



# Joint Approach

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THE NEWSLETTER OF THE  
NATIONAL JOINT REGISTRY  
[WWW.NJRCENTRE.ORG.UK](http://WWW.NJRCENTRE.ORG.UK)

The NJR  
Helpline number  
has changed to  
**0845 345 9991**



National Joint Registry  
[www.njrcentre.org.uk](http://www.njrcentre.org.uk)

This Newsletter is also available from the NJR Centre in Welsh

# Latest NJR News - at a glance

## Minimum Dataset (MDS) review

A review of the current MDS has identified a number of essential data field changes that will enhance future data analysis and subsequent interpretation to further improve patient outcomes. The data entry system is currently being developed to incorporate these changes. The update - MDS Version 2 - will be launched for use within hospitals in Spring 2004. This means that hospitals will need to use a revised proforma to collect MDS V2. See page 3 for further information.

## Helpline telephone number change

The Helpline telephone number has changed to 0845 345 9991. The new telephone number means that all UK calls are charged at the local rate. The Helpline fax number has changed to 0845 345 9992. MDS proformas and NJR patient consent forms have been updated with the new numbers and are available from the NJR website [www.njrcentre.org.uk](http://www.njrcentre.org.uk)

## Locating prosthesis components on the NJR database

The data entry system has been updated to help you locate components. If a component cannot be located on the NJR database, data entry staff should complete a 'new component request' form on-line. Add your contact details so that the NJR Centre can follow-up each request where further information is required, see page 4.

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## Events Diary

### The NJR is at the following events:

**Black Notley Hospital Conference Day**  
14 January 2004 Speaker: David Carter, Programme Manager, NJR Centre

**Welsh Quality Forum**  
15 January 2004 St David's Hotel, Cardiff

**Patient Safety 2004**  
24 - 25 February 2004 International Convention Centre, Birmingham

**BHS AGM**  
4 - 5 March 2004 Sheffield

**BASK AGM**  
1 - 2 April 2004 Basingstoke

All NJR information and documents are available on the NJR website  
[www.njrcentre.org.uk](http://www.njrcentre.org.uk)

If you do not have access to the web, contact the NJR Helpline to receive a copy by email or by post.

**NJR Centre, 329, Harwell, Didcot, Oxfordshire OX11 0QJ**  
**Tel:** 0845 345 9991\*\* **Fax:** 0845 345 9992\*\* **Email:** [enquiries@njrcentre.org.uk](mailto:enquiries@njrcentre.org.uk)

\*\*Please note NJR Helpline number change

## Next newsletter publication: March 2004

If you would like to make a contribution to this Newsletter please contact Sandra Hasler, Communications Manager, via the NJR Helpline.

# An Improved Minimum Dataset - MDS Version 2

**A review of the current MDS has identified a number of essential changes to data fields collected by the NJR. These changes will enhance future data analysis and subsequent interpretation to further improve patient outcomes. The data entry system is currently being developed to incorporate these changes and MDS Version 2 will be launched for use within hospitals in Spring 2004 (subject to ROCR approval). This means that hospitals will need to record all hip and knee procedures on revised paper proformas designed to collect MDS V2.**

The MDS review took into consideration:

- feedback from hospitals of their experiences of using the MDS and paper proformas
- data fields that were often left incomplete or frequently completed inaccurately
- the views and experiences of non-orthopaedic profession groups represented on the Steering Committee
- expert consensus of Regional Clinical Co-ordinator working groups, one focussing on hips and one on knees

## Key data field changes

Accurate data fields improve data analysis and subsequent interpretation; MDS V2 aims to provide a more objective measure of epidemiological case mix and complexity. The review also ensured that the time taken for data entry did not increase significantly.

Importantly, MDS V2 includes "Reoperations other than Revision", i.e. where reoperation has been due to, for example, infection or dislocation.

MDS V2 will be available for reference on the NJR website in January 2004 following its submission to the relevant NHS data standards bodies.

## Data entry

The data entry system needs to reflect the

changes to the MDS and development is currently underway. Prior to its general release, the updated system will be rigorously tested and will be piloted in several hospitals to ensure it is fully functional and easy to use. Some user improvements will be provided during system development but there will be no significant changes to the way in which the system operates or the method of data entry.

The system will allow data from both the current MDS (MDS V1) and MDS V2 to be entered, but only for a limited period. Therefore, it is vital that hospitals enter backlogs of proformas ahead of MDS V2 launch. The data entry system will provide on-screen instructions for data entry staff.

The NJR Centre will continue to provide one-to-one support via the Helpline and supplementary information will be made available on the NJR website. In-house, hands-on training workshops are also available on request. To discuss your hospital's training requirements contact Amanda Hoare, NJR Training Co-ordinator, via the Helpline, or by email [training@njrcentre.org.uk](mailto:training@njrcentre.org.uk)

## MDS V2 proforma

Hospitals will need to ensure that they use the revised MDS proformas to collect hip and knee MDS V2. The proformas will be made

available on the NJR website in March 2004. The proformas will be distributed to hospitals where the NJR Centre have a contact email address.

## Bulk data upload

Many hospitals collect data on their local database systems and have requested a method of exporting that data directly into the NJR – a bulk data upload facility. Bulk data upload will avoid duplicate data entry and hence preserve data quality.

The NJR Steering Committee has agreed to the development of a bulk data upload facility. This facility will be developed following the MDS V2 modifications to the data entry system. This means that no bulk data upload facility will be developed for the current MDS (MDS V1).

## Barcode reader system

Following the completion of a scoping study, the Steering Committee is considering the development of a barcode reader system.

A barcode reader system capable of entering component data will potentially aid data entry. However, not all suppliers provide barcodes for implants, so it will not always be possible to enter a components details using such a facility.

The image shows two overlapping forms titled 'Minimum Dataset Form' from the National Joint Registry. The top form is for 'KNEE OPERATION' and the bottom form is for 'HIP OPERATION'. Both forms include a header with the NJR logo and website, and a section for 'PATIENT DETAILS' with fields for name, date of birth, patient history, and consent. The forms are designed to collect standardized data for hip and knee procedures.

# Working With You - the NJR Helpline

The Helpline Telephone number has changed to **0845 345 9991**

The new telephone number means that all UK calls are charged at the local rate.

Please note that the Helpline fax number has also changed to **0845 345 9992**.

The National Joint Registry Helpline is open from 9 am – 5 pm Monday to Friday to answer your questions and queries. Out-of-hours you can leave a message or send your query via email to **enquiries@njrcentre.org.uk**.

## Using the Helpline

The Helpline operates a rota system, so you may not speak to the same Helpline adviser each time you call. All advisers are familiar with a diverse range of NJR subject areas - from using the data entry system to Steering Committee decisions. If your question is very specific the Helpline adviser will take your contact details and the nature of your enquiry and pass them on to the appropriate person within the NJR Centre for follow-up.

## NJR data entry queries

Helpline advisers use a 'duplicate' system (i.e. a system that mirrors the 'live' system) to work through individual user data entry queries. This means that they can help you work through your data entry difficulty step-by-step.

## Registering for a new user account

To use the NJR Data Entry System you will need to register with the NJR Helpline.

The Helpline will require the following essential information:

- Your name (in full)
- Your user category (see below)
- The hospital(s) at which you work
- If you are a surgeon, you will also need to provide your GMC number and grade.

## User categories and data access

There are four NJR user categories which each have a specified level of access.

- 1 NJR Hospital Data Entry** – can enter data on the system but do not have access to any data reports.
- 2 NJR Hospital Data Manager** – has access to all NJR data for the hospital under which they are registered (but only for surgeons who have given their permission)
- 3 Surgeon** – has access to their own data
- 4 Implant supplier** – has access to their own component data

**Note:** Patient personal details (e.g. name and date of birth) can not be recalled by any user category since these details are encrypted once entered and are not stored in the database in an identifiable format.

## User verification

The NJR Centre needs to verify the identification of each new NJR user for security purposes. The NJR Centre must receive written authority from the hospital / unit manager for Hospital Data Entry and Hospital Data Manager user accounts.

Written hospital authorisation must be:

- written on headed hospital paper
- signed by the appropriate person, e.g. the Hospital / Unit Manager
- sent to the Helpline – by post or by fax.

Surgeons can verify and activate their account over the telephone if they provide their GMC number at the same time – this is why the NJR Centre request surgeons to register directly with the Helpline. If this is not possible, the person who is registering the surgeon on their behalf will need to provide a letter of verification signed by the surgeon. Surgeons will not be able to register without a GMC code.

Hospital Data Entry users and surgeons can be associated with as many hospitals as

applicable. Hospital Data Managers can only be registered for their own hospital.

## Your NJR User Account

At the time of registration you will be issued with a:

- User name
- Memorable data
- Password

A user can specify their own password and 'memorable data'. Alternatively, the NJR Centre will provide unique user password and memorable data on request.

A password **MUST:**

- be between 8 and 16 characters
- contain a mixture of Upper and Lower case letters (at least one of each)
- contain at least one numeric
- **NOT** contain spaces

Password expiry periods can be changed. The default period is 30 days but users may choose to increase this up to the maximum period of 90 days.

To maintain NJR security, users should never share user names, passwords or memorable data.



## Authorised access only!

**The majority of Helpline calls are a result of users forgetting their passwords and/or 'memorable data'. For security reasons the NJR Centre does not keep a copy of any user passwords or memorable data, which means that they must be reset everytime they have been forgotten.**

The NJR login process may seem rather arduous to some users but it has been introduced for a very good reason - to protect the confidentiality of patient data.

To allow independent healthcare providers to submit data, the NJR sits in the public domain (i.e. outside the security of NHSNet – the NHS secure intranet). This means that the NJR is potentially open to outside interference such as unauthorised access and malicious attacks. To prevent this from happening the NJR has implemented the use of a username, memorable data and password - this is a common Internet practice and is used, for example, by banks. For this reason it is important

that NJR users do not share their login details or openly keep a note of their login details.

The 'memorable data' field provides an added layer of security to reduce the chance of an unauthorised person gaining access by simply guessing usernames and passwords. In addition to this security measure the format of the password (i.e. a mixture of numbers and upper and lower case letters) further reduces the possibility of unauthorised access.

# The New Zealand National Joint Register



**The 'New Zealand National Joint Register' was established by the New Zealand Orthopaedic Association to record technical data on primary and revision procedures for hip and knees.**

In 1998, a six-month pilot study was undertaken over seven regions. In 1999, the Register was expanded to include all forty-nine surgical hospitals across New Zealand. The Register was further expanded in

January 2000, to incorporate other joint surgery and since then the New Zealand National Joint Register has recorded hip, knee, unicompartmental knee, shoulder, elbow and ankle joint replacements.

Patient consent is required before registration, similar to the England and Wales National Joint Registry. New Zealand has a population of 4 million inhabitants. Annually, about 4800 primary hip replacements, 3000 primary knee replacements and 1700 replacements from the remaining joint types are registered.

Audit procedures using Ministry of Health data for publicly funded discharges, show a greater than 95% participation rate. There are now more than 40,000 procedures registered. Participation is compulsory for orthopaedic surgeons undertaking joint arthroplasty.

Patient outcome questionnaires are an integral and unique part of the Register. The validated Oxford questionnaires are used for hip, knee and shoulder arthroplasties. An Oxford modelled, but not validated,

questionnaire is used for the remaining joint types registered. Patients receive the questionnaire six months post surgery and can answer on-line at <http://www.cdhb.govt.nz/njr>. The questionnaires allow patients to include details of any complications they have experienced post surgery.

The Oxford Scores range from 12 (best) to 60 (worst). The New Zealand average is 19 for primary hips and 23 for primary knees. To date, the response rate is 75%.

Every six months each participating surgeon receives a report listing the number of joints they have registered along with the regional and national figures for comparison.

Included in the report are the respective Oxford Scores and the New Zealand averages for each type of joint replacement. In summary, the combination of technical data and patient outcome scores provide an invaluable resource for audit and research.

**Toni Hobbs**  
Coordinator  
NZ National  
Joint Register

# Implant Components on the NJR Database



**There are currently 23 suppliers that equip hospitals in England and Wales, with over 40,000 NJR listed implant components for total hip and knee replacement procedures.**

This list is constantly evolving due to the emergence of new technologies and surgical techniques and the NJR database is updated regularly to reflect the situation. However, data entry staff may not always be able to locate a specific component on the NJR Data Entry System, for example:

- it may be a brand new product and not yet entered onto the NJR system by the supplier
- it is an old style product which is no longer marketed by the supplier concerned
- a typing error may have occurred whilst entering the component details ('REF' and 'LOT' numbers)
- the code on the component label may have a slightly different format from the component code on the NJR database (e.g. missing hyphens, full stops, letters)
- during data entry the component 'REF' and 'LOT' numbers may have been interchanged

- some bone cement products do not have product codes on their sticky labels

If a component cannot be located on the system, data entry staff need to complete a 'new component request form' - the Data Entry System provides on-screen user instructions.

## **New component requests – what happens**

'New component requests' are received daily by the NJR Centre and processed by a dedicated team who liaise with the requester and the implant suppliers to resolve such issues.

The first step for the NJR Centre is to establish whether the component is really missing from the database. Experience has shown that many of the components reported to be missing are actually on the database but the data entry person has not recognised them. This is largely due to the length and format of the component ID codes.

Where products have been omitted from the database, the NJR Centre will contact the relevant supplier and notify them of the need to upload the missing details as soon as possible.

Many of the 'new component requests' received do not provide full component details for the NJR Centre to check whether the product in question is on the database. Where this is the case the NJR Centre will contact the requester for more information - this is why email contact details are requested on the 'new component request form'.

The NJR Centre is currently working hard to refine the Data Entry System to speed up the 'new component request' process. Some NJR users have suggested that a barcode reader facility would further ease the component data entry process, and the NJR Steering Committee are currently considering the results of a scoping study that was commissioned earlier this year.

## **Locating a component on the NJR database**

To help locate a component on the NJR database, data entry staff need to:

- Double check! Re-type and re-enter the component number to reduce the possibility of simple typing errors
- Re-enter the component number excluding any hyphens, dashes or full stops if the product cannot be located with them included.

To help the NJR Centre process 'new component requests' more quickly, data entry staff need to provide the component description **exactly as it is stated** on the implant sticky label.

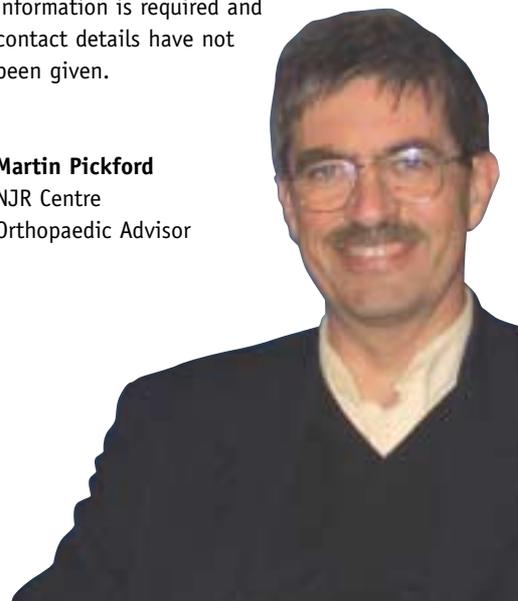
For example, providing details such as: "*Charnley flanged cup 22.225/40 mm*" will provide the NJR Centre with sufficient information to progress the 'new component request'.

whereas providing details such as: "*Charnley 22 mm cup*" will delay progress until more information has been provided.

## **The importance of providing contact details**

It is important to include a contact email address and phone number with all 'new component requests'. Many of the current outstanding requests have been resolved, however the NJR Centre has had difficulty progressing requests where further information is required and contact details have not been given.

**Martin Pickford**  
NJR Centre  
Orthopaedic Advisor



# Looking at Your Information – CSV Files

One of the key benefits of the NJR for individual surgeons, hospitals and suppliers is that data can be recalled on-line. To view your own data you will need to download it into a CSV (comma separated value) file - a data report where each data field is separated by a comma, see Example 1.

At first glance, the CSV file appears to contain a jumble of data. To view the data more easily, you need to open the file into a spreadsheet (or import the data into a database). All CSV files can be viewed in Microsoft Excel. If you are unsure how to import CSV files – ask your local IT support department for help. CSV format preserves a constant number of data fields in a data row, this allows users to set-up automatic data import routines.

The first data row of a CSV file always contains the data field descriptors, i.e. NJR Reference, Patient Hospital ID, and Surgery Date in Example 1. The data rows that follow contain the actual data, e.g. "17183" and "17362" in Example 1 are the NJR Reference numbers of submitted records.

If a data field contains "" it means that no data was entered in that particular field (see the second data field in the last data row in Example 1, no Patient Hospital ID has been entered).

## Records with multiple data rows

Each operation commonly uses more than one component. For each record, a new row of data is generated in the CSV file for every individual component used. This means that

## Example 1 – typical format of a CSV file

```
NJR Reference, Patient Hospital ID, Surgery Date,
"17183", "", "14/8/2003", "856762", "DePuy", "CHARNLEY EVOLUTION CUP 37/40MM", "1234"
"17183", "", "14/8/2003", "851882", "DePuy", "10/12 COBALT CHROME HEAD 22.225mm+10", "1256"
"17183", "", "14/8/2003", "8112100", "DePuy", "CEMVAC ULTRA CMW1 PLAIN 100G", "6543"
"17362", "", "9/10/2003", "102.413P", "Corin", "ROTAGLIDE+ FEMUR PEGGED LARGE LEFT", "5678"
"17362", "", "9/10/2003", "102.123", "Corin", "ROTAGLIDE+ TIBIA BASE PLATE LARGE", "9645"
"17362", "", "9/10/2003", "127.204", "Corin", "ROTAGLIDE UHMWPE TIBIA 14.5MM", "7834"
```

*"individual data fields are separated by a comma"*

a CSV file will contain record numbers that appear to have multiple rows of data, see Example 2. Note that for NJR reference 17183 in Example 2, three individual components were used.

## How to download your data

To download your data, login to the NJR data entry system.

From the main menu select **SYSTEM FUNCTIONS**. This will take you to a second screen, select **VIEW CSV EXPORTS**. This will take you to a third menu screen - what you see here will depend on what user status you have, i.e. Surgeon, Hospital Data Manager or Supplier, and therefore what data you have access to.

**Note:** 'Hospital data entry' status does not give those hospital staff access to CSV data reports.

**Surgeons** will see an option called **DOWNLOAD DETAILS OF ALL PROCEDURES YOU HAVE LED**. To start the download process, click on **SELECT**. A 'File Download' dialogue box will appear and will prompt you to choose where you want to save the file. Once you have selected the appropriate file directory, click on **SAVE**.

**Hospital Data Managers** will see an option **DOWNLOAD ALL HOSPITAL DATA**.

To start the download process, click on **SELECT**. A 'File Download' dialogue box will appear and will prompt you to choose where you want to save the file. Once you have selected the appropriate file directory, click on **SAVE**.

**Note:** Hospital Data Managers can only recall data for surgeons that are associated to their hospital and have given their prior permission for access to their data.

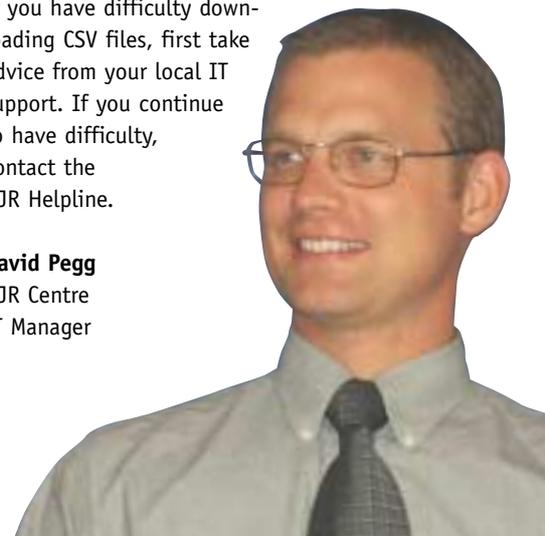
**Suppliers** will see an option **DOWNLOAD PROCEDURES USING YOUR COMPONENTS**.

Click on **SELECT** - this will load a new screen which prompts you to select a date. Because suppliers' CSV files can be very large, this page allows you to select a date from which all components will be downloaded (this provides the option of downloading smaller files).

Select the 'Download from' button to start the download process. A 'File Download' dialogue box will appear and will prompt you to choose where you want to save the file. Once you have selected the appropriate file directory, click on **SAVE**.

If you have difficulty downloading CSV files, first take advice from your local IT support. If you continue to have difficulty, contact the NJR Helpline.

**David Pegg**  
NJR Centre  
IT Manager



## Example 2 – CSV format of records with multiple data rows

```
NJR Reference, Patient Hospital ID, Surgery Date, REF, Manufacturer, Description, Batch
"17183", "", "14/8/2003", "856762", "DePuy", "CHARNLEY EVOLUTION CUP 37/40MM", "1234"
"17183", "", "14/8/2003", "851882", "DePuy", "10/12 COBALT CHROME HEAD 22.225mm+10", "1256"
"17183", "", "14/8/2003", "8112100", "DePuy", "CEMVAC ULTRA CMW1 PLAIN 100G", "6543"
"17362", "", "9/10/2003", "102.413P", "Corin", "ROTAGLIDE+ FEMUR PEGGED LARGE LEFT", "5678"
"17362", "", "9/10/2003", "102.123", "Corin", "ROTAGLIDE+ TIBIA BASE PLATE LARGE", "9645"
"17362", "", "9/10/2003", "127.204", "Corin", "ROTAGLIDE UHMWPE TIBIA 14.5MM", "7834"
```

# A View from the Other End of the Needle

**Peter Phillips is a consultant anaesthetist who has worked with patients undergoing total hip replacement for 18 years. Earlier this year, Peter experienced hip surgery for the first time as a patient.**

## Accepting the inevitable

For several years I experienced episodes of pain in my right hip but it always improved after a few days. Then, about three years ago I was referred to a physiotherapist for exercises to alleviate lower back pain. The consultation revealed a marked restriction in the movement of my right hip. Although only in my mid fifties an x-ray confirmed degenerative joint disease. Typically for a doctor I put it to the back of my mind and carried on as normal until last Christmas when severe pain limited my ability to get about and my friends and colleagues began to comment on my limp. I still had good days though, where I could comfortably swim, cycle and use a rowing machine. In March this year, I accepted the inevitable and consulted one of my surgical colleagues. He gave me some comprehensive information about the operation including details of his own performance; this information enabled me as a patient to make an informed choice. Surgery was due four months later.

## The anxieties of hip surgery

The prospect of such a major procedure did not appeal and at the time I was involved in an audit of thromboprophylaxis and the high incidence of thromboembolic disease in hip surgery. I imagined that I would be subject to all known complications.

My anaesthetist, and colleague, kindly gave me complete freedom to choose the type of anaesthetic I wanted. As a consultant anaesthetist I had looked after numerous patients undergoing hip surgery, many of them awake or minimally sedated under regional anaesthesia. It was time to get some first hand experience of this technique.

I was anxious from the moment I arrived on the ward, despite the kindness of the staff.

I also had a real feeling of unreality that persisted until I entered the anaesthetic room; there was no turning back now. The epidural and spinal anaesthesia were quickly and skilfully placed and I felt only slight discomfort (this is where two needles are inserted into the patient's back, the spinal anaesthesia provides immediate loss of sensation and an epidural catheter provides continuous postoperative pain relief). It was fascinating to lie in theatre, warm and comfortable, listening to the familiar surgical dialogue interspersed with the sounds of surgery.

## Post operative exercise

Back on the ward I was curious to see how long it would take sensation and power to return to me as the spinal anaesthetic wore off. The epidural provided perfect analgesia and that evening I celebrated my good fortune with a cup of tea and a ham sandwich. Mindful of the risk of deep vein thrombosis I got my legs moving as soon as possible. Over the next couple of days I progressed from epidural to oral analgesia, from frame to walking stick, and cast off the drip and urinary catheter. I soon got the hang of the physiotherapy exercises and on day four did a circuit of the hospital grounds. I did not experience severe pain during this period but my leg ached after a prolonged period of rest and following too much exercise (I probably overdid it on a few occasions!). I was discharged home six days after receiving surgery.

## Homeward bound

The journey home was a bit of an ordeal; small modern saloon cars are not designed for people with new hips! Getting in and out and finding a comfortable sitting position were difficult.

It was great to be home, the hot dry weather provided the perfect conditions for more exercise and I began to manage stairs easily. The most painful part of my recovery was being awakened at night by an aching in my thigh. The pain was resistant to conventional analgesics, but fortunately it only lasted a few nights. My knees were also delighted to renew their acquaintance with each other after six weeks of using a Charnley pillow (placed between the legs at night to prevent dislocation of the new hip whilst asleep).

I returned to work after ten weeks with renewed enthusiasm and 'a spring in my step'. I regret not being able to use my rowing machine but instead I now use leg strengthening exercises in the gym, and continue to go swimming and cycling. Three months on I am mostly unaware of my new hip although there are still occasions when a slight ache reminds me to slow down.

## Information and encouragement

I have been fortunate and sailed through this major procedure, thanks largely to the exceptional skill and care of my medical and nursing colleagues. No doubt my relative youth stood me in good stead and contributed to my early mobility. I now realise how intimidating it is to face surgery and can truly empathise with apprehensive patients. I am happy to spend more time informing them of what they may expect and encourage them to ask questions when I make my preoperative visit. I can also recommend spinal and epidural anaesthesia with more authority than before - there's nothing like personal experience.

**Peter Phillips**  
Consultant  
anaesthetist



**This Newsletter seeks to share patient experiences of joint replacement and the benefits this type of surgery can bring. If you have experiences to share to help other people understand what's involved, contact the NJR Helpline.**