

**Edwina Hart AM MBE**

Y Gweinidog dros Iechyd a Gwasanaethau Cymdeithasol  
Minister for Health and Social Services

Our ref: EH/04744/08

Your ref:

James Cooper

[j.Cooper@nos.org.uk](mailto:j.Cooper@nos.org.uk)



Llywodraeth Cynulliad Cymru  
Welsh Assembly Government

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*Dear Mr Cooper*

16<sup>th</sup> October 2008

Thank you for your correspondence of 3 October enclosing a copy of the National Osteoporosis Society's report 'Your Bones and Osteoporosis'.

I agree that health promotion plays an important part in combating the risks of developing osteoporosis, arthritis and other chronic musculoskeletal conditions. This importance is emphasised in our National Service Framework (NSF) for Older People in Wales, and the Service Development and Commissioning Directives for Arthritis and Chronic Musculoskeletal Conditions.

The NSF contains a Standard for Falls and Fractures requiring the NHS to work in partnership with Local Authorities and other stakeholders to take action to prevent falls, fractures and other resulting injuries to maintain well being in their populations of older people.

Through Health Challenge Wales, the Welsh Assembly Government is raising awareness of the importance of healthy lifestyles and providing examples of positive behaviour change. My officials have conducted four campaigns which directed members of the public to the healthy lifestyle advice that is available through the Health Challenge Wales publication line (0845 606 4050) and website ([wales.gov.uk/healthchallenge](http://wales.gov.uk/healthchallenge)). In particular, the website provides advice on a wide range of healthy lifestyle issues, such as diet, exercise, accident prevention and smoking cessation. In recent months, the content has been developed to include measures people can take to avoid certain chronic conditions such as diabetes, kidney disease, stroke and cancer.

In light of the issues raised in your letter, my officials would be pleased to meet with you to discuss creating advice on the prevention of osteoporosis. This advice could

be disseminated through the Health Challenge Wales website, phone line and networks. I suggest you contact Anthony Davies on 029 20 82 5935 to arrange a meeting.

*evd.*

**Edwina Hart AM MBE**

Y Gweinidog dros Iechyd a Gwasanaethau Cymdeithasol  
Minister for Health and Social Services

Our ref: EH/04382/08

Your ref:

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Political Relations Officer  
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23<sup>rd</sup> September 2008

Dear Mr Cooper .

Thank you for your email of 5 September about the importance of identifying patients at risk of osteoporosis, which is now part of the Enhanced Service in the GP contract in England, but not in Wales.

In Wales, there is already a clear policy directive in place to improve osteoporosis services informed by the Welsh Assembly Government's *Service Development and Commissioning Directives for Arthritis and Chronic Musculoskeletal Conditions*, published in January 2007. These Directives require the establishment of care pathways to ensure the effective management of these conditions become the bedrock of service provision, supported by effective health promotion and prevention, timely assessment and accurate diagnosis and appropriate treatment and management.

As a contribution to this work we have introduced an Enhanced Service for residents of care homes. This includes an annual osteoporosis risk assessment and review of management. This will begin to address the concerns you have raised for some of our most vulnerable residents.

We will be continuing to develop services that can be provided for patients to suit local need. We will also work with the other UK administrations to develop clinical indicators for inclusion within the Quality and Outcomes Framework that challenge GPs and encourage accepted best practice. Osteoporosis is one of a number of clinical areas that have been and will continue to be considered for inclusion in future years.

**Edwina Hart AM OStJ MBE**

Y Gweinidog dros Iechyd a Gwasanaethau Cymdeithasol  
Minister for Health and Social Services

Our ref: EH/05373/09

Your ref: PET-03-222



Llywodraeth Cynulliad Cymru  
Welsh Assembly Government

Sandy Mewies AM  
Temporary Chair of the Petitions Committee  
National Assembly for Wales  
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16 July 2009

*Dear Sandra -*

Thank you for your letter dated July 9 regarding the petition from the National Osteoporosis Society about linking a Fracture Liaison Service to every hospital in Wales that receives fragility fractures.

Phase 1 of the National Service Framework (NSF) for Older People, which focussed on setting down the structures and foundations underpinning this 10 year programme, has been largely achieved across Wales. Whilst recognising that the initial targets and milestones for the NSF standard for falls and fractures have been largely achieved, there is variation across Wales and more work remains to be done.

The NSF is currently being reviewed by Care and Social Services Inspectorate Wales and Health Inspectorate Wales. This joint inspection will report in the summer of 2010 and the NSF is currently being progressed through interim action plans across Wales.

I will ask my officials to meet with the National Osteoporosis Society to discuss their petition further.

*[Handwritten signature]*

**Edwina Hart AM OStJ MBE**

Y Gweinidog dros Iechyd a Gwasanaethau Cymdeithasol  
Minister for Health and Social Services

Our ref: EH/06843/09

Your ref: PET-03-222

Val Lloyd AM  
Chair, Petitions Committee  
National Assembly for Wales  
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Cardiff  
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Llywodraeth Cynulliad Cymru  
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3 November 2009

*Dear Val*

Thank you for your letter of 26 October on behalf of the Petitions Committee about the National Service Framework (NSF) for Older People's Standard on falls and fractures. I will respond to the specific points in your letter in the order you raised them.

Phase 1 of the NSF, which focussed on setting down the structures and foundations underpinning this 10 year programme, has been largely achieved across Wales. Whilst recognising that the initial targets and milestones for the NSF standard for falls and fractures have been largely achieved, there is variation across Wales and more work remains to be done.

2009 - 2011 will be interim years for the NSF and through mechanisms such as Regional Meetings, there are opportunities to share experience and discuss good practice. One further development suggested from the Regional Meetings is an all-Wales 'Community of Practice' for falls and fractures. This possibility is at an early stage of consideration.

Please note that responses have been sent to all the individual petitions received on behalf of the National Osteoporosis Society. There are no plans to meet with the petitioners, as this was not requested. However discussions have been initiated with the National Osteoporosis Society, as committed in my previous letter. These discussions may in turn lead to developments, for example the National Osteoporosis Society contributing to the NSF newsletter.

*Edwina Hart*

Regarding the independent NSF review being conducted jointly by Health Inspectorate Wales and Care and Social Services Inspectorate Wales, the review methodology and associated reports are available on their respective websites. Further correspondence on the review, given that it is independent, may be taken up directly with the Inspectorates.

A handwritten signature in black ink, consisting of a series of fluid, connected strokes that are difficult to decipher as specific letters.

23 DEC 2009

Val Lloyd AM  
Chair  
Petitions Committee  
National Assembly for Wales  
Cardiff Bay  
CARDIFF  
CF99 1NA

Direct Line: 02920 928852

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E-mail: peter.higson@wales.gsi.gov.uk

Eich cyf / Your ref  
Ein cyf / Our ref

RECEIVED  
23 JAN 2010  
GPT

23 December 2009

Dear Mrs Lloyd

**RE PETITION: NATIONAL OSTEOPOROSIS SOCIETY**

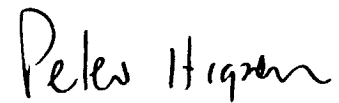
I write, further to your letter of 1 December 2009, regarding the petition from the National Osteoporosis Society to advise you of the work that Healthcare Inspectorate Wales is taking forward in relation to the falls and fractures standard of the National Service Framework for Older People.

As you will be aware, the Older People's National Service Framework (NSF) covers a wide range of issues and therefore the joint review we are taking forward with CSSIW is looking at the application of each of the NSF standards while focusing on the care and treatment of individuals with dementia. We are as part of this review looking at the role of General Practitioners in the prevention of falls and fractures through the early diagnosis and treatment of osteoporosis.

In addition to the joint review, we will be taking forward a national review of the "Management and Care of Patients with Fracture Neck of Femur" during the 2010-11 financial year. This review will look at the pathway of care for this group of patients including the prevention of future falls and fractures and consideration of whether more could have been done to prevent the initial fracture.

I hope this letter provides clarity in relation to the work Healthcare Inspectorate Wales is taking forward in relation to falls and fractures. I would be happy to meet with you should you wish to discuss our work in further detail.

Yours sincerely

A handwritten signature in black ink that reads "Peter Higson". The signature is written in a cursive, slightly slanted style.

**PETER HIGSON**  
Chief Executive

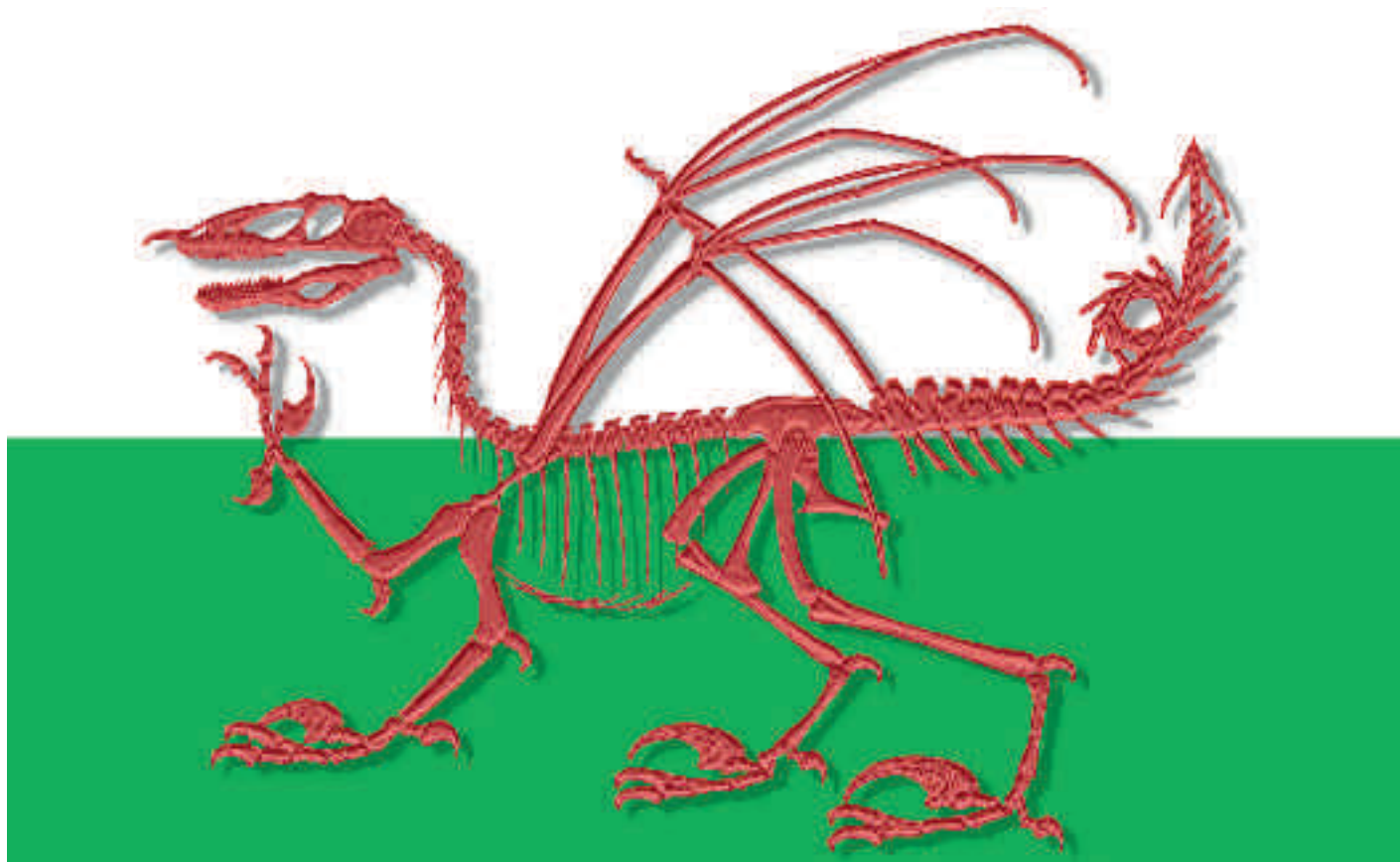


Further information from the petitioner

Hospital	Location	Health Board	Funded Fracture Liaison Service in place for inpatients?	If no inpatient service, why?	Funded Fracture Liaison Service for outpatients in place?	If no outpatient service, why?	Consultant Orthogeriatrician appointed?	Local access to DXA scanners?	Does service have auditable database other than the National Hip Fracture Database?	Agreed protocol between service and primary care in place?
Bronglais Hospital Aberystwyth	Aberystwyth	Hywel Dda	Yes		Yes		No	Yes	Yes	Yes
Llandudno Hospital	Llandudno	Betsi Cadwaladr University	Yes		Yes		No	Yes	Yes	Yes
Morrison Hospital	Swansea	Abertawe Bro Morgannwg University	<b>No</b>	Lack of funding	<b>No</b>	Lack of funding	Yes	Yes	Yes	No
Neath Port Talbot Hospital	Neath Port Talbot	Abertawe Bro Morgannwg University	<b>No</b>	No trauma admissions	<b>No</b>	No comments made				
Nevill Hall	Abergavenny, Monmouthshire	Aneurin Bevan	<b>No</b>	Bid for FLS unsuccessful	<b>No</b>	Bid for FLS unsuccessful	Yes	Yes	No	No
Prince Charles Hospital Merthyr	Merthyr Tydfil	Cwm Taf	<b>No</b>	Lack of funding	<b>No</b>	Lack of funding	No	Yes	No	No
Prince Phillip Hospital	Llanelli, Carmarthenshire	Hywel Dda	<b>No</b>	No trauma admissions	<b>No</b>					
Princess of Wales Hospital Bridgend	Bridgend	Abertawe Bro Morgannwg University	<b>No</b>	Lack of funding	<b>No</b>	Lack of funding	Yes	Yes	Yes	Yes
Royal Glamorgan Hospital	Llantrisant, Rhondda Cynon Taff	Cwm Taf	Yes		<b>No</b>	Bid for FLS unsuccessful	Yes	Yes	No	No
Royal Gwent Hospital	Newport	Aneurin Bevan	<b>No</b>	Bid for FLS unsuccessful	<b>No</b>	Bid for FLS unsuccessful	Yes	Yes	No	No

Singleton Hospital	Sketty, Swansea	Abertawe Bro Morgannwg University	<u>No</u>	No trauma admissions	<u>No</u>					
UHW	Heath Park, Cardiff	Cardiff and Vale University	Yes		<u>No</u>	Bid for FLS unsuccessful	Yes	Yes	Yes	No
West Wales General Hospital Carmarthen	Carmarthen	Hywel Dda	Yes		<u>No</u>		No	Yes	No	No
Withybush General Hospital	Haverfordwest, Pembrokeshire	Hywel Dda	<u>No</u>	No consultant with special interest	<u>No</u>		No		No	No
Wrexham Maelor Hospital	Wrexham	Betsi Cadwaladr University	<u>No</u>		<u>No</u>		Yes	Yes	No	Yes
Ysbyty Glan Clwyd	Rhyl, Denbighshire	Betsi Cadwaladr University	Yes		Yes		No	Yes	Yes	Yes
Ysbyty Gwynedd	Bangor, Gwynedd	Betsi Cadwaladr University	Yes		Yes		Yes	Yes	Yes	Yes
<b>Total (n)</b>			<b>7</b>		<b>4</b>		<b>8</b>	<b>13</b>	<b>7</b>	<b>6</b>
<b>Total (%)</b>			<b>41</b>		<b>24</b>		<b>47</b>	<b>76</b>	<b>41</b>	<b>35</b>

# All Wales Audit of Secondary Prevention of Osteoporotic Fractures 2009



All Wales Osteoporosis Advisory Group  
(WOAG)

## All Wales Audit of Secondary Prevention of Osteoporotic Fractures 2009

### All Wales Osteoporosis Advisory Group (WOAG)

Yn ystod Awst 2009, ymgwymerwyd archwiliad gan WOAG o holl ganolfannau llem yng Nghymru sydd yn delio a chleifion toriadau bregus. Gwnaed yr archwiliad er mwyn crynhoi'r ddealltwriaeth sydd ar hyn o bryd o ran gwasanaethau toriadau ar draws Cymru. Gwelir yn Fframwaith Gwasanaeth Cenedlaethol ar gyfer Pobl Hŷn yng Nghymru bod lleihau risg toriadau yn rhan allweddol ohoni. Mae canlyniadau'r archwiliad yn rhoi darlun cywir a chyfoes o wasanaethau toriadau ar gyfer Cymry heddiw.

Corff annibynnol yw WOAG, wedi'i lunio o bobl broffesiynol o fyd gofal iechyd o ar draws Gymru gyda diddordeb mewn Osteoporosis. Mae cynrychiolydd o'r National Osteoporosis Society hefyd yn rhan o'r grŵp. Bwriad ac amcan WOAG yw darpariaeth cyngor ac arweinyddiaeth ar faterion sydd yn ymwneud ag osteoporosis, a hefyd i gyfathrebu gyda Llywodraeth Cynulliad Cymru er mwyn datblygu a gweithredu strategaethau er mwyn darparu gwasanaethau Osteoporosis amhleidiol ar draws Gymru gyfan. Ar y pwyllgor presennol mae Dr. Mike Stone (Cadeirydd), Dr. Antony Johansen (Is-gadeirydd), Sr. Debbie Stone (Ysgrifennydd) a Dr. Wil Evans (Trysorydd). Mae modd cysylltu gyda WOAG trwy'r Ysgrifennydd dros e-bost: [Debbie.Stone@ceredigion-tr.wales.nhs.uk](mailto:Debbie.Stone@ceredigion-tr.wales.nhs.uk) neu ar 01970 628829.

#### **Cydnabyddiaethau**

Hoffai WOAG ddiolch i'r holl aelodau a gymerodd rhan yn yr archwiliad. Cefnogwyd cynhyrchiad yr archwiliad gan gymorth grant anghyfyngedig oddi wrth yr Association of the British Pharmaceutical Industry in Wales. Ni chafodd yr ABPI unrhyw fewnbwn i broses na chwblhad yr archwiliad. Mae'r archwiliad a'i chynnwys yn parhau i fod eiddo deallus WOAG. Cafodd yr archwiliad ei awduro gan Paul Mitchell, Darlithydd ym Mhrifysgol Derby a Rheolwr Gyfarwyddwr Synthesis Medical Limited.

## All Wales Audit of Secondary Prevention of Osteoporotic Fractures 2009

### All Wales Osteoporosis Advisory Group (WOAG)

During August 2009, the All Wales Osteoporosis Advisory Group (WOAG) undertook an audit of all acute centres in Wales that manage fragility fracture patients. The audit was undertaken to inform the understanding of current service provision with regards to fracture liaison services across Wales. The issue of fracture risk reduction is a key part of the National Service Framework (NSF) for Older People in Wales<sup>1</sup>. The results of the audit provide an accurate and current picture of fracture liaison services for the people of Wales.

WOAG is an independent body, comprised of healthcare professionals with an interest in Osteoporosis from across Wales. Representation from the National Osteoporosis Society is also included in the group. The aims and objectives of WOAG include the provision of advice and guidance on matters related to osteoporosis and to liaise with the Welsh Assembly Government in order to develop and implement strategies that will provide an equitable osteoporosis service across Wales. The current WOAG committee includes Dr. Mike Stone (Chair), Dr. Antony Johansen (Vice Chair), Sr. Debbie Stone (Secretary) and Dr. Wil Evans (Treasurer). WOAG can be contacted via the Secretary by email: [Debbie.Stone@ceredigion-tr.wales.nhs.uk](mailto:Debbie.Stone@ceredigion-tr.wales.nhs.uk) or phone: 01970 628829.

#### Acknowledgements

WOAG expresses thanks to all members that participated in the audit. Production of this report was supported by an unrestricted grant-in-aid from the Association of the British Pharmaceutical Industry in Wales. The ABPI in Wales had no input to the audit process or writing of this report. The audit and report remain the intellectual property of WOAG. The report was authored by Paul Mitchell, Associate Lecturer at the University of Derby and Managing Director of Synthesis Medical Limited.

## Rationale for the audit

The National Service Framework (NSF) for Older People in Wales<sup>2</sup> stated that 4,200 people experience a hip fracture in Wales every year. From the sufferer's perspective, hip fractures often result in significant pain, disability and premature death. From a societal perspective, hip fractures compromise mobility and independence of older people whilst exerting a tremendous burden on health and social care budgets. Research conducted in Cardiff in the 1990s informed an estimate of the cost of hip fracture to the Welsh economy at £84 million per year<sup>1,3</sup>.

The Falls and Fractures standard of the NSF states:

*"The NHS, working in partnership with Local Authorities and other stakeholders, takes action to prevent falls, osteoporosis, fractures and other resulting injuries, and to maintain well being in their populations of older people. Older people who have fallen receive effective treatment and rehabilitation and, with their carers, receive advice on prevention through integration of falls and fracture services."*

The NSF recognises that maximum health gain will be achieved by targeting integrated falls and osteoporosis assessment to patients at highest fracture risk. In this regard, the most readily identifiable patients at high risk of future fragility fracture are those older people presenting to hospitals with a fragility fracture; fracture begets fracture<sup>4,5</sup>. Guidance from the Department of Health in England<sup>6</sup>, the British Orthopaedic Association - British Geriatrics Society<sup>7</sup> and the National Osteoporosis Society<sup>8</sup> is based upon the fact that 50% of hip fracture patients have suffered a prior fragility fracture. The governmental, professional and patient organisations all state that 50% of hip fracture sufferers will emanate from the 16% of the population that have suffered a prior fragility fracture. As such, implementation of a systematic approach to secondary fracture prevention has the potential to intervene before half of all future hip fractures ever occur.

The National Institute for Health and Clinical Excellence (NICE) published Technology Appraisals on secondary fracture prevention in 2005<sup>9</sup> and 2008<sup>10</sup>, and a Clinical Guideline on falls interventions in 2004<sup>11</sup>. Implementation of this guidance has been monitored by the National Clinical Audit of Falls and Bone Health for Older People conducted by the Royal College of Physicians Clinical Effectiveness and Evaluation Unit (RCP-CEEU)<sup>12</sup>. The 2007 national clinical audit, conducted as part of the ongoing RCP-CEEU programme, found that 42% of hip fracture patients and 19% of non-hip fragility fracture patients received care according to NICE TA87<sup>13</sup>. These results concurred with findings of systematic reviews<sup>14,15</sup> which have shown that compliance with secondary prevention guidelines in the absence of a systematic approach is universally low. The RCP-CEEU audit concluded:

*"PCTs should commission a patient care pathway for the secondary prevention of falls and fractures that includes a **Fracture Liaison Service** that targets the high risk group of patients presenting with a first fragility fracture."*

A Fracture Liaison Service (FLS)<sup>16</sup> assumes responsibility for the secondary prevention of osteoporotic fractures by case-finding fragility fracture patients in the inpatient and outpatient settings. An FLS conducts bone health assessment and performs diagnostic evaluations, including bone densitometry, to inform specific treatment recommendations aligned to NICE guidance.

The service is usually delivered by a dedicated nurse specialist working within the orthopaedic environment under the guidance of a specialist in metabolic bone disease. The Fracture Liaison Nurse ensures that every fracture patient over 50 years (excluding high trauma and road traffic accident victims) receives a “one-stop-shop” osteoporosis assessment, by working to pre-agreed protocols. Fracture Liaison Services have been established in the NHS in Wales<sup>17</sup>, Scotland<sup>18</sup>, England<sup>19</sup> and Northern Ireland<sup>20</sup>. An audit conducted by NHS Quality Improvement Scotland found FLS to offer secondary preventative assessment to >95% of fragility fracture patients presenting to hospital versus 25% at centres with other service configurations<sup>21</sup>.

FLS provides the most clinically and cost-effective healthcare delivery solution to implement a systematic approach to secondary fracture prevention which is endorsed by governmental, professional and patient organisations throughout the UK:

**- Department of Health in England<sup>5</sup>:**

*“(Fragility fracture patients) constitute just 16% of the local population but it is from these clearly identifiable groups that 50% of hip fractures occur. Targeting these groups in primary care and through **fracture liaison case-finding services** based in hospital provides ready access to those at greatest risk of hip fractures.”*

**- Department for Health, Social Services and Personal Safety in Northern Ireland<sup>22</sup>:**

*“A **Fracture Liaison Service** for secondary prevention of fragility fractures should be established in all Trusts that have A&E and Minor Injury Services to ensure secondary prevention is offered to all patients who have suffered a fragility fracture.”*

**- British Orthopaedic Association - British Geriatrics Society<sup>6</sup>:**

*“Establishment of an integrated **Fracture Liaison Service** in every UK hospital, which operates in close collaboration with local general practice, offers the optimal system of healthcare delivery to implement NICE guidance consistently for all patients presenting with fragility fractures.”*

**- Royal College of Physicians Clinical Effectiveness and Evaluation Unit<sup>23</sup>:**

*“A service model to bridge this gap, the **Fracture Liaison Service**, has existed for over a decade and numerous research evaluations have confirmed its effectiveness in ensuring better rates of secondary prevention. Fracture Liaison Services have yet to become universally commissioned or provided.”*

**- National Osteoporosis Society<sup>7</sup>:**

*“We want a **Fracture Liaison Service** linked to every hospital that receives fragility fractures in the UK, to ensure that every fragility fracture patient gets the treatment and care they need.”*

**The primary objective of this audit is to identify the number of hospitals in Wales that have a funded service which provides systematic secondary prevention to fragility fracture patients.**

## Audit process

During August 2009, an audit of all acute centres in Wales that manage fragility fracture patients was undertaken. The audit and its associated report were conducted under the auspices of the All Wales Osteoporosis Advisory Group (WOAG), endorsed by the National Osteoporosis Society (NOS). Appendix 1 provides a copy of the audit questionnaire which was emailed to WOAG members, where present, in all Welsh hospitals. Two hospitals which do not have a representative on WOAG participated in the audit by direct contact from the WOAG audit lead. An independent academic with experience in authorship of national policy, professional and patient organisation guidelines on fragility fracture care was commissioned to prepare the current report. The work was undertaken in an ethical, open and transparent manner with the intention of promoting the appropriate treatment of those who have sustained fragility fractures, in line with national guidance.

The report assesses the findings of the audit against the agreed standards of the Welsh Government<sup>1</sup>, professional<sup>6,11</sup> and patient organisations<sup>7</sup>. A costed action plan to address the shortfalls in evidence-based, guideline-orientated service at a national level is provided. This plan is informed by an analogous health economic model developed by the Department of Health in England<sup>5</sup>. The report will be circulated to members of the Welsh Assembly Government and Local Health Boards in Wales to guide service development. Ideally, the audit will be repeated annually to gauge progress against the standards.

## Results

The 17 hospitals that participated in the audit are listed in Appendix 2. All patients that suffer fractures in Wales will initially present to one of these hospitals. The response rate to the questionnaire was 100% (15/17 by email and 2/17 by direct telephone contact).

The questionnaire (see Appendix 1) was structured into three sections:

1. Provision of **inpatient** secondary prevention service for fragility fracture patients
2. Provision of **outpatient** secondary prevention service for fragility fracture patients
3. Process of care for inpatient and/or outpatient secondary prevention services

**Inpatient secondary prevention service:** Seven hospitals (41%) reported having a funded service that provides routine post-fracture assessment of future fracture risk for inpatients. Three of the 10 hospitals lacking an inpatient secondary prevention service do so because they do not admit fracture patients. Of the 7 remaining hospitals that admit fracture patients but lack a funded inpatient secondary prevention service, 5 (71%) cite lack of funding as the reason for absence. Two hospitals report that business plans have been submitted to establish a Fracture Liaison Service for the last 3 years without success.

**Outpatient secondary prevention service:** Four hospitals (24%) reported having a funded service that provides routine post-fracture assessment of future fracture risk for outpatients.



Of the 13 remaining hospitals that provide outpatient fracture clinics but lack a funded outpatient secondary prevention service, 7 (54%) cite lack of funding as the reason for absence. Four hospitals report that repeated business plans have been submitted to establish a Fracture Liaison Service without success.

**Process of care:** The majority of hospitals operating inpatient and/or outpatient secondary prevention services identify patients in the fracture clinic and on orthopaedic wards. Case-finding and subsequent assessment of inpatients is conducted in broadly equal measure by Consultant Ortho-geriatricians/Physicians and Fracture Liaison Nurses/Osteoporosis Nurse Specialists. However, case-finding and subsequent assessment for the 4 hospitals with a funded outpatient secondary prevention service is exclusively delivered by Fracture Liaison Nurses/Osteoporosis Nurse Specialists. Eight hospitals (47%) have a dedicated ortho-geriatrician appointed at consultant level. Thirteen hospitals (76%) have local access to bone densitometry. Seven hospitals (41%) have an auditable database capable of monitoring implementation of national standards of care for secondary fracture prevention. Six hospitals (35%) have an agreed protocol between their secondary fracture prevention service and local primary care.

## **Recommendations**

This audit has identified a nationwide organisational gap in the provision of services to deliver secondary prevention for the majority of patients presenting to Welsh hospitals with fragility fractures. Less than one half of hospitals have funded services for inpatient cases whilst less than a quarter have funded services for fracture patients managed as outpatients. A Health Gain Target set in the NSF for Older People in Wales is to reduce hip fractures in the 75 and over age group by 10% by 2012<sup>1</sup>. Should the current lack of access to funded Fracture Liaison Services be allowed to persist, evidence from national audits conducted throughout the UK strongly suggests that the NHS in Wales will fall far short of meeting this key target.

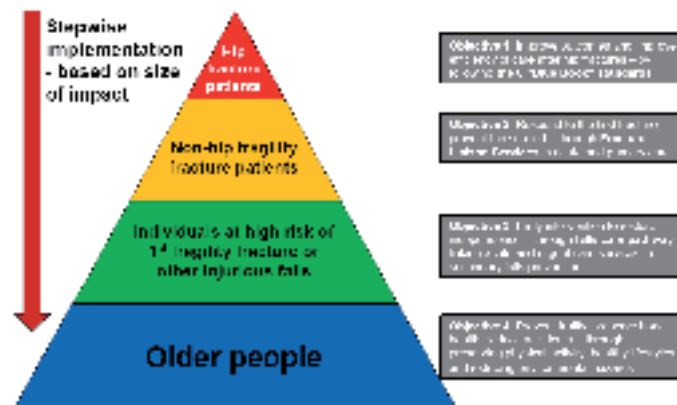
The Governments of England, Scotland and Northern Ireland have recognised that urgent action is required to improve delivery of secondary prevention for fragility fracture patients. Directed Enhanced Services launched in 2008/9 for England<sup>24</sup>, Scotland<sup>25</sup> and Northern Ireland<sup>26</sup> provide incentives to general practice which are not available in Wales. Policy initiatives from the Departments of Health in all 3 countries<sup>5,21,27</sup> support universal implementation of FLS as a means of reliably implementing NICE guidance<sup>9</sup> on secondary prevention for patients presenting with new fragility fractures. In Scotland, significant progress has been achieved, with 78% of the Scottish population having access to a Fracture Liaison Service<sup>28</sup>. As of 2009, the Department of Health in England<sup>5</sup> and the Fragility Fracture Working Group of the Department for Health, Social Services and Personal Safety in Northern Ireland<sup>21</sup> explicitly endorse universal access to FLS.

**A pressing need exists for NHS Wales to develop analogous policy initiatives that will result in universal access to FLS throughout Wales, with ongoing support from general practitioners. The costed action plan that follows provides an estimate of the costs and benefits to the NHS in Wales of establishing and operating Fracture Liaison Services in all Welsh hospitals.**

## Costed action plan

The Department of Health in England published the Prevention Package for Older People in July 2009<sup>5</sup>. The Prevention Package provides service commissioning guidance to Primary Care Trusts in England on several areas, including falls and fracture prevention. Four specific objectives are identified to improve falls and fracture prevention services as illustrated in Figure 1 below. Objectives 1 and 2 relate to the implementation of a systematic approach to hip fracture care and prevention. Fracture Liaison Services are advocated as a clinically and cost-effective mechanism to implement NICE guidance<sup>9</sup> on secondary prevention for all fragility fracture patients.

Figure 1. Department of Health in England Prevention Package for Older People<sup>5</sup>



A health economic impact assessment of FLS was provided in the Prevention Package for Older People<sup>29</sup>. The model was based on experience from the Ipswich Fracture Liaison Service<sup>18</sup> which serves a population of 320,000. Every year, the Ipswich FLS provides secondary preventative care for 800 patients presenting with new fragility fractures of the hip, wrist, humerus or spine. The Department of Health estimated that during a 5 year period, the intervention of the FLS would avert 18 hip, 5 wrist, 4 humerus and 6 spine fractures amongst the 800 patients seen during year 1. The consequent savings for NHS and local authority funded social care costs would be £258,000 plus an additional saving of £40,000 of self-funded social care. Accordingly, the total health and social care saving would be of the order £300,000. The cost for each year's "cohort" of 800 fracture patients, consisting of staff/diagnostic costs in year 1 and treatment costs over a 5 year period was estimated to be £281,250, rendering FLS implementation cost-neutral to marginally cost-saving<sup>28</sup>:

- Staff £41,250 p.a.:
  - Fracture Liaison Nurse £30,000
  - Lead Clinician in Osteoporosis (Consultant level) input £7,500
  - Clerical Support £3,750
- Bone densitometry £29,000 (@£70 per DXA scan marginal cost)
- Treatment cost for 5 years £211,000

To estimate the cost, above current investment levels, to provide universal access to Fracture Liaison Services for all hospitals in Wales, several assumptions will be made:

- Experience from the Glasgow FLS over a decade suggests that the work-load of an FLS is equally distributed between inpatients and outpatients (this may vary between hospitals)
- Thus, delivering an FLS for inpatients could be costed as 0.5 FLS FTE and an FLS for outpatients as 0.5 FLS FTE
- The audit identified 7 hospitals that admit fragility fracture patients currently lacking an FLS
- The audit identified 13 hospitals that provide outpatient fracture clinics lacking an FLS

Accordingly, in order for the NHS in Wales to provide universal access to FLS for both inpatients and outpatients, funding for 10 new Fracture Liaison Service Full Time Equivalents is required i.e.  $(7 \times 0.5) + (13 \times 0.5)$ . Based on the Department of Health in England's estimate<sup>28</sup>, this translates to year 1 staff/diagnostic costs of £702,500 and 5 year treatment costs for the cohort of fracture patients identified during year 1 of £2,110,000. Capital expenditure may be required in the 4 hospitals that did not report having local access to bone densitometry. Ten hospitals also need to develop an auditable database to underpin the operations of the FLS.

**Hip fracture care costs Wales £84 million per year. The new costs for establishing universal access to Fracture Liaison Services across Wales in 2010 and treating patients according to NICE Technology Appraisal 161 for 5 years thereafter is £2.8 million. The savings for NHS and social care attributable to fractures averted is estimated at £3.0 million, the majority being delivered during the first 3 years.**

### Summary

In 2005, a UK national audit of orthopaedic surgeons reported that 24% had Fracture Liaison Services in their hospitals and 47% had access to ortho-geriatric services<sup>30</sup>. In August 2009, the All Wales Audit of Secondary Prevention of Osteoporotic Fractures identified remarkably similar access to FLS and ortho-geriatric services in Wales. During the intervening 4 years, the Welsh Assembly Government published the National Service Framework for Older People in Wales<sup>1</sup> and NICE published 2 Technology Appraisals<sup>8,9</sup> on secondary fracture prevention. The ongoing Royal College of Physicians national audit has repeatedly identified a lack of FLS provision<sup>11</sup> and consequent failure to implement NICE guidance for the majority of fragility fracture patients<sup>12</sup>.

In June 2009, a question on provision of Fracture Liaison Services was put to the Minister for Health and Social Services in the Welsh Assembly<sup>31</sup>. The Ministerial reply indicated that this information was not held centrally<sup>32</sup>. This audit provides the Minister for Health and Social Services, members of the Welsh Assembly Government and healthcare professionals working in NHS Wales with an accurate and current picture of FLS provision for the people of Wales.

**A post-code lottery of access to Fracture Liaison Services exists across Wales. Elimination of the current inequality of access to NICE standards of care for patients with fragility fractures must be designated a priority for NHS Wales. The All Wales Osteoporosis Advisory Group commends the findings and recommendations of this report to the Minister for Health and Social Services.**

## Appendix 1 - Audit questionnaire

**All Wales Osteoporosis Advisory Group (WOAG)**  
**All Wales Audit of**  
**Secondary Prevention of Osteoporotic Fractures July 2009**

Your name:

Job Title:

E-mail address:

Health Board:

Main hospital base:

### **Inpatients:**

1	Do you have a <b>funded</b> service that provides routine post fracture assessment of future fracture risk for <b>inpatients</b> (i.e. those presenting with new fractures who are admitted to hospital)?	Yes	No
		<input type="checkbox"/>	<input type="checkbox"/>

2 a	If <b>yes</b> to question 1, <b>who</b> is responsible for the routine post fracture assessment of future fracture risk for <b>inpatients</b> - nurse, consultant or other (please specify and include one or more clinicians e.g. Fracture Liaison Nurse, Specialist Osteoporosis Nurse, Consultant, Orthogeriatrician etc) ?	
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2 b	If <b>yes</b> to question 1, do you assess the following patients?	
	Yes	No
	Female	<input type="checkbox"/>
	Male	<input type="checkbox"/>
	Please specify what <b>age</b> you offer assessment from (e.g. those aged 50+ or adults of any age)	

2 c	If <b>no</b> to question 1, please can you comment as to why this service is not available?  Do you wish to comment on any "informal" or other arrangements that you may have in place for the assessment of future fracture risk for <b>inpatients</b> presenting with new fractures	
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**Outpatients:**

3	Do you have a <b>funded</b> service that provides routine post fracture assessment of future fracture risk for <b>outpatients</b> presenting with new fractures (such as those attending Fracture Clinic)?	Yes	No
		<input type="checkbox"/>	<input type="checkbox"/>

4 a	If <b>yes</b> to question 3, <b>who</b> is responsible for the routine post fracture assessment of future fracture risk for <b>outpatients</b> - nurse, consultant or other (please specify and include one or more clinicians e.g. Fracture Liaison Nurse, Specialist Osteoporosis Nurse, Consultant, Orthogeriatrician etc) ?	
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4 b	If <b>yes</b> to question 3, do you assess the following patients?	
	Yes	No
	Female	<input type="checkbox"/>
	Male	<input type="checkbox"/>
	Please specify what <b>age</b> you offer assessment from (e.g. those aged 50+ or adults of any age)	

4 c	<p>If <b>no</b> to question 3, please can you comment as to why this service is not available?</p> <p>Do you wish to comment on any "informal" or other arrangements that you may have in place for the assessment of future fracture risk for <b>outpatients</b> presenting with new fractures</p>	
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If you have answered yes to questions 1 and 3 please answer the following questions:

5	<b>Where</b> in the care pathway does the <b>identification</b> of <b>low trauma</b> fractures take place?		
		Yes	No
A&E			
Fracture Clinic			
General Wards			
Orthopaedic Ward			
Other (please specify)			

6	<b>Whose</b> responsibility is it to <b>identify low trauma</b> fractures?			
		Yes	No	Specify
A&E Nurse or Doctor				
Fracture Clinic Nurse or Doctor				
Trauma Liaison Nurse				
Orthopaedic Ward Nurse or Doctor				
Other (please specify)				

7	Do you have a <b>dedicated</b> Orthogeriatrician at consultant level?	Yes	No

8	Do you have local <b>access</b> to <b>DXA</b> ?	Yes	No

9	Do you have an <b>auditable database</b> to monitor the care of fracture patients in your hospital (other than NHFD)?	Yes	No

10	Do you have an agreed <b>protocol</b> between your service (following assessment of fracture risk) and <b>primary care</b> ?	Yes	No

11	What recommendations/referrals are made?		
Yes		No	
Treatment			
Falls service			
Physiotherapy			
Other (please specify)			

Thank you for your time – please return completed audit to Debbie Stone (Secretary to WOAG) by email, fax or post:

Tel: 01970 628829

Email: [Debbie.polymorph@btinternet.com](mailto:Debbie.polymorph@btinternet.com)

Fax: 01970 635937

Address: Integrated Osteoporosis Service, Leri Day Unit, Bronglais Hospital, Aberystwyth, Ceredigion SY23 1ER.

Please contact Debbie if you have any queries.

## **Appendix 2 - Participant hospitals**

### **Bronglais General Hospital**

Caradog Road, Aberystwyth, SY23 1ER

Tel: 01970 623131

### **Llandudno General Hospital**

Hospital Road, Llandudno, LL30 1LB

Tel: 01492 860066

### **Morrison Hospital**

Morrison, Swansea, SA6 6NL

Tel: 01792 702222

### **Neath Port Talbot Hospital**

Baglan Way, Port Talbot, SA12 7BX

Tel: 01639 862161

### **Nevill Hall Hospital**

Abergavenny, Gwent, NP7 7EG

Tel: 01873 732732

### **Prince Charles Hospital**

Merthyr Tydfil, CF47 9DT

Tel: 01685 721721

### **Prince Philip Hospital**

Dafen Road, Llanelli, SA14 8QF

Tel: 01554 756567

### **Princess of Wales Hospital**

Coity Road, Bridgend, CF31 1RQ

Tel: 01656 752752

### **Royal Glamorgan Hospital**

Ynys Maerdy, Llantrisant, CF72 8XR

Tel: 01443 443443

### **Royal Gwent Hospital**

Cardiff Road, Newport, NP20 2UB

Tel: 01633 234234

### **Singleton Hospital**

Sketty, Swansea, SA2 8QA

Tel: 01792 205666

### **University Hospital of Wales**

Heath Park, Cardiff, CF14 4XW

Tel: 029 20 747747

**West Wales General Hospital**

Dolgwili Road, Glangwili, SA31 2AF

Tel: 01267 227007

**Withybush General Hospital**

Fishguard Road, Haverfordwest, SA61 2PZ

Tel: 01437 764545

**Wrexham Maelor Hospital**

Croesnewydd Road, Wrexham, LL13 7TD

Tel: 01978 291100

**Ysbyty Glan Clwyd**

Sarn Lane, Rhyl, Denbighshire, LL18 5UJ

Tel: 01745 583910

**Ysbyty Gwynedd**

Penrhosgarnedd, Bangor, Gwynedd, LL57 2PW

Tel: 01248 384384



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# All Wales Osteoporosis Advisory Group (WOAG) 2009

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