Payment by results and elderly care medicine—friend or foe?

Payment by Results (PbR) is a model of financial flow within the NHS, where money is paid by commissioners for clinical work carried out. It poses challenges for clinicians and necessitates changes in work practices around discharge documentation. Elderly care patients are by nature very complex, and capturing full, accurate details about their in-and-out patient journeys can be challenging. This article aims to inform clinicians about the 'mechanics' of PbR, and provide practical suggestions for optimal working within the PbR structure, for the benefit of patients, providers and commissioners.

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Payment by Results (PbR) was first introduced by the Department of Health in 2002, as part of wide-ranging reforms within the National Health Service (NHS).[1] It is a system by which money flows around the NHS and sets up incentives for NHS hospitals to behave somewhat like businesses, charging commissioners (usually the local Primary Care Trust (PCT)) for treatments and services provided.

PbR is a different concept from historic fund holding principles, and Practice Based Commissioning (PBC). Fund holding enabled general practitioners to receive a fixed budget to pay for primary care, drugs and non-urgent hospital treatment. PBC is about engaging primary care professionals with NHS service commissioning. PbR pays for these services once commissioned, and also covers payment for non-scheduled care.

PbR aims to introduce transparency in NHS financial flows as essentially the funding follows the patient. It challenges and incentivises organisations and departments to improve efficiency and increase productivity in a very dynamic environment.

Ultimately the principle of PbR is that charging for each treatment provided should drive cost efficiency, incentivise new clinical activities, and make the flow of funds to and within NHS hospital trusts more transparent and fair.[2] Under PbR, most patient attendances and admissions in a secondary care setting are translated into a national tariff, which is charged to commissioners.

In the UK, PbR is being used in England, and is based on similar models used in countries such as Australia and Sweden.[1] It has been swiftly implemented within the NHS, and it poses new challenges for both NHS managers and clinicians with respect to current and future working practices.

In the past, NHS hospital trusts would negotiate 'block contracts' with their local PCT, to provide, for example, an elderly care service for the local population. Complex negotiations and estimations of the volume of clinical work predicted to take place within a given financial year would determine the cost of secondary care. These negotiations were conducted by NHS financial and business managers with variable input from clinicians. Once the block contract had been agreed, the volume of clinical work undertaken in the following financial year was less important, as the elderly care services had effectively already been purchased. With PbR this pattern of commissioning services has been radically altered, with money paid in retrospect for recorded work.

PbR 'mechanics'

The tariff generated for each individual patient episode is translated into health resource groups (HRGs) by trust clinical

coding department staff, based on clinical information about individual patients' diagnoses, investigations and treatments. The problem for primary and secondary care communication is that there are 28,000 individual codes that describe different interventions and diagnoses—an unworkable number to translate into tariffs.

Therefore, HRGs are numerically much smaller and standard groupings include similar treatments that use similar levels of healthcare resource.

Each HRG has an allocated tariff, which can be charged individually to commissioners. Since April 2009, the previous version of HRG (version 3.5) was replaced by HRG 4.0. This saw an increase in HRGs – from over 500 in HRG 3.5 to over 1400 in HRG 4.0 – that is designed to better reflect the complexities of care.

A term used within PbR is the 'trim point' for a particular HRG. Each diagnosis has a particular 'trim point' attached. This refers to the amount of money health economists have calculated an individual condition should cost in terms of inpatient days and cost per patient. An example to illustrate the concept is included below:

- The HRG code for thrombolysis of a total anterior circulation stroke would assume an inpatient stay of a certain number of days: the 'trim point'. If the patient stays in hospital for fewer days, then the tariff is not reduced (perhaps a financial incentive to plan for early discharge); but if the patient's inpatient spell exceeds the trim point, each extra day can be charged at a pre-specified rate for that diagnosis, as set out in the HRG coding manual.

PbR accuracy

A recent internal audit within the Elderly Care and Stroke Departments at University Hospital of North Staffordshire compared the accuracy of information on 64 inpatient electronic discharge summaries (used by the Clinical Coding department to generate tariff data) with a detailed case-note analysis to ascertain inpatients' journeys regarding diagnoses and treatments.

Thirty six percent of notes were inaccurately coded, resulting in payment inaccuracies of £23,788 (comprised of theoretical underpayments of £13,745 and overpayments of £10,043).

A typical example of a patient who had inaccurate data recorded on their discharge documentation is as follows

- Diagnosis recorded on discharge summary: injury to hip
- Diagnosis when medical notes were reviewed: fall, with hallucinations due to opiates.

This additional information led to the HRG code being changed, with £511 extra income that would not have been billed to commissioners by the Trust, based on the original information. The results concur with previous external and internal audits at the Trust, as well as national audits analysing the accuracy of data recorded for coding into tariffs.

In 2007, the Audit Commission analysed the data used to code the inpatient episodes of 70 elderly care patients, which were submitted to commissioners

Box 1: An example PbR tariff

An 85-year-old lady from a residential home had a fall thought to be due to postural hypotension and excess sedation from haloperidol. She fractured her right pubic ramus as a result. She had a background of dementia, and required analgesia and rehabilitation to re-mobilise. She was also noted to have a sacral pressure sore that required redressing, and input from the tissue viability team.

This generates an ICD 10 code S32·50 for fracture pubic ramus, L89·X for sacral sore, I95·1 for postural hypotension, Y49·4 for adverse effect of haloperidol, F03·X for dementia, generating an HRG code of HA91Z which translates into a payment of £2210. Additionally, there is an unbundled HRG for the 'rehabilitation of the hip fracture.' This is VC16Z. This is not yet under PbR and is not nationally agreed and is generally locally negotiated.

For the fictitious patient detailed above, the final PbR tariff was calculated to be £2210. If the discharge data had failed to mention that the fall was due to two phenomena (drug sedation and postural hypotension) or failed to mention the sacral sore, this would not have affected the HRG tariff calculated under PbR, but clearly this is important clinical information to be communicated to the GP. It is crucial that all relevant facts are included, in order to ensure the PbR tariff is as accurate as possible, appropriately remunerating the Trust for clinical work carried out.

under PbR.[4] When the discharge documents were compared to the clinical notes, it was noted that the primary diagnosis was inaccurate in 30% of patients. In terms of HRGs, there was an HRG variance of 17%, which could theoretically lead to either under- or over-payment by commissioners. The audit concluded that, in this cohort of notes, the differences could be valued at £38,369.

This level of inaccuracy is worrying as it directly translates into a potential loss of revenue for the NHS Trust, or equally could have serious implications for the PCT in terms of inappropriate overpayments being made. Consistent inaccurate over-billing to PCTs may lead them to seek commissioning of services from alternative hospital trusts or providers, which could have grave financial consequences for the hospital Trust involved.

Of course, there is also the potential for the system to hide fraudulent claims, due to its complexity, but PbR relies on honesty and transparency between commissioners and providers of clinical services, both working on behalf of patients and in their best interests.

Elderly Care departments, in particular, face challenges regarding the accuracy of discharge documentation, as patients are, by definition, very complex in terms of their inpatient journeys.

Under PbR, different tariffs can be applied depending on the background medical co-morbidities, so it is vital for accurate remuneration that none are accidentally omitted. All procedures must be documented, even if normal results were obtained, so that the investigation can be appropriately charged for. Frail elderly patients also often have rehabilitation (albeit sometimes only for a couple of days) as part of their acute medical in-patient episode, and therefore this must be recorded, in order for the hospital to appropriately receive payment.

With ongoing developments of HRGs, it becomes even more important, though currently rehabilitation tariffs are subject to local agreements.

Useful things to know about PbR

1. All PbR payment submissions for the previous month's clinical work must be submitted to the commissioners by the third working day of the new calendar month. Payments submitted after this day can only be charged at 10% of their tariff but this may be subject to local agreements. This has implications for the importance of timely discharge documentation, and perhaps increased pressure on doctors and could potentially risk taking them off direct clinical care.
2. Under the rules of PbR, PCTs are not obliged to pay any additional monies that come to light after a tariff fee is submitted, yet they are empowered to (and frequently do) question cases where they feel overpayment has happened. As PbR is evolving and the knowledge around the processes is shallow and experience little, a large district general hospital can get as many as 100 queries per month about potential over-payments. As PbR is a new concept for money flow within the NHS, there is potential for uncertainty and ambiguity whilst clinicians and coding department staff within primary and secondary care adapt to a new way of working. It is perhaps not unreasonable to suggest that PCTs may have better procedures for detecting discrepancies than acute trusts currently do as primary care has adopted successful business model principles and systems for several years.
3. **PbR Exclusions**
   Some activity is excluded from PbR and remains subject to local payment rather than mandatory tariff. This may be because some services are outside the scope of reference costs, have not yet had currencies developed for them, or do have currencies but the costs associated with them are not considered robust. Similarly, some drugs are typically specialist or high cost, and their use concentrated in a relatively small number of centres. Consequently, they would not be fairly reimbursed if funded through the tariff. Similarly, some medical devices represent a high and disproportionate cost relative to the cost covered under the relevant HRG.
4. **Best Practice Tariffs**
   These were a commitment in High Quality Care For All, the final report of Lord Darzi's NHS Next Stage Review. They are tariffs that have been structured and priced to encourage high quality care, and mark a significant departure from pricing tariffs on the national average of reference costs. The

first Best Practice Tariffs were released in 2010–11 for four high volume service areas, all characterised by significant unexplained variation in practice and clear consensus of what clinical best practice constitutes. These include:

(a) cataracts: aims to reduce the number of times patients are assessed before and after surgery by setting a price for the whole pathway rather than pricing each spell of activity
(b) cholecystectomy: aims to encourage keyhole surgery in a day case setting where clinically appropriate
(c) fragility hip fracture: makes an additional payment for providing rapid surgery and orthogeriatric care
(d) stroke: makes additional payments for urgent brain imaging and care in an acute stroke unit. More Best Practice Tariffs are in development for 2011-12.

5. Services where PbR is under development

- Ambulance services
- Community services
- Integrated sexual health services and HIV outpatients
- Mental health
- Palliative and end of life care
- Rehabilitation (admitted patient and community)
- Services covered by unbundled HRGs (e.g. critical care and chemotherapy)
- Specialised services (e.g. cystic fibrosis and spinal injuries)

Readers can obtain further information from the Department of Health document 'A simple guide to Payment by Results'.[5]

Possible solutions to improve PbR accuracy

Based on these challenges, it is important to improve discharge documentation for the purposes of generating accurate PbR tariffs for each patient; to enhance the quality of discharge summaries required for an effective hand-over of clinical care; and record better demographic and epidemiological data.

Suggestions have included:

1. Junior doctor training at trust corporate induction sessions.
Currently, in most hospitals, it is the junior doctors who are primarily responsible for preparing patient discharge documentation. These doctors should therefore receive particular instruction in understanding what information should be included in discharge documentation and why this is important for the Trust.
2. Consultant input into checking all discharge documentation.
It is noted from local audits that consultant input is helpful in improving the quality and accuracy of data recorded. However, this may require considerable costs to the Trust in terms of consultant time within job plans for this activity to take place.
3. Drop down menus (discharge prompts) of commonly used diagnoses on a specialty basis.
The discharge documentation for every inpatient is usually typed using locally available computerised programs that vary between different trusts. Liaison with the trust information technology departments regarding the design of drop-down boxes within this computer program, based on the most common diagnoses, investigations, co-morbidities relating to different specialty based patient groups, to facilitate accuracy.
4. Use of ward-based, medical-trained typists who would type the summaries to be signed off by the junior doctor.

There are also discussions around employing ward-based secretarial support staff, who would be trained to read medical notes and whose primary responsibility would be the completion of electronic discharge documentation in an accurate and timely manner. All documentation would then be checked and signed off by the junior doctors. This would release busy junior doctors from having primary responsibility for completing the documentation, which can take several minutes per patient using the rather complex computer software.

It must also be acknowledged that, although the discharge letter is the primary source of data used for PbR coding in many trusts, this was not always the case. Previously, the main aim of a patient's discharge letter was medical communication with their general practitioner (GP), to ensure patient safety on discharge. This remains a vital part of the discharge letter, and this must not be forgotten now that discharge documentation is used for dual purposes.

Economics

Will Elderly Care 'win' or 'lose' under PbR?

As 'block contracts' are being replaced by PbR tariffs, leading to all treatments being individually remunerated, it will soon be apparent what the actual cost is of providing an elderly care service within a particular acute hospital trust.

It is not controversial to suggest that elderly care departments may have been financially squeezed at times, and that some block contract funds been diverted from their intended purpose, whilst the therapists and clinicians have continued to develop services for an ever-expanding frail population. PbR may be a rude awakening both for commissioners and providers, when they see the true cost of a geriatric service effectively 'itemised'.

This may produce financial gains for those departments who have been (voluntarily or involuntarily) financially prudent, whilst remaining clinically productive. If the payment gap between 'block contracts' and PbR income generates excess income for Elderly Care departments, the onus will be on its consultants to 'hold onto' that income, rather than let it be diverted to other parts of their trust. This could be via expansion of clinical working or trialling novel ways of working, with the aid of newly discovered financial flexibility.

It is fair to say, however, that some trusts will find a deficit between their block contract and PbR funding for Elderly Care Medicine and this will need to be looked at in more detail to ensure that a department's activity is being captured appropriately, including undertaking audit cycles to assess the accuracy of data used for coding purposes.

In the longer term, it is unknown whether commissioners will be unwilling to pay the true cost of an effective, comprehensive geriatric service, and will look to whether alternatives are possible, perhaps by using alternative providers for some services, for example rehabilitation.

Development of Best Practice Tariffs for common conditions relevant to care of older people may effectively improve care of older people as this may encourage trusts to build services around these. These could include acute and post acute rehabilitation, outcomes based on functional independence at day 30, multi-disciplinary approach in discharge planning, return to usual place of residence, nutrition, continence management, falls prevention, delirium prevention, comprehensive geriatric assessment in community settings, dignity in care and finally linking them to outcomes rather than just clinical activity.

Final thoughts

PbR has been a huge change in the way acute hospital trusts are funded, and elderly care departments, in particular, face serious challenges.

It is difficult to predict how PbR will affect clinicians on an individual trust level. There may need to be changes to local working practices, in response to either a rise or fall in income generated at both departmental and/or trust level. Service line management and reporting will make services and consultants accountable for the contribution they make to the Trust's income and so clinicians need to understand how the processes that generate income work now.

What is absolutely critical to the success of PbR is clinical engagement to ensure that all clinicians are aware and involved in the processes needed to ensure accurate reimbursement, not forgetting the impact that finance and good data quality can have on patient care.

An important note to finally re-emphasise is that the principles of PbR lie not solely within finance but also on using it as a tool to impact on performance, service delivery and, most importantly, improved patient care within the NHS.

Dr A Arora is a member of Clinical Advisory Panel for Payment by Results. Dr Chambers and Dr Mona Arora have no conflicts of interest to declare

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