

## The Fracture Discharge Program – an ambitious project

**Since the start of the year, you have come to know and – as the large amount of feedback received proves – to appreciate the new approach of ‘La Semaine Médicale’. This approach is a more structured one, with ordered and regular sections, allowing readers to find exactly what they are looking for in our weekly publication, in every sense of the expression. Also, this approach differs from that used to date in the medical press, with an outspokenness and freedom of style that is truly innovative for this type of media.**

With the introduction of this new editorial look, we have above all decided to fully opt for a weekly magazine-style concept, preferring to invite reflection by taking both a step back and a closer look at the issues we cover, rather than scoring scoops. The most significant change has without doubt been the introduction of a weekly special feature. To date, we have covered problems at the very heart of the medical profession, with politico-medical topics such as health law, euthanasia and reimbursement for medicines in Belgium. Other features have aimed to cast a new light on certain diseases such as asthma, cardiovascular conditions and COBP.

This week, we are once again bringing you a fresh special feature, which focuses on the Fracture Discharge Program, a project set up by a group of renowned rheumatologists under the aegis of the Belgian Society for Rheumatology. We found the work of our colleagues in rheumatology to be exemplary in that it reflects the direction in which modern medicine should, increasingly, be moving: towards interactivity, multidisciplinary, and the creation of specific ‘treatment paths’ for a given disease or health problem.

These are concepts that we are sure to cover again in the very near future.

**Dr Christian Cottriau,  
Editor in Chief**

## Belgian projects on the prevention of new osteoporotic fractures

**A fracture is often the first sign of osteoporosis. Once one fracture has occurred, secondary prevention of new fractures is required. It is therefore important to pay particular attention to patients at increased risk of falling. A number of projects are currently being developed in Belgium aimed at identifying these people and offering them appropriate treatment. At its recent congress in Ghent, the Belgian Royal Society for Rheumatology focused heavily on the scientific and organisational aspects of follow-up care for patients over 50 years of age who have recently suffered a fracture.**

It seems that rheumatologists are already very active in this area, both within and outside university medical centres, often playing a pioneering role. Moreover, the role of the rheumatologist in the detection of osteoporosis and the prevention of fractures in high-risk patients who have recently suffered a fracture is one of the motivating factors behind the creation of the osteoporosis working group within the Belgian

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Royal Society for Rheumatology. This resulted in intensive discussion on this topic, which is both well documented on a scientific level and very innovative in organisational terms. The rheumatologists were particularly concerned with improving follow-up care for patients over 50 years of age admitted to hospital with a fracture. Many surveys have shown that insufficient attention is paid to the prevention of new fractures. Judging by information from various rheumatologists, there is significant interest in this topic. We will also be making a point of focusing on other initiatives of this type, covering both scientific and organisational aspects. In this article, we discuss the issue with Dr Stefan Goemaere (Unit for Osteoporosis and Metabolic Bone Diseases, University Hospital Ghent), who underlines the importance of preventive measures.

“When we look around us, within the hospital, it’s clear that there are more patients in the hospital because of a fracture than there are heart attack or cancer patients”, explained Dr Goemaere. “In the literature, the impact of fractures on the number of people hospitalised has been demonstrated many times. In terms of days of hospitalisation, the number of patients suffering from osteoporosis is considerably higher than the number of patients in all other groups. This is for the most part due to the significant impact of fractures in terms of the probability of an operation being required, possible complications, pain and reduction in social and physical functioning and quality of life, set against the context of a very expensive hospital bed. A long period of physiotherapy is often required after a fracture, which also increases the number of patients in hospitals who are suffering from fractures.” The experience drawn from all corners of the country and reported at the Belgian Royal Society for Rheumatology congress shows that in hospitals there is still a lot of work to be done, particularly in terms of organisation, to move treatment provision and secondary prevention of fractures on to the next implementation level, as described by the current Evidence Based Medicine standards. The rheumatologists present wanted to take up the challenge by clarifying the associated objectives through the intermediary of a working group within the Belgian Royal Society for Rheumatology and by making, as a professional body, a structured contribution to implementation in practice.

### **Fracture patients: increased risk**

The influence of osteoporosis on the natural history of the appearance of fractures is considerable and, for Dr Goemaere, is difficult to underestimate. The literature shows that osteoporosis is diagnosed remarkably rarely in patients hospitalised for fractures. In most countries, the figure reaches a maximum of 10%. Barely half of patients in whom a reduction in bone density is identified actually receive effective treatment for osteoporosis on discharge from hospital. Moreover, Dr Goemaere has observed that compliance in patients leaving hospital after a fracture is rather poor, mainly because they rarely receive follow-up care from a specialist. In addition, after leaving hospital, the indispensable osteoporosis treatment is hardly ever prescribed by GPs. “The factors responsible for this include the absence of real awareness of the problem on the part of both doctors and patients, lack of judgement in the application of diagnostic procedures (DXA tests) and the fact that the cost of these tests is non-refundable”, said Dr Goemaere.

### **GHOST study (Gentse Hospitalen Osteoporose Studie)**

“The low figures for diagnosis of osteoporosis in hospitals in the literature encouraged us to develop a number of studies in this area”, continued Dr Goemaere. We began a few years ago, in 2002, by selecting Ghent hospitals to act as a basic structure. A study coordinator was nominated in each hospital. The coordinators were responsible for working with orthopaedic and osteoporosis specialists and DXA clinics, identifying those patients admitted for fractures, and diagnosing cases of osteoporosis. Two major problems arose from the outset meaning that the study rapidly fell considerably behind schedule, which was unexpected. Firstly, at the start of the study in 2003, hospitalised patients were not being properly registered in terms of their medical conditions. As a result, there was a considerable time lapse between the hospitalisation of fracture patients and the initial meeting with the study coordinator. Often, the patient had already left hospital, so that the coordinator’s first contact with the patient was not in person, but over the telephone, which of course meant that patients were less likely to agree to tests. By the end of the study, the success rate was 1 in 3: 37% of the patients contacted gave their consent for a further DXA test. One third of these patients agreed to undergo a bone measurement test (figure I). These results confirm the figures reported in the literature (10%). “Even though patients were approached directly, fewer than 1 in 9 were prepared to undergo bone measurements”, explained Dr Goemaere, clearly disappointed. Osteoporosis was detected in 40% of the 119 patients who agreed to undergo a DXA test. Follow-up of these patients over a period of a few months showed that less than half had actually started the suggested anti-osteoporosis treatment. “These figures are particularly disappointing”, stressed Dr Goemaere. “However, the detailed information collected during the study gave us a good insight into the issue, and highlighted the problem points in how osteoporosis is dealt with in patients with a documented fracture.”

### **Fracture Discharge Programs (FDP)**

The GHOST study (Gentse Hospitalen Osteoporose Studie), the results of which will be published on an ongoing basis, was the starting signal for the establishment of a certain number of fracture polyclinics in Belgium, dedicated to the Fracture Discharge Program (FDP). The aim was to screen patients hospitalised due to fractures for osteoporosis. A patient risk profile is created on the basis of a certain number of specific questions, followed by a more detailed examination, more specifically a bone density test and a limited blood test. Treatment is initiated on the basis of the results of these tests. For Dr Goemaere, the advantage of this method is that the number of people involved remains quite small: the patient who agrees to the tests, the orthopaedic and osteoporosis specialists who make the request and interpret the data, and the nurse and DXA clinic responsible for contact with the patient and the actual test. A disadvantage of this method was that it did not include an assessment of the risk of falling. In hospitals in which communication is good, this method seems to work well as long as there is efficient coordination between the three parties involved. “The FDP is an initiative that is growing rapidly worldwide and that is producing good results, especially in hospitals, including in Belgium”, continued Dr Goemaere. “Currently, the prevailing opinion in the healthcare sectors of the majority of European countries is that the available resources should first of all be allocated to those patients at the greatest risk. An osteoporotic patient with a DXA lower than  $-2.5$

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as well as a fracture is without any doubt exposed to the greatest level of risk. These criteria are also applied in most European countries, including Belgium, in approving reimbursement of pharmacological interventions.”

As we have said, the FDPs are becoming increasingly successful in many Belgian hospitals, in accordance with the model created on the basis of the experience of researchers at the University of Glasgow (Scotland). “More specifically, at the moment we are studying the interaction between osteoporosis and the risk of falling, and are currently drawing up an assessment”, added Dr Goemaere. “Many more disciplines are affected than those that are currently involved, and this sometimes makes it more difficult to work together, although far from impossible. Developing a project with the various parties or departments concerned often requires more time.” It is important that communication is effective, and it is now essential for there to be a good healthcare coordinator, often a rheumatologist.

### **The importance of communication**

“In addition to good coordination within the multidisciplinary working group, it is also about providing an efficient service to external parties”, concluded Dr Goemaere. “Communication with the front-line is tremendously important in this context.” The fact that rheumatologists play a pioneering role in the assessment of patients at high risk is, judging by the interviews that we have performed in the various centres, a particularly interesting development. The rheumatologists we spoke to also hope that other healthcare centres will follow this example.

Figure I. Frequency of bone density tests (DXA) in fracture patients. (Figure provided by Dr Goemaere)

Patients (n)  
Consent  
DXA+  
  
Hip  
Vertebral  
Wrist  
Pelvis  
Lower limbs  
Shoulder  
Upper limbs

## Targeted screening for osteoporosis in fracture patients

**The Fracture Discharge Program (FDP) for active osteoporosis screening in fracture patients is a novel concept for Belgian hospitals. At the opening session of the 9th Annual Congress of the Belgian Society for Rheumatology that took place in Ghent between 28 September and 1 October 2005, Dr Luc De Clercq (rheumatologist, Sint-Augustinus Hospital, Antwerp), who could be called the pioneer of the FDP in Belgium, discusses the initial results.**

There is currently an operational Fracture Discharge Program (FDP) in eight Belgian hospitals (figure I). Similar programmes have been developed in other hospitals, while others still are in preparation phase.

Dr De Clercq started an FDP on 1 December 2004 at the Sint-Augustinus Hospital in Antwerp. An osteoporosis specialist nurse visits all patients over 55 years of age admitted with a fracture, except those who have been in a road traffic accident, have suffered a fracture of the skull, or have fallen further than approximately 1.8 m. The patient is given information on osteoporosis, and offered a DXA test. On the basis of the information collected, the rheumatologist provides the attending doctor with recommendations for osteoporosis treatment. In the first 10 months, 212 patients – mainly with fractures of the hip – were screened. One of the initial observations was that virtually none of the patients were receiving osteoporosis treatment. As the DXA test is not reimbursed in Belgium, only 74 patients were willing to have a bone density test. On the basis of the DXA measurements, osteoporosis was not always found in cases of hip fracture. Dr De Clercq ended by calling for rapid reimbursement of the cost of the DXA test in osteoporosis screening.

*Figure I. Fracture Discharge Programs in Belgium (red = full FDP, green = partial programme). (Figure provided by Dr Luc De Clercq)*

*Fracture Discharge Programs in Belgium*

## Fracture Discharge Program: initial results from Belgium

**The treatment of osteoporosis in hospitalised fracture patients is often disappointing. In Belgium, a number of initiatives have been developed over recent years aimed at improving the success rate of screening programmes. A poster by Dr Valérie Badot, et al. (rheumatologist, Brugmann Teaching Hospital, Brussels) presented at the 9th Belgian Congress on Rheumatology held in Ghent between 28 September and 1 October 2005, revealed the initial results of the Fracture Discharge Program, which has been in place in the hospital for some time.**

In this prospective study, the rheumatologist or the osteoporosis specialist nurse contacted patients admitted to hospital with fractures in the first week of hospitalisation. If possible, the patient's risk profile was established by way of a questionnaire. All patients were then offered a DXA bone density test and screening for vertebral fractures during their stay in hospital or within a month of discharge.

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Appointments were also set up with a rheumatologist, to discuss the test results and any treatment, where applicable.

### **Patient data**

A total of 254 patients (201 women and 53 men) admitted to the hospital's orthopaedic department with fractures were included in the study, over a period of 18 months. The age of patients ranged from 41 to 96 years, with a mean age of 80 years. Fractures of the hip were by far the most common (107), followed by fractures of the wrist (35) and vertebral fractures (2). There were an additional 66 other bone fractures. More than one fracture was found in 8% of the patients, while 38% had suffered a fracture in the past. Only 11% of the patients included in the study were being treated for osteoporosis when they were hospitalised, with bisphosphonates (8%), SERMs (2%) and/or hormone replacement therapy (2%).

### **Less than half of patients screened**

Of the patients contacted during the study period in the hospital, 105 could not be screened for osteoporosis, for a variety of reasons. Three patients died before screening, 30 were confused or could not be examined due to poor health, 6 were of foreign extraction and had obvious language problems, 5 categorically refused to cooperate, 8 wanted to get their GP's opinion before undergoing screening, 12 did not see the point in osteoporosis prevention, 9 were already being treated by a rheumatologist and 27 could not be found after the initial examination. Of the 149 patients (58%) considered for a bone density test or an X-ray, only 69 (27%) were seen at the osteoporosis clinic. The remaining 80 patients had either died in the interim or had been hospitalised again, or did not attend hospital despite having an appointment and a letter having been sent to the GP they had specified. Of the 254 patients initially included in the study, 78 (31%) were found to have abnormal bone density according to the WHO directives on osteoporosis. In 58 patients (23%), osteoporosis treatment was begun or a different form of treatment, calcium and vitamin D supplements, and/or a therapy to prevent bone resorption were provided. Five patients continued with their initial treatment and the remaining 14 patients were not seen again at the rheumatology clinic.

### **Osteoporosis care: fraught with pitfalls**

Analysis of the study results led Dr Badot and her colleagues to conclude that osteoporosis care for patients admitted to hospital with a fracture is not a simple matter. There is no doubt, however, that one fracture means an increased risk of new fractures. It is important to provide patients with comprehensive information; to have the consent and cooperation of patients, GPs and orthopaedic specialists; and to take account of the patient's health status on discharge from hospital and their means of communication. In addition, in accordance with the legislation and healthcare system of Belgium, various conditions must be met before new osteoporosis treatment can be prescribed. The study data show that a prospective plan of care for osteoporosis screening in hospitalised patients reaches approximately half of the target group, and that only half of these patients will then be effectively treated.

## Incidence of new fractures in a Dutch population

**A special study has been undertaken to assess the incidence of new fractures after a recent fracture in a Dutch population (Svenhjalmar van Helden JC, Fons Kessels, Peter Brink, Geert Jan Dinant, Piet Geusens. Risk of new clinical fractures within two years following a fracture. Osteoporosis International 2005; in press).**

The hospital registry system enabled the records of all patients over the age of 50 presenting with a fracture between January 1999 and December 2001 to be used. The study was only performed at the beginning of 2004, which meant that we had at least 2 years' follow-up information for the whole group. We were able to identify 2419 patients, 585 of whom had already died. There remained, therefore, a group of 1834 survivors, who were all sent a survey by post asking them, among other things, whether they had suffered a new fracture after the initial fracture. It also asked if when the initial fracture was being treated, anybody had asked to check whether theirs was a case of bone demineralisation. This was the case in less than 5% of patients. We then searched the hospital information system to find new fractures suffered by the patients in the study. Fractures were grouped into 13 different locations, with a fourteenth group for patients with numerous simultaneous fractures on inclusion.

### New fractures

In the group of 585 patients who had died, 69 patients had suffered one or more new fractures. 1276 of the 1834 patients returned their questionnaire (69%). Of these, 139 patients stated that they had experienced one or more new fractures. In the group of 558 patients who did not respond to the survey, we found in the hospital archives 54 patients with one or more new fractures. There was therefore a total of 193 patients in the group of survivors who had suffered one or more new fractures. In both groups (survivors and non-survivors), the rate of new fractures was therefore 10.8%. We do not know which patients were already suffering from osteoporosis when they experienced the fracture. If we could identify this group *a posteriori*, it would be reasonable to expect that the percentage of fractures in this group would be slightly higher. Simply treating the condition with a bisphosphonate could have prevented half of these fractures, even if the additional positive effect of adequate fall prevention is not taken into account.

### Beyond fracture treatment

It has since become clear that it is time to do more than simply treat the fracture in all patients with a recent fracture. In September 2004, the trauma unit at the Maastricht Teaching Hospital (Netherlands) therefore set up a polyclinic for fractures and osteoporosis, in conjunction with the rheumatology, orthopaedic, general medicine and endocrinology departments. The geriatrician and physiotherapy specialist will also be involved in the project, along with experts in fall prevention. Fall prevention involves informing a patient's GP of the increased risk of falling. Sometimes, a simple measure can prove effective, such as adjusting the strength of the patient's glasses or reducing their dose of benzodiazepines. Here again, it is the GP who needs

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to be involved. In future, fall prevention may be supplemented by the introduction of special physiotherapy programmes for the group with the highest risk of falling. Finally, a system for collaboration between the parties responsible for treating the fracture within the hospital and the GP outside the hospital is to be developed, with the aim of minimising the number of new fractures in this high-risk group.

**Prof. Dr Piet Geusens (rheumatology, Maastricht Teaching Hospital (Netherlands) and Biomedical Research Institute, Hasselt University)**

### Successful service in Scotland

**A few years ago, an osteoporosis screening service for patients admitted to hospital with a fracture was developed in Glasgow (Scotland). The aim of the programme was to optimise secondary prevention and reduce the risk of new fractures. It is often only after the first hospitalisation for a fracture that osteoporosis is thought about, and a screening test and/or preventive treatment are considered. Moreover, the first fracture is an important risk factor for subsequent fractures.**

Osteoporosis remains a largely neglected public health problem at global level. Fractures due to osteoporosis are a major threat to the healthcare systems of all the countries of Europe. One fracture resulting from osteoporosis occurs every 30 seconds in the European Union. One woman in three and one man in five will be affected by osteoporosis. Adult women have a 40% chance of suffering a fracture. It is true that men are less vulnerable, but despite this, 13% of males will suffer a fracture after 50 years of age. The majority of cases will be fractures of the hip (30%), or symptomatic vertebral fractures (20%). Despite the availability of effective means of diagnosing and treating osteoporosis, treatment of the disease leaves a lot to be desired. In addition, population ageing will cause the number of osteoporosis fractures to increase, along with the burden on healthcare systems, in decades to come.

### Need for an active approach

In an effort to improve osteoporosis screening, a few years ago two teaching hospitals in Glasgow implemented the Fracture Liaison Service by which people in their fifties admitted for a fracture are offered a bone density test, after being referred by their doctor. In the first year, some 1000 patients were treated for a fracture in these hospitals, but less than 3% of patients with fractures of the wrist and 11% of those with fractures of the hip later attended hospital for a bone density test. These disappointing figures led those responsible for the programme to conclude that a more active approach was required to improve secondary prevention of osteoporosis. In collaboration with orthopaedic surgeons, GPs and osteoporosis specialists, they decided to recommend osteoporosis screening for all patients over 50 years of age hospitalised for a low-trauma fracture. The fractures were caused by falls, with osteoporosis as a possible cause. An osteoporosis specialist nurse regularly visited the orthopaedic and casualty departments of the participating hospitals to find all those patients with fractures who met the criteria. For each patient, a letter was sent to the GP, explaining the recommendation for osteoporosis screening and/or treatment. In

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patients who attended hospital for bone density testing, the presence of other risk factors was established by way of a questionnaire and, where applicable, a blood test was performed. The patient was given detailed information about osteoporosis and preventive measures, with a focus on lifestyle changes. A report was sent to the GP based on the results of screening with, if necessary, recommendations for treatment.

### Promising results

In the first 18 months after implementation of the service in November 1999, the osteoporosis specialist nurse contacted a total of 4671 fracture patients over 50 years of age. The most frequent fractures were fractures of the wrist, hip and upper and lower limbs. Almost three quarters (73.5%) of patients were screened for osteoporosis by way of DXA testing. Overall, 82.3% of patients were found to be osteopenic or osteoporotic. Treatment was recommended for 56.4% of the patients tested, primarily with bisphosphonates, followed by vitamin D and calcium, and in fewer cases, SERMs or hormone replacement therapy. On the basis of this very high success rate, the active screening programme was implemented in all the hospitals in Glasgow, a city with a population of almost a million. Since 2002, osteoporosis screening has been offered to all patients at Glasgow hospitals presenting with a fracture, except victims of road traffic accidents. This is an important first step in the prevention of new osteoporosis fractures. However, the ultimate success of the programme will be measured by the subsequent frequency of fractures in screened patients.

#### Reference:

*McLellan AR, Gallacher SJ, Fraser M, McQuillan C. The fracture liaison service: success of a program for the evaluation and management of patients with osteoporotic fracture. [Osteoporos Int.](#) 2003;14: 1028–1034.*

### The opinion of Prof. Y. Boutsen, Mont-Godinne University Hospital, Louvain Catholic University

There are a number of reasons why we decided to implement, at Mont-Godinne, systematic osteoporosis screening after a peripheral fracture.

- It is universally accepted that patients who have suffered a fracture as a result of a minor trauma are at increased risk of suffering another fracture in the short and long term.
- Post-menopausal patients with a fracture of the wrist are osteoporotic (T-score < -2.5) in almost half of cases, and this percentage is significantly higher than 50% after a fracture of the hip.
- Despite this evidence, this population, which is easy to identify, is not generally provided with osteoporosis screening or even any specific treatment. This problem is already well documented [MC Lollan OI 2003; Gardner M JBJS 2002]. In our department, retrospective analysis performed over a period of 12 months of all menopausal patients presenting with a fracture of the wrist or hip confirmed that the treatment rate for osteoporosis remained exactly the same after the fracture [in press].
- There are effective therapies to reduce the risk of fractures.

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- Not all peripheral fractures are indicative of osteoporosis and after a fracture, it must be possible to diagnose those patients who do have osteoporosis and for whom specific treatment could be beneficial.
- In Belgium, in cases of documented osteoporosis a bone density test is required in order to receive reimbursement for SERM or bisphosphonate treatment to reduce bone loss.

In theory, our colleagues the orthopaedic specialists are convinced of the need to improve diagnosis and treatment procedures for osteoporosis, but experience has already shown that they are not dealing with it actively, despite repeated awareness campaigns. However, orthopaedic specialists say they are interested in other parties involved taking on this responsibility.

At the Mont-Godinne University Hospital, Louvain Catholic University, on a part-time basis (2/11) a nurse has direct contact with female patients admitted to the hospital for fractures of the hip or for an orthopaedic consultation after a peripheral fracture. A customised information-request form and a questionnaire covering the risk factors for osteoporosis are handed to the patients in person. All female patients who are not currently receiving adequate treatment are offered an osteoporosis screening test. The liaison nurse also deals with logistic matters (appointments for bone density tests or for rheumatology consultations, alongside orthopaedic consultations) for female patients who have already suffered a fracture. The results of this experiment will be available from December 2005, i.e. after one year of operation.

Many female patients, of all ages, do not feel that osteoporosis affects them at all, even after a fracture. This is the main difficulty encountered in practice at Mont-Godinne by the coordinating nurse for osteoporosis. The second difficulty is the cost of the bone density test, which can sometimes be a brake on screening.

Although patients are easily convinced of the role that their smoking or dyslipaemia has played in their stroke, there is a marked denial of osteoporosis when a fracture occurs. Patients almost always blame the traumatic nature of the event (clear refusal to admit that they have a disease that is considered to be a sign of ageing), and a very active, even insistent, approach is generally required to convince patients or their families to make the most of the opportunity to have a bone density test. It is therefore not sufficient to leave a few information booklets in the orthopaedic-department waiting room, as patients would not feel that this information applied to them.

The cost of bone density tests does not generally pose a problem to patients who come to the rheumatology clinic of their own accord for osteoporosis screening. After a fracture that the patient considers to be due to a trauma only, however, the cost of the test is a restriction on screening.

**A more systematic approach, in which patients presenting with a fracture at the orthopaedic department and who match a certain “profile” are sent for a bone density test, is being implemented in around 15 hospitals. How is this approach perceived by those outside these hospitals? We spoke to Dr Schreiber (rheumatology, Tivoli Teaching Hospital, La Louvière and Edith Cavell Institute, Uccle)**

**What are the potential day-to-day difficulties associated with implementation?**

The Tivoli Teaching Hospital does not currently use this approach to treatment. However, even without being involved with the initiative, certain comments spring to mind.

**What about situations where fracture cases are treated in the casualty department without hospitalisation? An example of this is an elderly person treated for a fracture of the wrist, an obvious sign of osteoporosis, but which does not necessarily require hospitalisation.**

Another problem is the nightmarish issue of reimbursement for tests and medicines in Belgium. When they were first introduced, bone density tests were refunded at a rate of 100%. Soon after, reimbursement for these tests was abolished completely! In Belgium, though, a bone density test result is required by the Belgian health insurance body responsible for reimbursement (INAMI) before refunds for osteoporosis-specific medicines can be approved! So who will pay for the bone density tests in this programme? Patients? The hospital? It is hoped, of course, that the test will soon be reassessed and will be made refundable once again.

Yet another difficulty, which may seem trivial but is in fact significant, is that projects of this kind require a change to the mindset of clinicians. Reticence can often be encountered when one department “intrudes” in another, with the disruption that this may cause.

**What is your opinion on projects of this kind?**

It is clear from the literature that osteoporosis is underdetected, even when there is a clear risk. However, it is not possible to offer osteoporosis screening to the whole population. Firstly, the costs would be very high, and secondly, the efficiency would be low. Fracture patients, however, represent a particularly significant high-risk group, as it has been clearly established that suffering a vertebral fracture increases the risk of suffering another 4- to 5-fold, and because treatment is effective, reducing this risk by 50% or more.

However, the personnel-related and financial cost of reserving one specially trained nurse or a doctor, who would dedicate time to analysing patients’ medical records, must be assessed.

Implementing a project of this kind is therefore an interesting challenge in terms of public health, but the costs and organisational restrictions involved must be taken into consideration.

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### **REACTIONS**

#### **Dr Carlos Immesoete (rheumatologist, Alost Municipal Hospital)**

“We are very interested in the Fracture Discharge Program, but it is not yet operational at the hospital. We are trying to develop a system for the active screening of osteoporotic patients in our hospital. However, this needs to be done in conjunction with other departments. This requires consultation, and consultation takes time. We have not yet had the opportunity to present our programme to the orthopaedic specialists and convince them of the importance of this step. There is no fundamental problem, but organisational difficulties are causing a delay. Despite this, we hope to begin the programme at the start of 2006. We know that some 900 patients per year are admitted to our hospital with fractures, who would be considered for osteoporosis treatment. Currently, both the rheumatologists and orthopaedic specialists in the hospital are fully aware of the problems related to osteoporosis, and a more than reasonable number of patients are already adequately treated. A coordinated and active awareness campaign with the FDP is sure to increase this number.”

#### **Dr Luc Goethals (rheumatologist, Stuivenberg Hospital, Antwerp)**

“We have always been concerned with detecting osteoporosis in patients who have suffered a fracture. For the moment, it is not possible for us to implement the FDP in our hospital in full, for a number of reasons. However, as far as possible, we are trying to screen patients admitted for a fracture and offer them appropriate treatment. We do not offer a complete service with a specially trained nurse, essentially for financial reasons. An assistant has received the relevant training. The nursing staff of the departments that see the greatest number of hospitalisations due to fractures (orthopaedic, geriatric and physiotherapy departments) actively work to identify patients at risk of osteoporosis. Bone density tests and blood tests are used to definitively diagnose cases of secondary osteoporosis. Pharmacological treatment is begun and, in patients hospitalised for a fracture resulting from a fall, we work with occupational therapists to establish how the fall happened and work to prevent future falls. This fall prevention service will gradually be provided to geriatric patients who have fallen but not suffered a fracture. Outpatients with a fracture are also offered a bone density test by orthopaedic specialists if osteoporosis is suspected. Here, also, there is an excellent level of cooperation. Overall, there is very little patient resistance to tests.”

#### **Ruth De Moester (osteoporosis specialist nurse, Sint-Lucas Hospital, Gand)**

“My work involves finding all the patients admitted with a fracture to the orthopaedic, geriatric and respiratory departments and initially providing them with information about osteoporosis. By asking a few questions, we can establish their risk profile. We then ask the patients to take a bone density test and limited blood test. On the basis of this information, we can either exclude osteoporosis or think about secondary prevention. The recommendations for treatment are sent to the patient’s GP or attending doctor, in collaboration with the rheumatologist. The GP is then responsible for follow-up. As a rule, it is the younger patients who do not immediately see the need for a bone density test. In their eyes, osteoporosis is a disease that only affects

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women, and generally older women. When they are given more detailed information they often change their minds. The majority of patients agree to take the test. Hospitalised patients in particular make the most of the opportunity to be tested; outpatients are more difficult to convince. An additional problem is that I am the only nurse in the hospital who is specialised in osteoporosis (and I only do this work on a part-time basis), which means that we have to focus on patients who are admitted for fractures.”

### **Dr Xavier Janssens (rheumatology, Sint-Lucas Hospital, Ghent)**

“We began to actively screen patients at our hospital for osteoporosis on 1 September 2004, in accordance with the basic ideas of the FDP. For over a year, an osteoporosis specialist nurse has been working on a part-time basis to try and identify all cases of fractures caused by osteoporosis in patients admitted to the hospital, by working with other departments. The most common fractures are vertebral fractures and fractures of the wrist and hip, but we also monitor other fractures. We try to reach those patients that are potentially at risk and to give them advice about osteoporosis. We make every effort to provide bone density tests and laboratory tests to exclude any causes of secondary osteoporosis. On the basis of all the information obtained, we establish recommendations for treatment, intended for both the attending doctor in the hospital and the GP.

We are not currently able to screen as many patients as we would like. The GHOST study shows that some 500 patients with osteoporosis are admitted to our hospital each year. We have been able to screen approximately half of these in the first year of our active programme. This represents considerable progress, given that previously osteoporosis treatment was only begun in approximately 5% of patients who had suffered a fracture. Our work with a certain number of other departments could be improved, especially the orthopaedic polyclinic. Because of our workload, we do not always think of referring fracture patients in their fifties to the osteoporosis specialist nurse. More work could also be done with the respiratory department. We know that many patients with COBP and dependent on corticosteroids suffer vertebral compression fractures, which can be asymptomatic, that may be indicative of future, more serious fractures with increasing disability and reduced ability to function. We hope that with additional screening of these patients, we will be able to increase the success rate from 50% to over 75% in a few years. This will allow us to send home at least three quarters of patients admitted with a fracture caused by osteoporosis with a diagnosis and recommendations for treatment with a universally accepted therapy – and one which also has a proven long-term effect, to prevent new fractures. There is very little resistance to screening from patients. One problematic point is the anachronism that exists in Belgium whereby bone density tests are non-refundable, even though refunds for related treatment cannot be approved by the health insurance service without a bone density test result. We are trying to have this test made refundable for at-risk patients.”

## **M-2 – Christian Cottriau – La Semaine Médicale – Belgium**

**A short time ago, the rheumatology–physiotherapy department at Citadelle Regional Hospital implemented a referral system for bone density testing. Dr Danielle Denis (physiotherapist, Citadelle Regional Hospital, Liège) gives us her first impressions.**

While the initiative is a valid one, a few weeks after implementation the basic weaknesses of the system started to become evident. The patients to be tested are conspicuous by their absence. Since the commencement meeting for the system, it has had no effect.

But where does the fault lie? Not with the rheumatologists, who are eagerly awaiting the arrival of the patients. The system itself is most likely to blame.

So what are the possible solutions? Dr Denis suggests that the orthopaedic surgeon prescribe a bone density test for the patient. The protocol for the test is provided to the attending doctor: he/she either takes on the responsibility for patient follow-up and any treatment, or refers the patient to the physical medicine–rheumatology department. Because otherwise – let’s make no bones about it – the system will not last long.