.

  Ensure security policies are implemented to National requirements.

  Develop and adopt agreed information governance requirements.

  Undertake ad hoc technical problem resolution.

  To provide leadership to implementation of specialist IT teams to support day-to-day support requirements.

  To liaise effectively with NHS Scotland support organisation, Atos Origin, to deliver effective business partnership.

Our ICT ambitions come with a price tag, requiring both new capital funds and ongoing running costs.

Those new monies can only be found by exhaustively reviewing all aspects for ongoing spend to eliminate duplication, waste and inefficiencies.

To that end, a number of pan-Glasgow, initiatives building on "single system" working, are ongoing:

- **IT Procurement**

  Centralise IT procurement to deliver "better buying" savings by placing larger volume contracts with fewer suppliers.

  Harmonise and rationalise on a pan-Glasgow basis support contracts for hardware support and related services.

- **Specialist pan-Glasgow IT Teams**

  Organise staff into "virtual teams" supporting all applications and network across Glasgow to:

  Provide cross cover between sites.

  Ensure more effective use of specialist skills across Glasgow.

  Increase opportunities for personal development and training.

  Release staff time to support new implementations and thereby reduce costs by:

  Early skills transfer of new technologies.

  Increased project management support for clinical applications.

- **Engage with NHS Scotland's IT Business Partner, currently Atos Origin to:**

  Explore opportunities to complement and augment the "in-house" specialist teams.

  Explore opportunity to move towards an centralised and integrated model for IT service management incorporating:

  Pan Glasgow Help Desk, available 24x7.

  Data centre approach to location of all hardware to reduce back up and other "housekeeping" requirements.

 *Utility storage model to reduce electronic requirements.*

In combination, these initiatives should:

- **Reduce costs and ensure value for money.**

- **Improve quality of IT support services, including introduction of 24x7 help desk.**

- **Allow existing staff, with an understanding of the "clinical business environment" to be released to support new applications and thereby ensure "successful implementation" and take up by clinical staff.**

- **Ensure business continuity as dependence on IT applications becomes increasingly important to the delivery of clinical services.**
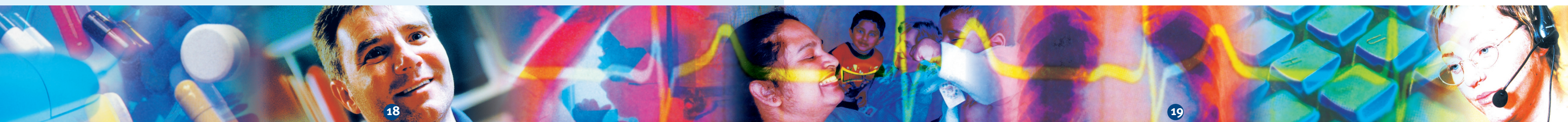
10 | The Plan Timetable

The timetable below reiterates the key deliverables set out in this strategy and gives an indication of the phasing of the overall programme.

Each compenent is in itself a complex set of tasks and dependancies: Individual Project Proposals exist for each component and can be accessed by intranet users via the Project Office site.

Projects	Yr1	Yr2	Yr3
Formulate and deliver ICT Strategy Communications Plan	✔		
Revitalise Clinical Reference Group	✔		
Increase the use of the CHI number to National requirements	✔	✔	
Build on the work of the Change Culture team	✔	✔	✔
Work with target staff groups to implement Phase I of the Clinical Portal	✔		
Work with agreed 'early implementer' care pathways	✔	✔	
Ensure effective programme and project management arrangements	✔	✔	✔
Work collaboratively with SEHD	✔	✔	✔
Appoint Design Authority	✔		
Confirm release date for SCI store/Index	✔		
Plan future electronic processing and storage requirements	✔	✔	
Develop local network strategy to reflect National decision on replacement of NHS net	✔	✔	
Improve overall pan-Glasgow support arrangements	✔	✔	
Complete development of SCI Letters Store and implement	✔		
Provide Clinical Portal access to all previous clinical correspondence		✔	
Work with Clinical Reference Group to define system 'privileges'	✔	✔	
Continue to work collaboratively with SEHD	✔	✔	✔
Undertake a clinical systems baseline audit	✔		
Upgrade GP computing to reflect requirements of GMS contract	✔	✔	
Review Community Pharmacists' and Dentists' IT requirements		✔	✔
Achieve National ECCI targets	✔	✔	
Ensure every clinician is supported by computer/workstation		✔	
Work in partnership to deliver National eCare Project		✔	✔
Complete PACS procurement and plan implementation		✔	✔
Continue to support ward-based prescribing and related ePharmacy projects	✔	✔	✔
Implement Phase I of Clinical Portal Project	✔	✔	
Evaluate and roll out Phases I and II of Clinical Portal Project		✔	✔
Support the new requirements of the GMS contract	✔	✔	
Agree ACAD requirements and deliver	✔	✔	✔