PASCOM data collection system & NHS IT strategy

Gavin Rudge

Defending criticisms that PASCOM may duplicate systems already planned in the NHS
David R Tollafield

PASCOM has always intended to act as a clinically driven method to collect data for the profession in the absence of any other structured approach in the UK. I think there is no doubt one can acknowledge that the NHS, and indeed the private practice sector, is hungry for data, but much of the drive is related to financial emphasis.

Here, Gavin Rudge presents an article on 'PASCOM data collection system and NHS IT Strategy', highlighting gaps that already exist in the national data collection system.

PASCOM has been adopted by the Faculty of Podiatric Surgery and the College as part of a forward strategy in Clinical Governance adopted by the Professional Practice Committee in 2000. This low-budget project, supported entirely by the Society of Chiropodists and Podiatrists, has allowed us to develop a database that can provide useful

data about activity that supports the sustained implementation of podiatric surgery. The collection of complications termed 'sequelae' allows us to look critically at our outcome with a view to reflecting change in practice.

Because it is unfettered by national policy, this has been a project that has adapted with foresight to the needs of the clinician (currently surgeon based).

The future development will build on 11 years of experience since it inception in 1997 and allow not just collection of data along the lines of any juggernaut database proposed, but will reflect much much more about what we do to patients and how effective our interventions are. In some ways we are doing the work for the health service by establishing a system that can identify measured outcomes.

The current system is limited to surgical episodes of care, and so the Working Party is developing a database that looks at the whole pathway from the point of view of process and outcome, using several tools to quantify that outcome. The second major change imposed upon us by the Faculty of Podiatric Surgery has been to ensure that clinicians can access their data for CPD and training purposes.

This side of PASCOM is not reflected anywhere else in the health care system and is vital for ensuring clinical probity as well as offering evidence about our practices. It would be quite reasonable to disassemble PASCOM and go with another system, but that system would have to do a great deal more than just count certain activities. It is comforting that at least one professional body has been able to think 'outside the box'!

Introduction

The IT systems of the NHS are undergoing a significant and ambitious period of development. The aim is to provide a system where practitioners can access data about an individual patient across provider organisations electronically.

Also, systems are being optimised to provide accurate information for billing following the introduction of the NHS financial reforms. It is therefore reasonable to ask where the data set collected by the PASCOM system sits in this context.

Much of the information issued by the NHS information centre has raised expectations of highly detailed data sets being captured in a radically new IT architecture.

Clearly, if, under this architecture, data collection processes similar to that of PASCOM are planned, then it is correct to consider any resulting duplication of effort most critically. However, when the actual Connecting for Health programme is examined in detail it can be seen that the reality of the systems envisaged may be somewhat different to some of these expectations.

Here I will briefly describe the systems upon which podiatric surgical data is being, or will be captured, and discuss the relationship between these processes and the PASCOM process.

Admitted Patient Care

There is one main system that records details of admitted patient care throughout England, this being Hospital Episode Statistics (HES). HES is the standard secondary care database used by the Department of Health to monitor centrally all admitted patient care activity in the country. It is a well-established data set with space to capture over 250 variables for every episode of care, although only a small number of the total fields is usually needed for any individual case. It covers both elective and emergency cases and day cases, and covers the acute sector, treatment sectors, and private providers commissioned by the NHS.

This is effectively an upload from the patient administration systems (PAS) of acute hospitals nationwide. PAS, which run in the acute sector, whilst supplied by different companies all do effectively the same job, which is to populate this national minimum data set, with some local variation of extra tasks tailored to the needs of the hospital concerned. As well as catching all of the usual administrative details of the patient, they capture clinically relevant details as well.

HES describes any invasive therapeutic and diagnostic interventions in that episode of care using the Office of Population Census and Statistics coding

system (OPCS). These are effectively the BUPA surgery codes (which are based on OPCS), with which many podiatric surgeons are already familiar.

HES also captures a detailed diagnostic profile of the patient using ICD10 codes. Up to 14 codes can be used to describe the main presenting complaint and up to 13 co-morbidities.

Podiatric surgery and HES

Historically, podiatric surgery has not appeared on HES as only care of patients admitted under a consultant with an NHS consultant code could be entered on it. Foot surgery undertaken by orthopaedics was recorded on the national system but podiatric surgery was effectively invisible on it.

Traditionally, data relating to podiatric surgery was captured by existing PCT systems, whose scope and structure are highly variable nationally and are driven by the largely local needs of obtaining payment from providers. This did not allow for any comparison nationally of what activity was being undertaken in various settings. Also, many of these systems have evolved from old databases used by providers of community care developed in the late eighties and early nineties, with extra modules and bolt-on systems added over time.

However this is now changing. According to guidance issued in April 2006, non-consultant led activity can be captured on HES (data set change request 754). However, it is my understanding from reading it (para 7 of background) that this data flow is still not mandated. However, almost certainly data flows into HES must be occurring as a result of locally agreed commissioning and, at some point, all podiatric surgery episodes will get recorded here.

In some locations teams are already submitting either full HES data now or a set of data that is very like HES to support billing under existing commissioning arrangements. As other services begin to capture data on HES, changes to existing documentation may be made, and surgical teams may begin to notice demands for different (and perhaps more) data. In other cases, a team may not even notice that they have migrated to HES, as the clinical coding required to enter these data may be done by a Trust IT Department from the documentation that it already collects, and the data will flow with no extra administrative overhead to the team involved.

So far it appears that at least a degree of duplication may arise from a wholesale migration from local Trust systems to HES. However, having looked at what HES does, we need to consider what it does not do.

HES cannot give any sense of a patient pathway through the system, and no useful outcomes data are collected. It does say where a patient was discharged to, including death or unexpected transfer to another hospital, but these are not useful outcome indicators in podiatry. Outpatient data will be entered onto a national system that works in parallel to HES, but again this just records the date, the patient, the specialty and whether it was a first appointment or not. No diagnosis fields are available here and no outcome indicators are captured.

Some inference of adverse outcomes can be reflected in HES, for example emergency readmission within a certain time could be searched for on the data base, but it would not be clear (other than by inference) as to whether a subsequent episode was linked or not. For example, emergency admission for DVT after a foot operation would be captured, but only the fact of a DVT diagnosis proximal in time to a surgery discharge would exist on the system.

There are no patient experience fields on HES. Patient surveys are applied in hospitals as well as in GP practices, but the domains they measure are very generic, seeking to gain an insight into the whole patient experience of the provider. These are not linked to individual HES episodes of care and are collected and warehoused on different systems. This means that the results cannot be case-mix adjusted or applied at specialty level.

The HES data set will remain largely unchanged and is seen as the central plank of data capture on hospital activity. From time to time the dataset is modified. For example, death within 30 days of discharge is planned through a linkage process to death registrations. Sometimes data items are removed, and systems are actually evolving in a de-centralising way. For example, many of the data items relating to intensive care have been removed, with hospitals being asked to submit a separate data flow on this activity to a separate system outside of the HES data warehouse.

To understand what recording activity on HES will mean, it is necessary to examine the key drivers behind it. The *raison d'être* of the HES system is the support of the recent financial reforms. Most of the money that is transferred around the system pays for admitted patient care. This relies on knowing who has received what care from whom. The financial reforms based upon this are

"PASCOM requires data of greater richness and detail than are required simply to get the billing right"

called 'Payment by Results'. The terminology causes confusion in that it implies that the policy (and by inference the data sets supporting it) relate to clinical outcome. The financial reforms are effectively based upon payment by activity, rather than outcome.

To ensure these payments are correct, the central role of systems that capture health information data is to ensure that treatment is allocated to the correct Health Care Resource Group (HRG). These are the groupings that patients are put into to determine the tariff for their care. This is a combination of ICD10 and OPCS codes, together with age depending on the HRG concerned. For foot surgery there are very few HRGs, and these do not require data of much detail to which to allocate the episode. There *are* incentives to make the HES system collect good quality timely data, but only up to and not beyond the level of detail required to support HRGs. Data of finer detail than is required to do this are not needed by the centre and will not be captured by it.

Some of this missing detail includes the surgical technique used, what sort of hardware is used, and indeed in many cases whether hardware was used. Also, medication is not recorded on HES, although some local PCT systems may have modules to monitor medication at a patient level. Diagnostic procedures, aside from a handful of invasive ones, are not recorded on HES, although again some local PCT systems may record these procedures. Individual radiology and pathology services will also record these processes, but there is no mechanism, current or proposed, where data from these systems can be routinely captured on one data set. However, all of these variables influence quality and outcome of care.

Conclusion

Some podiatric surgery teams will not have a high degree of administrative support in their Trusts. Of these, some may be faced with demands for extra data capture that, allied to PASCOM, will be difficult to deliver. Where this is the case, clearly they will have to prioritise the needs of their Commissioners.

Hopefully, however, many will not have any significant extra data capture burden as a result of NHS IT strategy. Indeed, there may be a strategic opportunity to strengthen areas of PASCOM, such as diagnosis capture, using the same data that may be required to support HES. The working party is currently including an ICD-10 code approach to clinical diagnosis in the next database version.

Ultimately the PASCOM data set seeks to achieve something that requires data of greater detail and richness than are required to simply get the billing right. Not only does the national data set not do this currently, there are no incentives in the national IT strategy to take the data sets in this direction in the future.

In conclusion, NHS IT strategy will change the scope and nature of current systems, but not that greatly. Little extra clinical detail or meaningful outcome data will be captured by these systems. Rather, the focus will be on improving existing systems on which these data sets are currently housed and improving completeness and quality of capture.

The level of detail and sophistication needed by the national IT strategy, being driven largely by the needs of accurate costing and billing, is activity-led. The level of detail involved differs from, and is somewhat lower than, that required by a specialty-based system to deliver intelligence about practice quality, which is predominantly outcome-led.