ASSIST evidence to the independent review group, commissioned by Stephen O’Brien MP, the Conservative Shadow Health Minister, to inform future policy for the use of information technology in the NHS, health and social care in England.

ASSIST National Council
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1 **Introduction**

1.1 **This document**

1.1.1 This document is the response from the Association for Informatics Professionals in Health and Social Care (ASSIST) to a request from Dr Glyn M Hayes M.B.Ch.B., D.R.C.O.G. FBCS. CITP, the chair of an independent Review Group, commissioned by and reporting to Stephen O’Brien MP, the Conservative Shadow Health Minister, in order to inform future policy for the use of information technology in the NHS, health and social care in England.

1.1.2 The Review Group’s remit is to:

- Establish how clinical, public, and management needs can most effectively be met by information technology
- In the light of the developments and progress of the last few years, establish a vision for IT in the NHS, health and social care
- Set out a strategy for achieving that vision including a workforce strategy
- Advise on action for the current Government to take
- Advise on the policy options to be considered for implementation by an incoming Conservative Government

1.1.3 The membership of the Review Group comprises:

- Glyn Hayes, President UKCHIP
- Gail Beer, Independent Consultant
- Iain Carpenter, MD FRCP, Clinical Lead on Record Standards, Health Informatics Unit, Royal College of Physicians
- Ian Shepherd, MRPharmS, FBCS, CITP
- Professor John Williams, Director, Health Informatics Unit, Royal College of Physicians

1.1.4 The Review Group starts from a premise of being convinced of the benefits that can be gained through the use of health informatics, and welcoming the progress that is being made in this area. In particular they are aware of the benefits to be gained from patient centred records. They believe that such records, appropriately designed, properly implemented, and made available to those providing health and, where feasible, social care would enable the improvement and efficient management of patient and service user outcomes.
1.1.5 The Review Group is collecting written evidence to support their inquiry from individuals and organisations involved in health and social care. ASSIST was approached as one of those organisations.

1.2 Role of ASSIST

1.2.1 ASSIST is a professional association of approximately 1800 members for those working in and for informatics in healthcare and social care.

1.2.2 ASSIST's key objectives are:

- to provide a network for the exchange of information, good practice and to address current issues
- to provide a forum for activities and events at branch and national levels
- to influence policy at national and local levels, and offer advice on health and social care informatics issues
- to promote, raise and maintain professional standards in informatics

1.2.3 The Association is run by an elected National Council, and consists of a network of regional branches that run educational and informative events throughout the year. This programme of events is supported by a national annual conference and AGM. Further information about ASSIST may be found at: www.assist.org.uk

1.2.4 ASSIST is a member group of the British Computer Society (BCS) Health Informatics Forum; ASSIST members become Affiliate members of the BCS.

1.2.5 As such it is entirely appropriate for ASSIST to respond to such requests for advice, from an entirely apolitical perspective and as a professional body.

1.3 The process

1.3.1 The National Chair of ASSIST issued an invitation to senior informatics practitioners to attend a discussion group event specifically on this topic

1.3.2 On Wednesday 24th September 2008 a group of 28 ASSIST members met in Leeds for that discussion. Many other senior informaticians contributed to this report by correspondence.

1.3.3 The discussion group had between them over 500 person-years of health informatics experience. Membership included individuals operating at Director and senior management levels in the field of health informatics, nationally and locally, in both the public and private sectors, in all types of NHS organisations, Social Care and education and research.

1.3.4 As such, the group represents a significant body of UK health informatics expertise.
1.3.5 The ASSIST National Council would like publicly to put on record its gratitude to all those who gave up their time to contribute their knowledge and insights to its formal response to this important independent review of NHS information and information technology.
2 ASSIST perspectives

2.1 Introduction

2.1.1 This section describes the key themes emerging from the discussion

2.2 Vision

2.2.1 ASSIST continues to support the vision for information management and technology (IM&T) in health and social care that has underpinned the last decade of development – that of ensuring that all those professionals caring for patients should be able to access up-to-date and complete information about the patients they are caring for, where and when they need it.

2.2.2 This vision was established in the 1998 Information strategy, Information for Health, and remains valid. It is imperative to focus on delivering this vision, and the priorities identified in the Health Informatics Review following extensive consultation with the public, clinicians and other front line staff. Diverting energy towards new another strategy, or further new national systems, will not get us any closer to the imperative of detailed care records available at the point of need.

2.2.3 What has changed is the context in terms of health needs and means of delivery. As a result of medical advances and other factors we are living longer and hence the country has an increasingly aging population. At the same time the population has become more mobile, the traditional concept of the family has changed and there is increasing diversity.

2.2.4 While smoking levels have reduced overall, there are still considerable variations across populations, and there has been a general rise in the levels of obesity, and with corresponding rises in associated conditions such as diabetes and heart disease.

2.2.5 At the same time, the use of IT has moved from the preserve of the specialist into the fabric of normal life. The internet, mobile communications, e-commerce and an ever-increasing array of digital devices have changed public expectations about the operation of public services. This has brought concerns about the security and confidentiality of information, though it is noteworthy that many recent incidents have been the result of the loss of physical ICT devices, carrying person-identifiable information, in the absence of secure on-line systems and networks.

2.2.6 The pursuit of media point-scoring and personal vendettas has masked the many informatics national and local successes and contributions to better services. These include: primary care computing, electronic record transfer and prescribing; digital imaging (PACS); shared primary and secondary care access to test results and summary care information; digital patient monitoring systems; new funding flows (Payment by Results); electronic appointment booking and reminder systems; a massive expansions in information for regulation and accountability; the secure NHS broadband network (N3) etc etc.
2.3 Our unifying concept

2.3.1 Despite all the changes in technology, the underlying fundamental concept is that of an encounter between a care worker – whether a health or social care professional, working in the public, voluntary or private sectors – and a patient or service user.

2.3.2 These encounters – when combined together – form the basis of most information flows, whether in support of direct patient or service user care, or when used – in aggregate – for the purposes of: policy development; commissioning; service planning, operational management and administration; and public accountability.

2.3.3 We see this concept of the encounter as the fundamental platform upon which to build a large part of the health informatics ecology.

2.4 Standards vs. standardisation

2.4.1 The implementation of the National Programme for IT has previously focused on the standardisation of systems solutions.

2.4.2 We believe that the current shift in emphasis towards the adoption and implementation of standards rather than systems standardisation is the right one. We see the future in terms of the integration of information from inter-operable systems with common information and technical messaging and other IT standards.

2.5 Local tensions

2.5.1 We believe that the challenges faced in the use of IT to support health and social care services are by and large not addressed by focussing on often simplistic arguments about centralised versus distributed architectures. There are real world examples of both approaches working successfully.

2.5.2 Rather we believe that the critical factors associate with the successful implementation of IT in a health and social care environment are more to do with the readiness of the organisations and their staff to adopt such technologies.

2.5.3 We observe that IT-imposed solutions have always tended to failure, while IT-enabling solutions have tended to be more successful. The experience of the members of the group suggests that simple systems, which offer flexibility to be configured to meet local processes and circumstances, can achieve greater success that more sophisticated systems which bring rigidity. The “one-size fits all” approach does not work. The needs of a complex teaching hospital with multiple specialities, seeing patients from all over the UK, are different to the needs of a local general hospital. In the same way, the ICT needs of a rural local authority will differ from those of a large city.

2.5.4 We recognise the tension that exists between optimising ICT for the benefit of an individual organisation and the need for that organisation to recognise its wider responsibilities to other parts of the health and social care system. Costs and benefits of ICT investments are not always co-located, yet in the same way that competition in the
provision of care carries duty of co-operation, so too must investments in ICT. The efficient and effective flow of information along a patient pathway requires balance; there is little value, for example, in having rich, high quality clinical data from primary care, if there are gaps in hospital, community or social care.

2.5.5 This tension is exacerbated by the apparent inconsistencies in national policy. As an example, the tension caused by the increasing autonomy offered to Foundation Trusts to direct their own development appears to contrast with the expectation that they will adopt a nationally procured solution to meet their needs.

2.5.6 We do not take a view on whether FT policy is right; merely to observe that greater devolution of responsibility sits uneasily with national, centrally-directed delivery programmes such as the National Programme, and as such there needs to be clarity about roles and responsibilities which are coherent to which ever approach is adopted. That coherence is currently lacking but we think is best addressed through the adoption of mandatory standards rather than systems solution standardisation, and through investment decisions which take account of the value for money for the whole NHS, as well as for the individual organisation.

2.6 The role of standards and regulation

2.6.1 We believe that adopting a standards based approach offers the best opportunity to accelerate successful implementation of ICT solutions which are accepted and embraced, and which opens-up the market to new entrants and more rapid innovation.

2.6.2 In this respect the role of regulators is critically important in establishing a framework within which all care providers – from large state-owned teaching hospitals running internationally recognised specialist services to small local social enterprises providing social care services – should be expected to meet a minimum set of ICT standards in order to be permitted to operate.

2.7 What is the NHS?

2.7.1 Traditionally the NHS has been perceived as equating to the care delivered through state-owned healthcare providers. The current National Programme for IT has – since 2002 - been focused around the process of procuring and deploying systems solutions that support those state-owned care providers.

2.7.2 However the current environment is one which has seen the policy of introducing a pluralistic model of providers whereby voluntary and independent care providers are playing a significant role in the delivery of care as explicit members of the national health and social care infrastructure.

2.7.3 We believe that the time has come for the National Programme to redress the balance and focus more on ensuring that ICT is in place that supports publicly-funded care, regardless of the ownership of the organisation which delivers that care.
2.7.4 This also raises further challenges. What of those patients who choose to engage with forms of private healthcare services, whether as an alternative to state-provided care or because the state system does not provide for that care? The encounters between them and their carers remains a fundamental part of their health and healthcare history, and should form part of any integrated patient record.

2.7.5 This situation is even more pronounced in social care where two individuals with similar needs may receive similar care, one having that care funded by the local authority, the other funding that care themselves. Such service user/carer encounters both form part of the same care histories of those individuals.

2.8 Securing public confidence

2.8.1 Another major issue we wish to comment on is the importance of securing public confidence. Statements which seek to attribute blame on the adoption of a particular technology are unhelpful as they undermine confidence in the use of technology by the state as a whole. As we have alluded to already, the factors impacting on successful adopting of ICT are more complex than just the technology alone. ICT often provides a convenient scapegoat for more fundamental failures in policy or service planning.

2.8.2 We believe that there is value in debate about how to maximise the value of ICT in supporting health and social care but that such debates should not resort to arguments about technologies, or if they do, then they are based on evidence and facts, and not perceptions. “Super-computers” are not good or bad per se. Indeed many technological advances would be impossible without them. Similarly “distributed networks of local servers” are not good or bad, rather it is the appropriate or inappropriate use of technology which is important, and which itself is only one element which impacts on success. “Failures in IT” are rarely due to the technology per se.

2.9 Suppliers

2.9.1 As a consequence of the National Programme there has been a significant (radical) change in the marketplace for ICT systems and services.

2.9.2 There has been a shift from a very wide range of small to medium sized suppliers, to one where there are a few very large suppliers with relatively constrained supply chains.

2.9.3 While the past practice of placing systems from small suppliers at the heart of operational processes of large complex businesses has been all but wiped out, with considerable merit, the balance has swung perhaps too far the other way. We observe that this has reduced the speed of innovation, responsiveness and flexibility.

2.9.4 This is in contrast to the rate of innovation in other areas of medical technology. For example, the development of home diagnostic and assistive technologies has continued apace. Unless the core ICT systems which have been contracted for are capable of adapting to cope with the interaction with such technologies, we will see a fracture in the vision of comprehensive records.
We believe that the successful exploitation of IT to improve health and social care relies on an innovative, robust and competitive supplier market. We therefore believe that there is considerable value – both to UK health and social care and to UK plc from an economic perspective - in encouraging small to medium sized enterprises back into the UK healthcare systems market. This should be done by ensuring that there are market opportunities, that innovation is encouraged and that we support a flourishing and thriving domestic industry; and by looking to be exporting the UK’s undoubted world class skills and expertise in healthcare informatics to a huge international market.

**2.10 Build on success**

2.10.1 The healthcare informatics profession is frustrated at continual ill-informed criticism of NHS “IT”, including short-sighted scare mongering, often focussed on a (non-existent) “NHS supercomputer”. The profession has risen to repeated challenges, from repeated restructurings of the management of the NHS, to fundamental changes in mechanism for performance management and financial flows, to meeting ever-growing demands for data, and to meeting the critical informatics implications of major new policies. This has happened with relatively little increase in the proportion of NHS resources invested in informatics, despite the recommendations in the first review of the NHS by Sir Derek Wanless.

2.10.2 Informatics is now fundamental to the delivery of national and local strategies and plans. Yet it often remains an afterthought in policy development and planning processes, at all levels. Last-minute, ad hoc information demands and system changes at best miss opportunities for innovation through ICT and can only jeopardise delivery; as core systems become integral to front-line care this sort of approach will increasingly put patients at risk. Significant examples of informatics planning and impact assessment lagging behind policy implementation include the 18 weeks referral to treatment target and Payment by Results, and Vital Signs. Each of these has led to substantial, avoidable demands on limited informatics resources and capacity.

2.10.3 We must not lose sight of some stunning informatics successes over the last 10 years:

- We have primary care computing that is – by any definition – “world class”.
- We have a robust secure IT network
- We lead the world in the development of health information and IT standards.
- We have new modern primary and community systems which share records swiftly and securely between professionals - systems which can underpin rapid service improvements - whether through optimisation of existing service delivery models or by acting as an enabler for the development and deployment of new service models.
- We have implemented clinical systems – notably PACS systems – on a large scale and at an unprecedented pace, with demonstrable benefits.
We have worked hard on the introduction of a security and information governance regime which recognises the critical importance of managing personal data safely.

2.10.4 Some of the work leading to these achievements predates the National Programme, whilst others can be clearly associated as a result of adopting a more national approach. Whether they would have come about without a central approach may be a matter of debate but it is very unlikely they could have been achieved at the pace they have and with the degree of standardisation without co-ordinated national leadership.

2.10.5 We cannot afford for these hard won successes to be put at risk.

2.11 Learn from mistakes

2.11.1 The corollary to building on our past successes is to learn more from our failures.

2.11.2 It is generally accepted that deployment of ICT in acute hospitals through the National Programme has not gone well for a variety of reasons. However even pre-dating the National Programme there were mixed experiences, with some notable successes but also some spectacular failures. We also return to our earlier point about avoiding unnecessary media point scoring and scapegoating.

2.11.3 Most importantly, we must not forget the lessons of the Bristol Heart Deaths Inquiry, Harold Shipman and Victoria Climbié. These tragic events all highlighted fundamental issues about access to and the use of information. While progress has made in some areas, we are still some way from being able to be confident that such calamities could not recur.

2.11.4 From an ASSIST perspective, no informatics professional would knowingly implement ICT that could jeopardise patient safety or their organisations. To do so would be totally unprofessional; as well as being at odds with the fundamental ethos of the healthcare professionals to “do no harm”, an ethos that we as healthcare informaticians fully identify.

2.11.5 We would therefore call for greater openness and transparency in learning from what has gone wrong. To do otherwise is not just a matter of seeking to avoid criticism; patients’ lives may be at risk if we do not heed them.
3 Going forwards – our recommendations

3.1 We commend the follow propositions to the Review:

- **Focus on the basics before trying the ambitious.** Get clinical systems working in hospitals working; this can be achieved and there is evidence to show past successes. This is fundamental to any vision of real improvement to the quality of acute and mental health care. A world of inaccessible, incomplete and illegible case notes is not a safe one. The visibility of ICT in hospitals is high and successes will be noticed and build confidence. In community and social care services we start from a lower base and there are still some important information and systems gaps to be filled. The long-term movement of care closer to patient’s homes and to community settings reinforces the need for focused effort in this area. Moreover, the delivery of mental health and other services through integrated NHS and local authority teams requires shared systems, standards and networks; the existing separate ICT solutions are a fundamental barrier.

- **Do not lose or threaten the hard won successes:** the national security and information governance models, the high levels of ownership and use in primary care; the success of national systems and IT infrastructure – notably PACS and the national broadband network. Public and staff confidence is fundamental to exploiting the further potential of ICT to improve health, social care and other public services – to raise levels of safety, effectiveness and efficiency, and to support integrated person-centred services, across the NHS and Social Care, and the public, voluntary and private sectors. The short-term attraction of media headlines and blaming will undermine vital strategic opportunities, to the detriment of patients and taxpayers.

- **Focus on standards** not standardisation. A key theme of the 2002 NPfIT implementation vision was “ruthless standardisation”. This emerged from an attempt to see the health services as analogous to a big business, where efficiencies and control was exercised through the deployment of common systems. We reject the notion that the NHS is analogous to a bank (especially in the current “credit crunch”!), a global telecommunications company or an airline, and thus believe that focussing on their ICT models for a healthcare environment was fundamentally flawed. By all means study and learn from such environments but avoid blinkered extrapolation. The guiding principle should now be “ruthless standards”.

- **Achieve a balance between technology, systems, people, process and culture.** These need to be address in a coherent and balanced way. Different health and social care organisations are at different stages of maturity, for each of these key dimensions. “Big bang” implementations of highly sophisticated solutions will rarely succeed in organisations without structured and integrated operational processes, top–level commitment from care professionals and managers, and strong informatics skills and infrastructures. There should be a focus on “roadmaps towards readiness” rather than “roadmaps for systems implementation”; and on
real, widespread engagement among care professionals. NHS service improvement activities need to be much better aligned with the exploitation of technology, not an insular alternative.

- **Ensure much earlier and more integrated policy planning at both national and local levels**, recognising that informatics is now core business and needs to be included in mainstream planning. Information is a vital and costly asset and should be treated as such. Few would dream of developing policy or service plans without addressing the finance, workforce or estates implications. To do without fully addressing the informatics opportunities and constraints will miss opportunities, invite failure and could potentially harm patients. Informatics must be treated as a core priority for Boards, and integrated with change programmes addressing business transformation and cultures, not just technology. The costly lessons of the 18 weeks waiting times target and Choose and Book should not be lost. Future success will depend on credible and skilled Chief Information Officers who can make a real, pro-active contribution to business strategy and operational delivery. Also critical is an appropriately skilled workforce of informatics specialists and of users of informatics systems and services. We commend a more robust approach to prioritisation and to the economic concept of opportunity cost: the informatics and change management capacity of health and social care is finite, and while it has to be targeted on new national systems initiatives and information demands, it cannot be focussed on the strategic and operational “basics” essential for long term success.

- **Invest in a systematic health informatics research and development programme** and recognise the lessons from in the UK and elsewhere in the world. Use this to help develop an innovative and robust supplier market. We need to lower the barriers to entry into the NHS informatics market, build long-term relationships based on mutual respect and balanced risk sharing, keep longer-term options, and ensure that all contracts cover the transition requirements of any future migration to alternative suppliers or systems.

- **Avoid structural change.** This drains resources, diverts management attention, incurs cost, creates substantial disruption, and delays implementation of the consistent vision. It is better to improve the ship than move the deckchairs. The achievement of truly person–based records and information - independent of care setting and the nature of the care professional and based on our unifying concept of the encounter - is future-proof against structural ad other change; what we have now is a barrier.

- **Avoid stand-alone data demands.** Information should be derived as the product of operational systems – a principle enunciated by Dame Edith Körner some 30 years ago and never truer than now. Ad hoc demands, often requiring inefficient and staff-intensive solutions, are wasteful, produce poor quality data and continually divert resources and attention from addressing the underlying information and systems gaps.
Avoid insular systems development, recognising the potential value that individual local systems can have but only if they are developed in line with standards and support the flow and integration of information along care pathways, and delivered where and when needed by care professionals.

Invest in developing informatics skills, leadership and the profession. The full benefits of investment in informatics depends critically on the NHS and Social Care workforce – care professionals, managers and administrative staff – having the necessary core skills to make effective use of information and ICT. It also requires a skilled informatics workforce, operating to the highest professional and operational standards, and having the capacity to exploit the opportunities ahead. The time for enthusiastic amateurs is over and the adoption of engineering disciplines to be encouraged. There should be formal assurance of informatics specialists, informatics processes and informatics services. This should be underpinned by: explicit national standards for education, training, experience and behaviours; formal mechanisms for procurement, project and programme management, service management and data quality; objective measures of service quality, efficiency and investment; and evidence-based assessment.

ASSIST National Council

September 2008
4  **Annex: Responses to Specific Questions Highlighted by Review Team**

This section seeks to offer responses to the specific questions asked by the Review Panel. They should be read in the context of the general response provided above.

**4.1  Strategy**

**4.1.1** What are the strategic objectives that can be supported through use of IT in health and social care?

- Person-centred, integrated, safe, high-quality, effective and efficient care, across organisational and professional boundaries, leading to health improvement and enhanced quality of life.

**4.1.2** What information is required to support these strategic objectives?

- Person-centred operational information: demographics; history; needs/condition; assessments/diagnosis; intervention/treatments; expected outcome; actual outcome; resources used; waits, activities. The information should be linkable to form a complete record for the “person” and be a function of the person’s condition and care; not, as now, fragmented and a function of the type of care, care professional and care organisation. This does **not** mean that all information about a person’s health, wellbeing and care should be held in a single physical information system. Rather the requirement is that information can be integrated at person-level, and augmented and viewed locally by those with the need and authority to do so.

- Population-based information on: demographics; factors related to well-being and health needs; societal indicators (deprivation; education; access to resources/facilities)

- Resources used (workforce, consumables, facilities), costs and income

- Health and care knowledge bases

- Conformance with mandatory process and guideline for audit, governance etc

**4.2  Clinical data to support individual patient management**

**4.2.1** What are the advantages and disadvantages of using person-centred data captured in patient-focused records?

- Pros: supports person-centred and integrated planning, care and management, across organisational and professional boundaries. Future-proof against changes in health and social policy, priorities and structures.
Cons: require common standards across organisations and professional groups; complicates information governance roles and responsibilities. Has been interpreted – wrongly – as meaning that patient data needs to be captured and processed either centrally or on a single system.

4.2.2 How should patient and service user outcomes best be measured?

Both from the care professionals’ and the recipients’ perspectives, with clarity about how the measures are to be used. There should be a formal link to clinical/care standards and audit processes.

4.2.3 What are the benefits and disbenefits of patient and service user recorded outcome measures?

Need to distinguish between outcomes and quality. Outcomes may be scientifically measured in relation to the expected clinical result of a defined course of action. Quality can embrace speed and convenience of access, communications, environment etc.

Pros: they take account of wider dimensions of quality and reflect the perspectives of the patient/client.

Cons: may be more influenced more by context and culture than scientific outcome; variations in patient perceptions, expectations and psychology will affect the results.

4.2.4 Who should perform the necessary data capture, how should it be done, and how can accuracy be ensured?

Data should, wherever possible, be captured as close to source as possible and as a by-product of operational processes.

It should involve sophisticated validation at source, using robust rules. The longer the data flows from source, the more costly it will become to identify poor quality and correct it.

Accuracy should be assured by establishing data quality audit an integral part of wider care and performance audits.

In addition investment in workforce skills and capacity will be needed to support accurate data capture, including informatics skills for care, management and administrative staff.

4.2.5 What are the key issues with regard to data quality?

Clinical/care records are the source of all the key information about service delivery. These need to meet robust standards for content and behaviours (signed, date, legible, use of abbreviations etc).
National data standards, definitions and concepts are out of date and incompatible with current models of care, e.g. the information recorded is a function of the care setting and professional group involved in care delivery, not the patient/client needs, conditions or interventions; the focus is on care administration and central targets, not care quality and outcomes.

Information priorities and systems driven by central rather than operational requirements.

Lack of investment in change management and service redesign, to get the best from the opportunities available from IT.

Gaps in core informatics skills and knowledge, across the care professional, administrative and management workforce.

Capacity and capability of the informatics workforce

Relevance: measuring true outcomes and quality rather than inputs or processes. (Where there is robust evidence that a particular form of intervention leads to good outcomes, it can be appropriate to use the intervention as a proxy for outcome).

Specificity: addressing exogenous variation, e.g. casemix, co-morbidities.

Accuracy: inadequate source material (case notes etc); systems out of step with operational processes; poor validation rules and me

4.2.6 How important will it be to introduce professionally-agreed clinical standards for the data captured in patient records?

Critical: the quality of clinical decision-making, and the integration of care across organisations and professional groups, relies critically on relevant, accurate and complete information being accessible at the point of care, at the time needed, with a common understanding of what it means.

4.3 The approach to system architecture

4.3.1 What is right balance between centralised and decentralised systems?

Depends what is meant by “systems”. The key consideration is the safe, secure, effective and efficient sharing of information. Common information, interoperability, messaging and technical standards are more important than common ‘physical’ IT systems.

4.3.2 Should systems be designed and built to support specific diseases, interventions, professional disciplines or patients, regardless of their clinical problems?

The aim should be to use generic, integrated patient-centred systems wherever possible. The more systems, the greater the integration, maintenance and support challenge
4.3.3 What future technical developments could affect the use of IT in health and social care?

- There are two certain answers: there will be many; and no-one now know what they will all be. The need is for a significant informatics R&D programme, spanning pure IT technology; service-orientated systems; IM&T enabled change; information processing, analysis and dissemination; and benefits assessment and realisation.

4.3.4 What role might other informatics models play (Google Health, MS Vault, open source etc)?

- These – and others we do not yet know about – should be approached with an open mind. Assessment should be based on core principles of: fit with legislative requirements, particularly around Data Protection, confidentiality and security; patient/client benefits and risks; consistency with health and social care strategy; fit with NHS standards for interoperability, although where there are proven benefits from these new technologies, we should be prepared to adapt and amend standards if required.

4.3.5 What role, responsibilities and structure might a national centralised IT support body have?

- Information and technical standards; source of IT expertise; delivering national systems to meet policy initiatives; professional leadership and assurance.

4.3.6 How can the system procurement process be optimised to maximise and sustain benefits?

- Information and technical standards; source of IT expertise; delivering national systems to meet policy initiatives; professional leadership and assurance.

4.4 Management of the NHS, health and social care

4.4.1 How can the delivery of health and social care be better supported by IT?

- More investment, focussed on local operational needs rather than central demands.
- The robust assessment of the informatics implications of new policies, including realistic options, timescales and costs, both of supporting local delivery of the policy as well as central monitoring and accountability.

4.4.2 How should data to support the management of health and social care be derived?

- As a by product of operational processes.

4.4.3 How could IT support commissioning in health and social care?

- The question should be: “how can information, information systems and IT support….”. This is not pedantry: it is important to consider each of these elements individually and collectively.
Support can be – and must be - provided on: needs assessment, strategic planning, service design and redesign, service delivery and management, contract management, accountability to stakeholders and in support of patient and public engagement.

IT *per se* offers innovative new ways of delivering and managing care, especially self-care and telecare.

### 4.5 Leadership and Human Resources

#### 4.5.1 How can professional leadership be best developed and used to encourage the effective use of health and social care informatics and to support patient and service user care?

- Needs to be both national and local. SHA CIOs should have formal responsibilities to provide professional leadership. NHS organisations should follow the DH model of a professionally-qualified, experienced and authoritative CIO on the board, reporting the Chief Executive.

#### 4.5.2 How can staff commitment be maximised at the local level?

- Investing in capacity, professional and personal development; providing the tools for the job; ensuring the robust assessment of the informatics implications of new policies and initiatives, increasing top management engagement and support.

#### 4.5.3 How should the change process be managed?

- By listening to stakeholders from the outset; securing senior stakeholder commitment and leadership; and focussing on operational process design, organisational readiness and maturity (cultural, managerial, process and infrastructure) as a determinant of any systems implementation rather than an afterthought or consequence.

#### 4.5.4 What education and training will health and social care staff need?

- Information confidentiality and security; use of IT systems -office and specialist; use of information; key information sources; delivering IT-enabled change; fundamentals of project and programme management. Education and training should be relevant, responsive, timely and up-to-date. E-learning should be used as far as possible. Informatics should be mandatory elements of clinician and manager training schemes. Evidence of attainment should be integral to the Electronic Staff Record. Education and training should be reinforced by continuing developmental.

#### 4.5.5 How are the workforce in health and social care affected by the increased use of IT?

- IT and information are now core tools in the delivery and management of care: not being able to use them properly will increasingly bring real clinical, performance and reputational risks.
4.6 Information Governance

4.6.1 What are the relevant issues and tradeoffs with regard to security, confidentiality and data governance?

- Issues: security, confidentiality, business continuity, information quality, roles and responsibilities, legislative requirements, practicability.
- Safety and quality of care versus controlling access to information.
- Inappropriate access versus inappropriate use.
- Theoretical risk versus actual adverse consequences.
- A balance between education, technical prevention, deterrence and punishment.
- Costs, risks and benefits of the alternative form of information systems (paper, stand-alone IT, organisationally integrated, patient/client integrated).

4.6.2 Who should have primary responsibility for the content of a shared record?

- Not sure that “primary responsibility” is right. A truly shared record requires shared responsibility, with clarity about roles, responsibilities, accountabilities and liabilities.

4.7 Patients

4.7.1 How are those who are disadvantaged, have a disability or are not computer literate affected by the increased use of IT in the delivery of health and social care?

- …and those for whose understanding of English is limited, those who are literally illiterate…
- Patient/client-oriented technology must be supported for those unable to use it, for whatever reason.
- Help also needs to be provided on the interpretation of information, e.g. measures of service quality, to support informed patient choice.

4.8 Evaluation

4.8.1 How should new and existing systems be evaluated?

- Against their intended benefits and costs.
- Evaluation should be robust, independent and evidence-based.
Results should be widely and transparently published.

4.9 Health and Social Care

4.9.1 How could information be beneficially shared between health and social care?

- In line with the needs for the patient/client, to support joined-up care planning and care delivery. Requires common governance, standards and network access. Our response above thus tries to maintain a focus on both health and social care, and on enabling their better integration.