

MAGIC TOUCH

THE REVOLUTION IN INFORMATION SHARING



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Towards world class quality of information for healthcare

For the next stage of healthcare improvement, better and more timely use of information is not just important, it is vital.

Health minister Lord Darzi's next stage review has placed great emphasis on the quality of healthcare and on the outcomes for patients. These things cannot merely be asserted – they must be measured, compared and published. The quality of care must inform the decision-making of commissioners and the remuneration of providers.

The measurement of quality in healthcare is an emerging science. It will need to proceed with care, and to bring the confidence of the clinical community with it. But it is the way of the future.

The 2008-09 operating framework has introduced patient-reported outcome measures for a small range of conditions. And Lord Darzi's report has confirmed that up to 2 per cent of acute trusts' income will in future be affected by quality measures.

Using, generating and respecting good-quality information is now part of the core business of almost everyone who works in delivering healthcare.

For the health service to achieve its goal of being a truly patient-centred service offering the best care, the levers are now becoming available

with the tools of world class commissioning (with its assurance process being implemented this autumn, underpinned by information). Yet to operate them effectively, we will need information about how far to push the levers, and in which direction. The expectations on commissioners are high. Ministers, NHS chief executive David Nicholson and Department of Health director general of commissioning Mark Britnell have all consistently emphasised that commissioning is here to stay.

Commissioning stands or falls on good-quality and timely information. Trying to achieve world class commissioning without the best possible information is like trying to drive along an unfamiliar winding country road in the dark without your headlights on: not a wise course of action.

While the health service has been collecting information for decades, it has not always enjoyed its current managerial, operational and policy importance. This used to lead to a vicious downwards spiral of low attention to data quality and collection, leading to criticism and low use of the data.

One of the NHS Information Centre's big aims is to improve the quality, timeliness and accessibility of data. The more clinical and managerial frontline staff understand the need for data and use it, the greater care they will take in collecting and submitting it, creating a strong upwards spiral.

Information is about partnership. Clinical engagement is clearly at the heart of quality. Clinicians are best persuaded by seeing data being used as evidence to drive reforms and improvements.

The recent informatics review confirmed the key role of the NHS Information Centre as the central authoritative source of health and social care information, acting as a "hub" for high-quality, national and local, comparative data. Put simply, the centre is here to help the health service do its job well, and ever better. This supplement aims to tell you more about our work, and how we can help you with yours. ●

Tim Straughan is chief executive of the NHS Information Centre and Professor Bruce Keogh is the NHS medical director.

'Clinicians are best persuaded by seeing data being used as evidence to drive reforms'

BROAD SWEEP

The NHS Information Centre has identified big gaps in the main areas where data is needed to service world class commissioning and is out to fill them. Andy Cowper reports

The development of commissioning in UK healthcare has been a long time coming. Although health service reforms often paid lip service to the idea (strengthening the commissioning function was a stated goal of creating primary care trusts), much action up to 2004 focused on the supply side, with waiting list targets, star ratings and foundation status for acute trusts.

Attention has now switched to the demand side of healthcare, and commissioning is centre stage. The 2008-09 operating framework, the next stage review and the Department of Health's informatics review all underline the vital role of good-quality and timely information as the bedrock on which commissioning must be built.

NHS Information Centre chief executive Tim Straughan is emphatic that his organisation's strategy emphasises information to support care quality improvements and, specifically, to support commissioning. "In my view, commissioning is probably the most powerful lever we have to drive up quality in the NHS," he says.

Mr Straughan outlines the three broad fields of commissioning information needs:

- the current status of population health;
- information about future population health needs;
- information about the services

commissioners are getting from provider functions (be they NHS acute or foundation trust, or independent or third sector) and how these perform and compare in care quality and patient satisfaction.

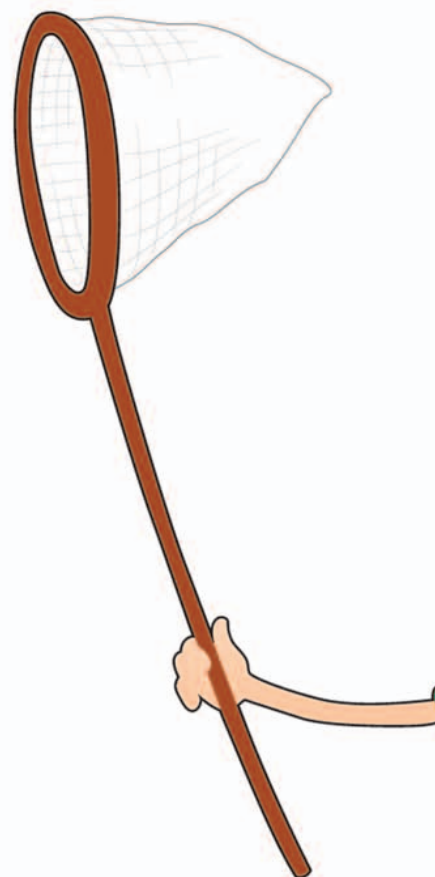
He adds: "It's fair to say that current information servicing these three fields is patchy and doesn't make best use of the data that is already available. There are big gaps we need to fill, and there's a major role for the Information Centre to help fill them."

Where does Mr Straughan see missed opportunities to make best use of current data? "To assess current and future health needs, there's good information available from public health observatories and sources like our own Compendium of Clinical and Health Indicators. I don't think these resources are widely enough used in commissioning," he says.

"Programme budgeting is another area – a really good Department of Health initiative, with lots of information about different specialties. Commissioners could be making better use of it to examine where they're spending their money and how they compare with peer organisations."

Mr Straughan highlights the Information Centre's comparators product as another powerful source of information for PCT or practice-based commissioning consortium

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←1 commissioners, based on hospital episode statistics data.

“While it gets good use and take-up, it can be much more fully used,” he says. “There are also some effective support tools provided by the private sector, including our joint venture partner Doctor Foster Intelligence, which are probably not used as effectively as possible.

“Perhaps commissioners don’t know about these resources, which means a signposting job for us. Or perhaps they know they’re there but lack the capacity to use them, which links to competency five of world class commissioning: to manage knowledge and asset needs.”

Climbing the data mountain

Information Centre director of commissioning Sandra Hills believes health service managers understand the relationship between data use and commissioning in ensuring decisions are robust. But she does have certain reservations: “I’m not sure they understand how, if they analyse different types of information, the different pieces can be used, and how to discern between them in relationship to commissioning differently.”

She also emphasises that the sheer amount of information is a challenge for commissioners. “The Information Centre has a colossal amount of different data collections and sources,” she says. “Commissioners must understand which of these are most helpful to develop commissioning a strategy.”

For more specific services, she says, they are often faced with so much data “they find it hard to sift and identify what’s most helpful”.

She reiterates Mr Straughan’s point about the centre’s signposting work to put data into formats that are easier to handle and understand. The centre collects or has access to ample data on population size and demographics, lifestyle surveys on behaviours and basic information on PCT coverage, from which public health profiles and condition prevalence information can be derived.

From this, Ms Hills says: “Hospital episode statistics data or secondary uses service data will tell you about acute activity and you can drill down to identify the biggest use of a service or resource. This tells you what you’re commissioning; but equally where you might need to rethink services if you’re spending on lots of activity but maybe not impacting in health

gain or output if mortality or morbidity rates remain high for these conditions.” (See page 4.)

Ms Hills adds that data from the quality and outcomes framework and the national quality management and analysis system also show what is happening in primary care. This informs commissioners about the quality of GP services, in the particular conditions measured in the framework.

She concludes: “The centre seeks to be a world class organisation in collecting, handling and securing data – and presenting it to commissioners in a way that’s effective to support and enable them to do a good job.”

Programme director Brian Derry notes that the emphasis on quality and outcomes in both the Darzi next stage review and the operating framework’s introduction of patient-reported outcome measures explicitly links improving information with improving commissioning.

“One limit on outcomes is the range of information in NHS data standards and modelling,” he says. “Traditionally, there’s not been much in outcome measures. We’ve lots on activity and on mortality rates, but more useful measures are hard to come by.

“Some trusts have their own measurements locally, but understanding relative performance and room for improvement is essential. The centre can help define, collect and share a standard data set – and mechanisms to help people use it wisely. Measuring quality and outcomes is a long, hard road, but it’s the direction of travel and the centre can help the journey a great deal.”

A common complaint is that practice-based commissioning consortiums find PCT data is less than accurate and less than timely. Can the centre help with this? Mr Derry believes it can help with the speed of dissemination. But he adds: “I suspect it’s not just about speed and quality; another dimension of data quality is relevance.

“Commissioning is increasingly about redesigning services and pathways, to use information to see what we do now, and what we could re-do better, as opposed to more traditional contract monitoring. In world class commissioning, waiting until next week rather than today for data should not be critical, but having the right data will be critical.

“The Information Centre wants to measure the right things correctly. It remains challenging to



THE RIGHT INFORMATION: STROKE AND DEMENTIA CARE

NHS South East Coast deputy chief executive and director of commissioning and delivery Marianne Griffiths headed efforts to revolutionise care for dementia and stroke in the region.

“We recognised that trusts were often not using the right information to inform robust decision-making. So we invested in an information team to focus on turnaround, and on supporting organisations to ask the right business questions and giving them tools to diagnose problems.

“In an effort to focus on dementia and stroke care, which are sometimes utterly forgotten, we worked with the Information

Centre on a project around dementia and stroke pathway. Dementia affects huge numbers, but is usually picked up too late, so interventions are not successful. Early diagnosis helps, so we worked with the centre to really look at care pathways, and to clinically validate metrics.

“First, we took estimates of the number of patients on GP registers, based on normal prevalence in the population, and found enormous variation across primary care trusts.

“Some recorded only 30 per cent of the prevalence you’d expect, but others 70 per cent. Then we looked at spending for

any correlation with prevalence and numbers on the GP registers and found no consistent correlation.

“So we made a map and radar of the variables, with statistics for hospital and mental health admissions for dementia, and used these to pose questions for our PCTs”.

Ms Griffiths describes the centre’s help as “constructive and supportive, using their expertise to improve our enabling work. It’s been a good symbiosis.”

→ For more information on the NHS Information Centre’s Comparators product visit www.ic.nhs.uk

link information between different providers in the acute sector, let alone with those in primary and community care. In the era of choice and plurality, information is still largely about activity and the administration of care in hospitals.”

Social care

Of course, commissioning is not confined to health. Social care has been more actively commissioned, and means-tested, by local authorities for two decades and, since many “heavy users” of one may also be big consumers of the other, the synergies are clear.

Information Centre director of social care Robert Lake says local authorities have been good at picking up information on demand for social care and on their own performance and population needs. They have also been able to feed that information through into commissioning, he adds: “PCTs have struggled with performance information. It’s such a massive area with trying to handle key bits of information to show where people move between primary and secondary care. The centre can start to identify for PCTs or commissioning consortiums the important information they need to do

‘Measuring quality and outcomes is a long, hard road but it is the direction of travel and we can help with the journey’

commissioning properly. We’re looking at how to bring together social care and NHS data for joint strategic needs assessments and to contribute to local area agreements.”

Mr Lake says that new indicators set by the Department for Communities and Local Government will change the nature of information for social care. “Under the new national indicators, only eight of 198 categories relate directly to adult social care, where there used to be around 500,” he explains.

He believes that to achieve world class commissioning, eight social care indicators will give too flat a picture: “So for added depth, we’re organising voluntary data collections with local authorities to fill the gaps, and we’ll marry that with NHS data.”

Mr Lake also stresses that better integration of social care data with health data will be vital. “Social care information will be a good indicator of future issues for health,” he says. “For example, we can anticipate that users of domiciliary care, who are not getting NHS services now, will need district nursing in future. Anticipating demand means starting to commission short and medium term, not just here and now.”

He adds that there is already good practice in joint working and commissioning between the sectors, pre-dating recent legislative mandates. “The centre can set joint health and social care data and commissioning into a national context, benchmark it and give comparative data,” he says. “With that, people can see other ways of doing things, other priorities in other areas and they can ask themselves questions to ensure their commissioning is as good as it can be.” ●

AUDITING DIABETES PREVALENCE IN SALFORD

The NHS Information Centre’s range of products and services are all intended to support better clinical practice. The National Diabetes Audit proved invaluable in Salford, Greater Manchester. Consultant diabetologist at the city’s Hope Hospital Bob Young said the audit highlighted that a much smaller number of people than expected in the area were being diagnosed with type 2 diabetes.

Type 2 diabetes can be difficult to spot, and the early signs may be going unnoticed by future patients in Salford. “This could be due to people not knowing about the condition or its symptoms,” Dr Young adds. “So as a priority, we are working with the local public health organisation to develop an awareness programme for practices and the community.”

Variation in general practice

The audit also identified a variation in the standard of support for diabetics among Salford’s 60 general practices. Dr Young confirms that “this was very apparent from the audit and resonated with the views of the Healthcare Commission. Now we have started a practice development programme, targeting those practices identified as underperforming”.

A specialist diabetes team now works with these practices, aiming to help them provide and peer-monitor a consistently high standard of diabetes care across the city.

Dr Young is in no doubt that the audit was crucial to progress: “I find the audit very helpful as it gives the whole picture rather than just a local one, so I can compare our performance with other areas of the country. We will certainly use the next audit to help assess whether these two priority programmes have been successful.”



Dr Bob Young: the National Diabetes Audit is “very helpful”.

SUS IT OUT

The Secondary Uses Service is a vital conduit of NHS data. NHS Information Centre chief executive Tim Straughan tells Andy Cowper how his organisation is setting its sights on improving SUS and eliminating historical problems

Nobody ever said it would be easy to give the NHS the information it will need to deliver high-quality patient services in the 21st century. Yet pretty much everybody agrees it is essential.

There is a huge amount of information collected during the provision of care and treatment. This is used to support and improve individual patient care. It can also be used to support healthcare – as long as the appropriate steps are taken to meet confidentiality obligations, data can be used to analyse, report and present information. In the case of the NHS, the system for doing this is the Secondary Uses Service, which is the data warehouse and reporting application jointly implemented by the NHS Information Centre and NHS Connecting for Health.

According to the 2008-09 operating framework, SUS should be the standard data repository for activity, performance management and monitoring, payment and reconciliation by April 2009. An annex to the operating framework makes clear the national expectation that SUS will offer “support for NHS providers to deliver initially coded datasets weekly and comprehensively coded datasets monthly”.

Yet many are aware that this service has its critics. Tim Straughan, Information Centre chief executive and senior responsible owner of the service, candidly outlines some of the major challenges found with its system to date, which have focused on three principal areas:

- timeliness and completeness of data;
- technical performance;
- user experience and confidence.

He points out that of these three problem areas, the first two are empirically measurable, while the third is about perception. “Trust and confidence – the ‘soft’ elements – are very important,” he says. “These perception factors set us a test around user confidence and fitness for purpose: if we get the first two right, the third will follow.

“We put great emphasis on standards of data and inter-operability, which in lay terms is having a common language and set of definitions. The purpose is to ensure that, whether data is being provided to the NHS or other bodies, we’re counting, measuring and reporting in a consistent way to a common, nationally agreed definition.

“The high-level, overall vision is to be the main source of comprehensive data and to support a wide range of activities – from reporting and analysis through to planning, commissioning, management, research, audit and public health.”

Major services produced by the centre, such as the SUS referral to treatment reporting application for 18 weeks and NHS Comparators (see page 6), are developed by and based on SUS data. So its importance to the centre is both emblematic and paramount.

Mr Straughan adds: “SUS is fundamental and critical to what we do in the centre. If it succeeds in its goals, we will succeed in ours.”

Timeliness and quality

Mr Straughan knows the issues of data timeliness and quality have been a stick to beat SUS with. But he explains: “A key information principle is that what comes out can only be as good as what goes in. SUS needs good and regular inputs.”



THE COMMON THREAD

Tim Straughan addresses some of the negative perceptions about the Secondary Uses Service, many of which he believes are being fixed.

“I think people respect the fact that we are honest about the issues, frustrations and problems that exist with quality, and that we’re well enough plugged in to user groups to know the problem areas to address. We take the

problems facing users very seriously and we’re working to resolve them.

“The Information Centre’s goal has to be to gain the whole system’s confidence and trust to meet not only the short-term operating framework requirements, but the longer-term goals.

“We’re creating a huge, complex system, which is maintained in a secure environment. SUS

is one of biggest databases in the world, with a huge number of transactions and users.”

The Department of Health’s health informatics review gave trusts the go-ahead to purchase interim systems if Connecting for Health-procured products were not available to support business need.

“Does this cause Mr Straughan concerns about potential data

compatibility issues?

“I’m comfortable that it’s a pragmatic way forward. Trusts have to do it. The real issues are more for local service providers,” he says, adding that he’d welcome more frequent data inputting into the service, and that he wants more user feedback.

“Accuracy of coding is another very important area for attention,” he says. “The other key

theme of the informatics review was about what the service is doing with data. SUS is more than a method for payment – it can shift into the commissioning and quality agendas, so commissioners are not just paying for numbers, but rewarding providers for how well they’re doing and how much value they’re adding.

“The future challenges for the NHS Information

Centre are how to modify and build SUS to support that.”

In terms of quality metrics to affect future payment in the health service, Mr Straughan quotes medical director Bruce Keogh’s dictum that we will only make progress on quality when we can measure it.

“So we need a metric or indicator,” he says. “There are lots of soft perception quality

‘Trusts may not find it comfortable to have their SUS returns bounced back to them, but it is important for everybody to get the quality of coding right’



Timeliness of data has been a big source of dissatisfaction. Yet Mr Straughan adds that the frequency of data input into the service is the real issue. “To date, because SUS was used for payment and billing, the system’s been running on the quarterly ‘flex-and freeze’ [known as inclusion and reconciliation] inputs,” he says. “Which means data goes in and so comes out in very big doses around those payment/performance times. So if people have tried to take data extracts between the quarterly ‘flex-and-freeze’ dates, the quality will have been poor, as so little up-to-date data has gone in.”

He says that if people want more ‘real-time’ data out of the service, it needs to be put in much more frequently than quarterly. How will that change be led? Mr Straughan explains: “People will get better data out, for themselves and others – benefits which should incentivise change.

“But we’ve also looked at trying to measure and report back to strategic health authorities on individual trusts and what data is inputted and when, so it becomes a director-level issue to know how often and how well coders and people down the tree submit data. As an operating framework target, it’s linked to pay for performance, and national visibility ups the stakes.”

The Information Centre’s work with SUS provider BT around data quality has examined the data deletion facility, used to remove duplicate records.

Mr Straughan says: “Multiple submission and doubling both cause big issues around quality, so we’re making it easier to delete. As well as the ‘bulk and net’ submissions into SUS, trusts

can send in extra data to previous work, or resubmit the whole of a previous period as well, with refinements and changes to more accurate coding.”

Money talks

Ultimately, the link to payment is providing trusts with an incentive to get the quality of coding right. SUS software detects missing fields or incorrect formatting, helping to automate the quality process.

“Trusts may not find it comfortable to have their SUS returns bounced back to them, but it’s important for everybody to get the data right,” says Mr Straughan.

“The technical service performance of SUS is already improving how quickly well-entered data is processed. BT’s processing is measured through service-level agreements and metrics with ourselves and Connecting for Health in order to monitor SUS data processing. We’re working on reducing turnaround times.”

He says users’ trust will sit on the back of those improvements: “If we get good inputs and good processing, we also need a good data extraction and analysis function so that users can log on and get information in the format they want on a system that doesn’t time them out or have lots of down-time.

“We’re working on all those things, putting a lot of effort into user experience monitoring: whether the system responds and gives them what they want. And we’re linking this to NHS Comparators, which is one of a number of ways of getting information and data analysis out of SUS.” ●

indicators, but hard measurable quality indicators are rare. The move towards measuring quality will be good for the NHS and there’s a clear role for the centre in defining common standards and establishing definitions of quality. We already have work underway to develop quality metrics, tying other quality indicators into SUS.

“For example, clinical

audit data is already taken for clinical purposes by practitioners, many of whom take pride in the quality of their data. Such data can feed in and be linked across the patient pathway.

“The key question for trusts and commissioners is simply, ‘are you using the data?’ If data is used, people pay attention to its quality and make comparisons with others’

performance. There’s lots of emphasis in the next stage review on scorecards and dashboards. Trusts should be comparing themselves with others, and also against norms of high-medium-low, be it for mortality or morbidity rates.

“Measurement and comparison are not just about finance, as in income, turnover and profit – they’re about

reputation, which will drive patient choice. Quality measurement is increasingly going to be a major focus for the NHS.”

Going forwards, Mr Straughan says: “The whole area of syndication of information is a huge opportunity for us in signposting resources and in cataloguing and developing standards and metrics. Information

hooks into everybody’s agenda: commissioning, finance, performance, workforce, clinical, public health and social care. It’s the glue that sticks all of these things together – the common thread supporting all of these agendas.”



Tim Straughan: “It’s a huge opportunity.”

MAGIC TOUCH

Information Centre products are helping commissioners with comparator data, referral to treatment reporting, electronic staff records and more, says Andy Cowper

World class commissioning is information hungry. To make the best decisions, local commissioners need national, comparative information to plan strategically, procure effectively and monitor and evaluate services. So if your role involves commissioning, you might consider the wide range of products and services offered by the NHS Information Centre to support commissioners with these tasks. Here are three of its latest services.

NHS Comparators

This enables commissioners to investigate aspects of local activity, costs and outcomes. It is a national resource for England, providing information for GP practices, primary care trusts, strategic health authorities and public health observatories, among others.

"NHS Comparators is a strong product that builds on the Secondary Uses Service data and is getting very good reviews," says Phil Collins, the service's lead on its development. (See page 4 for more information on SUS).

NHS Comparators derives practice indicators and activity from SUS.

"It is costed data through the payment by results tariff, together with quality and outcomes framework information and GP practice demographic population profile data," says Mr Collins. "We put it into a range of comparators – over 140 at present – profiling comparative performance at aggregate level by GP practice, primary care trust level or above. It looks at a whole range of factors: inpatient, outpatient and disease specific."

It is free to use, with a current and fast-growing body of 5,300 users.

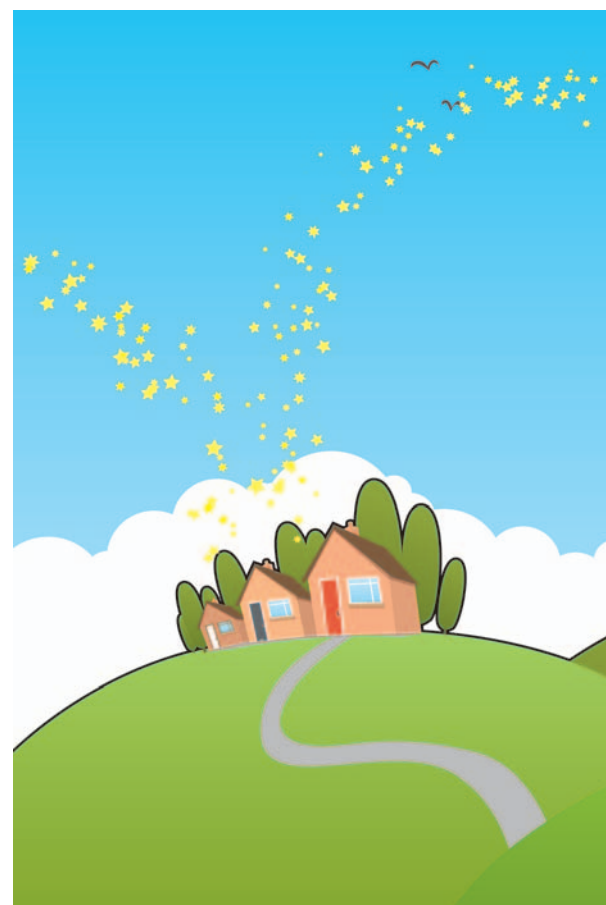
It was initially designed to meet the Department of Health's need to give practices and PCTs better comparative information on their activities so they could understand local commissioning, activities and focus. Currently, there is just one user account for each GP practice and only 2,000 practices using the service, which is a relatively low take-up, but the centre's focus is on increasing awareness of the product. Of the 5,000-plus users, over 2,000 are in GP practices, 2,000 are in PCTs and about 600 in SHAs.

NHS Comparators has broadened and already introduced elements such as prescribing and provider comparators.

Mr Collins notes that "If a GP practice is significantly different from the average, there can be locally known, clinically valid reasons. When they're out of line and didn't know they were, it gets interesting, and that is certainly where users are finding the most value".

He adds that the Information Centre has put a lot of work into making NHS Comparators highly user-friendly.

"We knew we couldn't train users individually, so the design is clear and intuitive," he says. "There are lots of interpretations, definitions and help in the system. It's designed to be picked up and used by novices, and it will continue to develop as data continues to come in. Its style of access presents information back in a comprehensible and digestible manner – it's a big step to make this type of information easily available and understandable."



NHS COMPARATORS: ASTHMA CARE

Dr Ian Greaves' Staffordshire practice developed a new strategic partnership with their local acute trust after NHS Comparators revealed that the practice referred many more asthma sufferers than average for hospital admission.

"The NHS Comparators site enabled us to map and plan how we could change from a hospital-based to a community-based service," he says.

Instead of many patients having to go to hospital for urgent care, the services are coming to them. "We felt the high number of admissions could be avoided if urgent care services were better," he says. "So we agreed with the trust to bring those services here to the practice."

Since January 2008, junior doctors and doctors of registrar level have been based at the practice from 6.30pm to 10.30pm every evening, including weekends and bank holidays. They see urgent cases as well as hospital outpatient follow-ups.

"Any new patient we refer will be seen by the doctors that evening, so we can easily meet the 18-week target," says Dr Greaves. "The patient is presented to the consultant by the junior doctor, who gets apprentice-type training. We are using the doctors who have failed to get into specialist training posts so they will have a better CV for when they reapply next year."





Information Centre medical director Dr Mark Davies agrees NHS Comparators is a good example of how vital information is to practice-based commissioning: “There is a credibility gap in the minds of many clinicians that information can be a tool to drive improvements in service quality. A key role [for the centre] is to help close that gap and show good examples of where information has been used to effectively feed back to individual services, highlighting their performance against markers and national standards.

“That just gets the debate going; it doesn’t provide the answers. But it gets people to ask the next level of detailed questions and leads to services improving over time. In my GP practice, we compared our referral rates for different conditions and found wide variation – but that enabled a set of conversations to make us reflect on our own clinical practice as a group, and the variation reduced over time.”

Referral to treatment reporting

The 18-week referral to treatment target is one of the main policy imperatives for the health service in England. By December 2008, no one should have to wait more than 18 weeks for non-emergency treatment from the time they are referred to the start of their treatment, unless it is clinically appropriate to delay treatment or patients choose to wait longer.

Naturally, it will be necessary to have a system to assess and compare national performance across multiple providers and SUS is being developed to do this.

Stephanie Reid, the Information Centre’s business lead for the SUS referral to treatment reporting application for 18 weeks, points out that while SUS will become the standard repository for activity reporting and payments, from April 2009 it can also help organisations to monitor sustained delivery of national priorities in the meantime, such as the 18-week target. In

A SELECTION OF OTHER PRODUCTS

You can find out more details about the topics below by visiting the NHS Information Centre’s website www.ic.nhs.uk

- **Neighbour Statistics Service.** Looks at the gap between neighbourhood deprivation levels. Click on population and geography.
- **National clinical audits support programme.** Gives clinicians information to help review their performance and identify areas for improvement.
- **Health Survey for England.** An annual snap-shot. Click on health and lifestyles.
- **Digital mapping data.** Enables users to identify health inequalities, record changes to patient catchment areas, carry out epidemiological analysis and target services to clinical hotspots. Click on population and geography.
- **The Quality and Outcomes Framework database**

enables users to compare GP practices against each other and other national averages.

Other useful sites

- **Health poverty index:** this can show the factors that influence health inequalities in a local area. www.hpi.org.uk
- **Hospital episode statistics.** Records of all patients admitted to NHS hospitals in England. Helps identify trends. www.hesonline.nhs.uk
- **The Compendium of Clinical and Health Indicators.** This enables users to find out how their area is performing against 250 indicators of public health. www.nchod.nhs.uk
- **National child measurement programme.** Measures the weight of children in reception class and year six and can be used to support local public health initiatives. www.icweb.nhs.uk/ncmp/

the past, the health service monitored outpatient and inpatient elements – and diagnostics – separately.

Ms Reid observes: “Everyone understands and agrees the need for changing measurement to capture referral to treatment times, but this has meant some major and significant changes in the ways we capture, collect and report data.”

To report on referral to treatment times, SUS will require data submitted in Commissioning Data Set version 6 formats, which has introduced specific new items needed to monitor 18 weeks accurately. Ms Reid is aware that until NHS organisations are sending RTT data items to SUS, there will be limited use for the reports.

“To get ready for 18 weeks, lots of preparation is needed in an organisation’s processes – engaging and consulting with staff so they understand the 18-week ‘rules’, system implementations, new data item capture, and submission of data via the new [formats],” she explains.

iView

iView enables health service users to access online and extract data from the authoritative source, making selections, viewing comparisons and creating tables and graphs. The service includes data on workforce, population and demographics, child measurement, estates and the independent mental capacity advocacy service. Further specialist information is being added.

iView Workforce, part of the service, makes electronic staff record data available for NHS Workforce planning. It includes workforce numbers, agency spend, workforce earnings, workforce census and labour productivity. It was developed by the Information Centre with key partners, including the DH, trusts and SHAs. Trusts need to authenticate users: for help with this, trusts can contact the Information Centre on 0845 300 6016. ●

The NHS Information Centre’s pull-out poster attached details resources to support each stage of the commissioning cycle.

CONNECTIVITY

INFO CENTRAL

In an era of patient choice and world class commissioning, the Information Centre is shaping up to be the “honest broker” of all data to drive healthcare improvement. By Andy Cowper





When it comes to the importance of information to health service management, policy could not be any clearer. The Department of Health's recent health informatics review, led by Matthew Swindells (former policy adviser to Patricia Hewitt, and now with Tribal Consulting) stated that "the need for high-quality information in the NHS and social care in England has never been greater". Health minister Lord Darzi's next stage review likewise emphasised the agenda for "health in an age of information and connectivity".

In an NHS based on patient choice and commissioning, where both the 2008-09 operating framework and the Darzi next stage review have put quality and outcomes centre stage, a trusted "honest broker" is needed to link the patient-level information the service needs in a secure environment. The NHS Information Centre aims to fulfil that role.

Chief executive Tim Straughan is clear about what will constitute success for his organisation. "We need to work with and for the service – and that means frontline clinical staff and managers at all levels – so that they see the centre as the first port of call for all NHS management information," he says.

"I see our principle roles to be, first, as a syndicator of authoritative data and information, making it accessible to different users in different formats according to their needs. Second, we have an 'honest broker' role and third, as a signposter, letting people know what resources are available and where, and making access to data easier.

"We are the central, authoritative source of information to the NHS and social care. We have a talented staff team and a range of products. We need to let people know about them, seek their feedback and involve them in putting information at the heart of improving healthcare."

Quality and commissioning

Mr Straughan says: "The centre's role is as much about supporting quality as about supporting commissioning. To underpin quality, a lot of enabling support is needed from information. Commissioning has a hugely important role to play in driving up quality in the NHS."

Clinical engagement is, Mr Straughan notes, essential to successful commissioning.

He says: "We know that clinicians respect good, timely data. Our dialogue with them is ongoing, and we're learning about their wants and needs all the time and adapting to meet them. You're going nowhere without clinical engagement."

Brian Derry, programme manager for the Information Centre and chair of the Association for ICT Professionals in Health and Social Care, emphasises that over recent years both central performance management and changes in payment systems have driven more focus onto information issues.

"These needs already occupy much of the information capacity in primary care trusts, with a range of collecting, processing and disseminating information," he says. "Part of the centre's role as honest broker is to remove some of the information burden and free up some

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information staff capacity locally for service improvement work."

Mr Derry adds that the principle challenges in information facing the health service are building skills and capacity among general managers and clinicians – significant workforce development.

"The centre updates what information is collected so that it's useful and relevant to today's NHS, and helps build practical and user-friendly systems and processes to bring the data together," he says. "Any industry anywhere faces similar issues on how to make best use of information and technology; it's just that in the NHS, the stakes are rather higher."

Mr Derry is confident the centre can help reduce the burden of data collection and avoid the bugbear of duplication. By doing so, he says, it will help to free up capacity so the service can focus on producing and using material and ➔10

9◀ improving data quality. He suggests that it can help avoid situations where the service is faced with various regulators making similar but slightly different requests for information. He cites the example of the Healthcare Commission agreeing to use information provided by the clinical negligence scheme for trusts.

“That’s the kind of good practice the centre can facilitate – as a ‘clearing house’ for information for regulators. It can set real standards for professionalism,” he says.

Contestability and plurality may be less emphasised in the post-Blair era, but the involvement of the independent and third sectors in healthcare is an ongoing fact of life. Since NHS commissioners are using NHS resources to purchase care from these providers, and indeed from any Healthcare Commission-approved private provider who can offer treatment at the NHS tariff price under free choice, the issues of data quality are equally important.

The different information requirements from the early independent sector treatment centres made direct comparison of their output with NHS trusts difficult.

Information Centre strategic adviser Martin Orton notes: “Wave one independent treatment centres were required to submit commissioning datasets, the most important part of central data. There were issues with implementing and enforcing data requirements due to flexibility in other areas of the contracts.

“However, for all central contracts (wave one, wave two, extended and free choice), the independent sector now has to provide the same basic data as the NHS. We also now monitor quality of information from independent centres, whereas in the original situation we only looked at quantity of information.”

Mr Orton adds that the centre measures across the NHS admitted patient care (30 datasets) and outpatient commissioning datasets. To determine the quality of this, staff dig down into detail by provider and site – and interrogate data quality using VODIM methodology (valid, other, default invalid and missing). As an example, he chooses ethnicity data. “The proportion of technically valid codes are quite high,” he says. “However, there is a noticeably higher incidence of the default code of ‘not stated known’ in independent sector data returns.”

Mr Orton says that only 35 per cent of ethnicity returns are valid if excluding default and missing codings, whereas about 80 per cent are valid in NHS returns. “Use of default codes is usually about not having effective processes.”

Mr Orton emphasises Tim Straughan’s message on the importance of clinical engagement. “Following the next stage review, we’re now working hard with NHS medical director Bruce Keogh and his DH team on new clinical quality indicators. We want to hear from practitioners what they need from the data. We want their ideas on clinical measures of quality, not for patient viewing.”

What do we need for the future? With patient-reported outcome measures coming in, how can we make better use of current data flows?

“We want to work with clinicians to develop meaningful metrics,” he says.

Information Centre head of architecture and data standards Monica Jones notes that a principal theme of the DH informatics review was the importance of data standards.

“We can’t measure quality without knowing what we’re measuring against. So there’s a real

emphasis within the centre on getting quality data. To compare accurately across the NHS, we need common definitions,” she says.

Previously programme manager for standards and classifications, Ms Jones emphasises that a joint programme of work between the centre and NHS Connecting For Health led to the informatics and data standards programme.

Much of her team’s work is developing the concept of a logical record architecture for health and social care – an underpinning model of what data should be shared across multiple applications, and how to manage it in independent data systems.

“This was probably needed a few years ago,” she says. “Connecting For Health inherited the existing NHS data model and dictionary, but to extract data and information for more than primary purposes, for secondary uses as well, we need to establish processes and rules and see how data will be interpreted. It’s about function requirements: how to fit around patient journey on the care pathways and clinical flow models.”

Ms Jones emphasises that her team look at pathways, not specialty-specific data silos such as cancer. The aim is for a cradle-to-grave collection of patient-centred information.

“The current NHS data model is very organisation-specific, about hospitals or ambulances or accident and emergency departments. But for the population as a whole, healthcare is about people. So we need individual care records to be built and collected (and not multi-duplicated), so we can be confident of seeing the right person at the right time for the right procedure – which we can only do with a patient-centric underpinning model”.

Community focus

The “commissioning dataset”, which comes through from every trust to central Secondary Uses Service returns, was designed in 1981 as Körner returns, named after health reformer Dame Edith Körner. Predominantly collected monthly from the acute sector, these are used for a host of things, but are also a huge dataset. Ms Jones points out that this means a big burden to collect, format correctly and push to the centre.

“It was designed for the old NHS that doesn’t exist any more,” she says. “So our second major workstream is to define a replacement for the commissioning dataset for the 21st century’s NHS.

“This allows us to move on from secondary care data (which is just 30 per cent of what a PCT commissions). To know what’s happening in community, primary and social care, we’ve got to concentrate on expanding our opportunities to collect data and on defining information needs.”

As care moves out of the acute sector and closer to patients’ homes, Ms Jones notes the need for more community data collection.

“Currently, there’s no real community dataset, leaving big gaps in our understanding from a payment-by-results perspective.

“If we get logical underpinning architecture, and a little event-driven dataset, that could free-up activity for NHS staff to do what they want to and are meant to be doing, rather than collecting data. We need systems so they can collect data automatically during normal day-to-day patient care and send it straight to data systems to be compiled and analysed.” ●

➔ Information about independent sector data quality is now available on the information centre’s website www.ic.nhs.uk/is

SUPPORTING EXCELLENCE

The NHS Information Centre’s prescribing support unit produces data that allows the National Institute for Health and Clinical Excellence to review patterns of care, estimate the cost of recommendations and to monitor the implementation of their guidance.

The unit’s information on prescribing trends in primary and secondary care is used to monitor the uptake of specialist drugs, such as cancer treatments.

NICE associate director of implementation systems Nicola Bent says: “The opportunity to access both the Information Centre’s high-quality data and their professional expertise has been invaluable in producing and assessing the impact of NICE guidance related to pharmaceutical products.”

The centre also provides NICE with sample databases of anonymised general practice records that show first-line treatments for conditions such as hypertension, and the proportion of patients receiving more than one medicine for such conditions.

Aggregate information from the quality and outcomes framework is also provided to identify trends, including the prevalence of long-term conditions.

“Analysis into how NICE guidance is being used is critical to developing our implementation strategy,” adds Ms Bent. “The excellent partnership between the two organisations has undoubtedly underpinned this process.”

CLINICAL ENGAGEMENT

The NHS Information Centre is working closely with clinicians to shape information resources.

Medical director Mark Davies says: “We need to make NHS information more relevant to clinicians caring for patients: we need to connect them to the data that others are seeing that describe their work.

“It is only in this way that we will get information that is both accurate and complete.

The Information Centre is working with clinicians, professional bodies, specialist societies, patient groups and other agencies to co-ordinate the development of a set of clinical quality indicators commissioned by the Department of Health in support of the next stage review.

The primary aim is to create a library of useful clinical quality indicators across the widest possible range of NHS services, accessible to staff and in support of local quality improvement efforts.

“We need to focus on clinical data that is collected once and is fit for multiple use,” explains Dr Davies.

For more information about the project visit www.ic.nhs.uk/cqi

SKILLS

KNOWING ME, KNOWING YOU

Take a manager or clinician, throw in some informatics training, add a pinch of support from the NHS and what have you got? A service that meets patient needs. Andy Cowper explains



The NHS Information Centre may be doing its best to improve the accessibility, quality and user-friendliness of data and information, but that is only one half of the equation. Managers and clinicians need to develop their own skills and knowledge to make most effective use of what is available.

Handling data effectively is not the sole domain of informatics staff. Commissioners, clinicians and managers all need to play their part in using information to help improve patient care.

Brian Derry, who chairs the Association for Health Informatics Professions in Health and Social Care (ASSIST), as well as working as a programme manager for the information centre, describes the association as “a professional association for people working in health and social care informatics. It exists to provide development opportunities for informatics specialists, and to provide constructive representation with government departments.”

Mr Derry is frank that informatics skills are lacking in the health service: “They are patchy, especially in using information as opposed to maintaining systems. Investment in technology is there through the national IT programme, but we still need to invest more in giving people the skills to get the best from the IT.”

“There’s a feeling that informatics is just used to produce information for the Department of Health and other third parties. We need to reach a point where informatics capacity and capability exist to improve local services – and it’s now

beginning to happen in a big way.” He sees this as primarily a local issue. “Informatics skills and good analytical brains are in short supply across the whole economy,” he explains. “A key enabler for world class commissioning will be improving the informatics capacity and capability of the NHS. The centre has a pool of expertise, which I hope will be more widely available to build capacity and capability.”

He adds that some primary care trusts have become forward-thinking about informatics skills and workforce development due to information-driven central performance management and targets.

Clinical perspective

The centre’s recently appointed medical director Mark Davies agrees with Mr Derry that although the health service has turned 60, its use of data and information “remains adolescent”. Information use has long been a key interest for Dr Davies – he was previously national clinical director for NHS Connecting For Health.

He says: “Even though I came from an information system, technical and data standards perspective, my job now is about practical, everyday information use in clinical practice.

“Information must become an inherent tool for clinicians to improve the responsiveness and quality of services.”

Dr Davies cites the GP contract quality and outcomes framework as a practical example of data driving improvement. He adds: “It’s vital to

present information in ways relevant to particular target audiences, like a PCT commissioner wanting to understand what a good service for diabetes looks like or a clinician wanting to compare their activity levels with a peer.”

He also emphasises the importance of health service colleagues taking ownership of data. He says: “Unfortunately, coalface clinicians have been divorced from data describing their activity, which isn’t sustainable going forwards,” he says. “It’s vital to connect them to data and information describing their services, to ensure, firstly, it’s relevant to them and, secondly, they have a vested interest in quality of data.”

“Clinicians must get to see collection, not as a burden, but as a fundamental part of the care process and an investment in improving our services. We can only do that by directly connecting clinicians to activity and outcome data.”

As a clinician, Dr Davies says: “What’s most important to me is relevance and usefulness of data to tell me whether I provide services to meet patient need.

“We need to reach a point where data is collected only once, at the point of care, giving us confidence in its quality and its suitability for a range of uses, including financial flows and commissioning. If we incentivise data quality and completeness at the point of care, that will drive up standards and create a virtuous circle of improving patient flows.” ●

➔ www.assist.org.uk

PRIMARY

LOCAL TO NATIONAL

Primary care trust and practice-based commissioners are being increasingly encouraged to use and contribute to the national as well as local data store. Andy Cowper reports

Primary care is where the vast majority of NHS healthcare begins and ends, treating around nine out of 10 patients and deploying around 60 per cent of the NHS's £100bn annual budget.

The policy driver to deliver more care in primary care is several years old now. It has been slowed by the ongoing absence of a community tariff. It has also been hampered by a lack of clarity about whether primary care trusts must give up their provider arms.

Yet despite these brakes on progress, the development of commissioning in primary care continues. Practice-based commissioning is becoming embedded, although it is now almost uniformly done by consortia or clusters of practices – despite its name.

User-friendly presentation

Richard Popplewell, chief executive of Stockport PCT and a member of the Secondary Uses Service programme board, says commissioners need “reliable, high-quality, accurate and timely data that is also accessible.

“That means that suitable and adequate informatics tools with user-friendly presentation are needed, rather than just raw data”.

His PCT has used various products from the NHS Information Centre to assess its commissioning of treatments for cardiovascular disease (see box).

Mr Popplewell stresses that many datasets were developed to support business processes, such as payment and managing and monitoring targets, rather than for individuals' care. This presents challenges for the commissioning datasets flowing through the secondary uses service and individual patient records.

He says: “Although there's a lot in commissioning datasets in terms of volume, they're quite a crude summary of the care given to individuals – not very rich in clinical data.

“Commissioning datasets were largely driven by national epidemiology work and then amended to serve business processes. We do seem to potentially compromise datasets to serve purposes for which they weren't originally derived.

“No doubt these compromises are widely understood, but we must remember they are compromises, rather than seeking commissioning datasets to monitor business processes and clinical care – they don't do both.”

Emphasising the importance of using and

stretching the data commissioners have now, Mr Popplewell says: “Don't get too worried about its inadequacy. By using it and finding inadequacies, it gets less inadequate in future.”

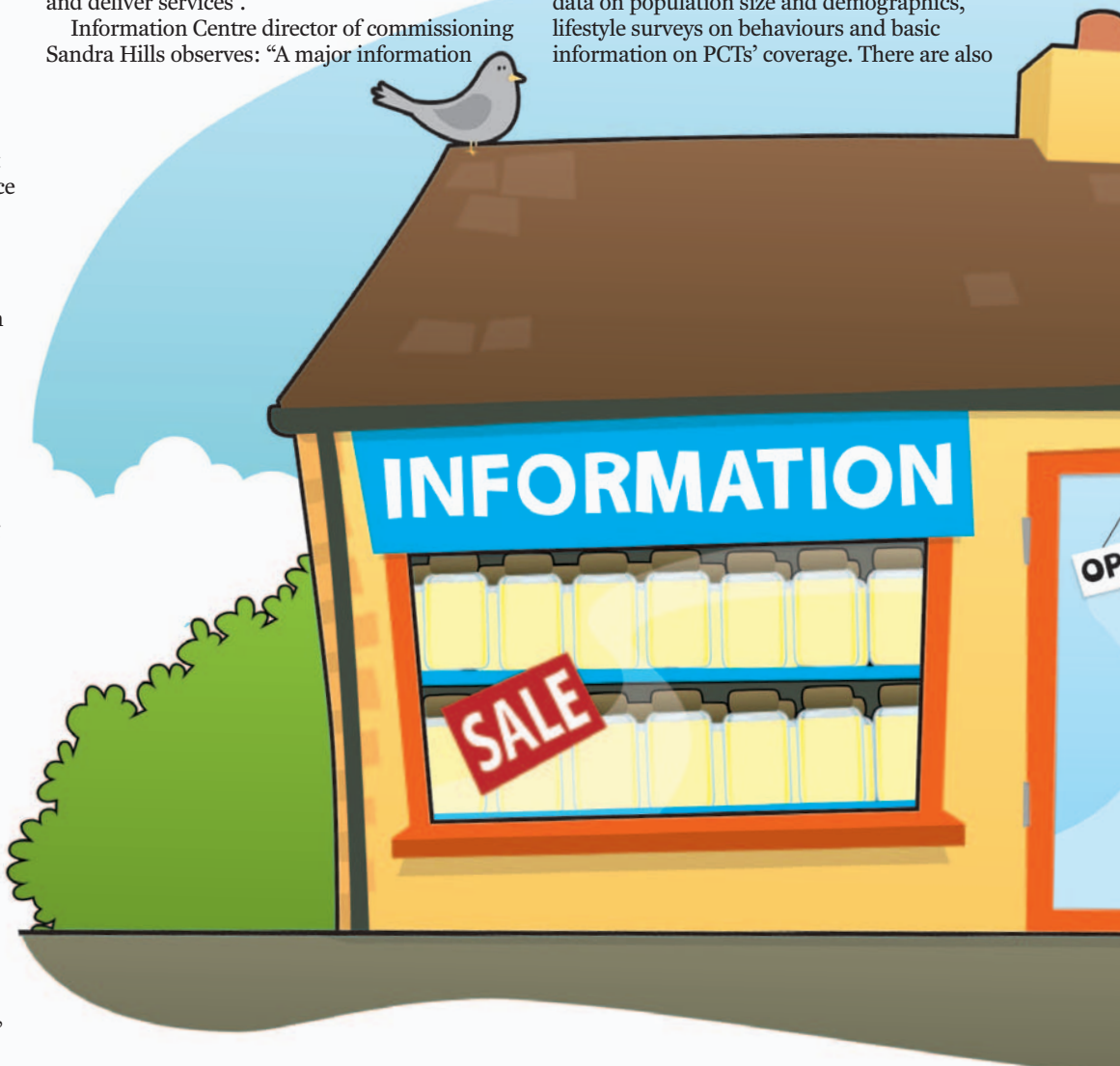
Western Cheshire PCT head of strategic performance Pam Hughes says: “Understand the data you've got – don't skim its surface. Drill down, and talk to your frontline staff to see what data they want and what data they need to help them: don't tell them what they can have. Once you understand down to data item level what you have and how you can marry it to other information, it can help you to redesign, manage and deliver services”.

Information Centre director of commissioning Sandra Hills observes: “A major information

challenge for primary care commissioning is that people in commissioning consortiums may not always be able to articulate the information problems they're trying to resolve, so it can be hard for us to identify what help they need and hard to signpost for them. You don't always get the answer the first time you ask, but sometimes the first asking helps you articulate the question that you really need to ask more clearly.”

Ms Hills suggests that commissioners should consider using the centre's resources.

“Commissioning starts with understanding population needs. We collect or have access to data on population size and demographics, lifestyle surveys on behaviours and basic information on PCTs' coverage. There are also



NUMBERS

things about public health profiles and condition prevalence. All this can give a rich picture of the population of a PCT or practice-based commissioning consortium. It can give useful indicators of what services a healthy economy should look to provide."

Looking to the medium-term needs for commissioning, Ms Hills suggests more locally based needs assessments, where PCTs will identify a particular area of health need in which they want to see mortality and morbidity improve.

"There will always be national and SHA-wide identification of needs to inform commissioning, but there should also be local information pockets relating to specific health needs for individual organisations," she says.

VITAL COMPARISONS

Stockport primary care trust chief executive Richard Popplewell has used data from the Information Centre to examine ways of delivering services to 290,000 residents. This population has relatively high rates of cardiovascular disease. He notes: "We are second or third highest in the country in cardiovascular spend per head of population, but we have relatively poor outcomes."

Stockport PCT redesigned various pathways for cardiovascular patients, by comparing their activity and outcomes with the national

average or various peer groups to see where needs were not being met. The Secondary Uses Service enabled the PCT to understand why its rates were so high.

"It's vital to be able to compare yourself with other PCTs. You can't be complacent that you're doing all you can. There's always somebody somewhere doing better," says Mr Popplewell.

Also important to his commissioning are the Information Centre's Healthcare Resource Groups. "Chief executives tend to pay attention to finance because if they don't, they tend to get caught out," he says.

Using this information helped the PCT deliver a £1.7m surplus in 2007-08.

The PCT also finds the centre's new NHS Comparators service useful in planning and monitoring services, and Mr Popplewell pays respect to his team of analysts:

"We tend to draw a lot of information from SUS and then analyse and reinterpret it locally. Particularly interesting is when you have patients flowing across pathways – hospital one to hospital two, particularly in cancer or chronic conditions. SUS is the only way you can do record linkage."

"Information skills and competencies are really important," Ms Hills concludes. "The centre sees its evolution and organisational development taking place in parallel to commissioning. As PCTs and commissioning consortiums are seeking to become world class commissioners, so we're seeking to become a world class organisation in relation to collecting, handling and securing information – and presenting it in ways that effectively support and enable commissioners to do a good job."

GP extraction service

While the NHS has comprehensive, high-quality national data about hospital care, in primary care its commissioners rely on local extractions which are not standardised. This lack of nationally co-ordinated information hampers efforts to develop the best policies to tackle health inequalities and target resources in the most effective way.

However, all this is about to change with a new service being introduced by the Information Centre. The General Practice Extraction Service will be a centrally managed data extraction and analysis service that will get information from NHS GP systems.

Dave Roberts leads on the GP extraction service for the Information Centre. He says: "Initially this service is designed to meet national needs for information at GP practice level. But at a later date we may see NHS users in strategic health authorities, PCTs and commissioning groups.

"Currently the NHS can access a disparate range of primary care information sources. Some cover all practices, but extract only limited data.

"Other sources, which are broader in scope, are all based on sample practices. This means their data is not appropriate for many purposes."

Mr Roberts says the service will be joined up and promote better coverage for clinical audits. It will also act as a focus for the development of clinical and data standards in primary care.

So will GP extraction service data feed into commissioning? "Absolutely," says Mr Roberts. "Our aim is to allow PCTs controlled access to the data they require. However, information governance and, in particular, patient confidentiality is paramount. The GP extraction service will operate under safeguards that are being discussed with the British Medical Association and the Royal College of GPs, including appropriate opt-outs for doctors and patients.

"Phase one will incorporate these safeguards and work with GPs to minimise risks while delivering the huge benefits that aggregated information of this type can provide to the improvement of the health of populations and the delivery of NHS services.

"If we can achieve all that, we will allow PCTs in collaboration with GPs to produce information vital to the commissioning agenda, such as developing care pathways as highlighted in the Darzi next stage review, as well as improved public health surveillance." ●