

Royal Osteoporosis Society Conference 2023:

A focus on equity

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After a five-year break, over 600 healthcare professionals attended Osteoporosis 2023, the UK's leading conference and exhibition on osteoporosis and bone health. The programme featured expert speakers from a variety of disciplines who showcased the latest in research and advances in the diagnosis, treatment and management of patients. For the first time, the conference organising committee led by Professor Emma Clark and Professor David Armstrong chose a theme for all speakers, workshop facilitators and poster presenters: **equity in bone health**.

The conference was opened by Craig Jones, Chief Executive of the Royal Osteoporosis Society. Craig set the scene by describing the injustice and contrasting experiences of patients who sustain fractures, and highlighted that inequity in bone health management is all-pervasive.

Dr Owen Williams OBE, Chief Executive of the Northern Care Alliance NHS Foundation Trust, launched our theme by describing health inequalities as a population health issue. Owen illustrated a simple but powerful way of addressing health inequalities called **SURE: See it, Understand it, Respond to it, Evaluate it**. SURE was a theme described throughout the conference.

Professor Celia Gregson illustrated the difference between equality and equity in hip fracture care.

Equality in hip fracture care means everyone gets the same care and all variation in patient outcomes reflects patient variability not variability in health care delivery.

Equity in hip fracture care means people get different care that is responsive to patient need and accounts for patient variability so that there's no variability in patient outcomes.

Professor Gregson presented evidence to show those living in areas with most deprivation:

- have the longest waiting times to surgery,
- are less likely to receive NICE compliant surgery for specific types of hip fracture,
- are less likely to be reviewed promptly by an orthogeriatrician.

This is the direct opposite to what is needed to ensure equity in hip fracture management. Similar inequity in hip fracture care is seen by geography, ethnicity and sex. To help address this, groups from around the world have started measuring this variation and sharing it with those in power in a transparent manner – using SURE - and reductions in inequalities follow. Professor Gregson has led the REDUCE Study, aiming to reduce this unwarranted variation through production of an implementation toolkit for organisations to improve their hip fracture service. All the resources produced as part of the REDUCE study including clinical governance templates, hip fracture pathway checklists, business cases for orthogeriatricians and suggested quality improvement projects are freely available to all through the Royal Osteoporosis Society website.

Dr Alison Black described the **Once for Scotland** whole system approach to provide equitable services. This approach highlights that services will not be identical due to the significant geographical differences that exist, but will have the same principles. The Scottish Hip Fracture Audit has published evidence that measuring, reporting and then improving adherence of hospitals to these national standards results in improved outcomes. Dr Black also discussed variation in Fracture Liaison Service (FLS) provision across Scotland, illustrating that the model developed in Glasgow in 1999 is not suitable for Aberdeenshire. For example, where people visit their local hospitals rather than a single large hospital based in a city. To provide an effective FLS in a large area with isolated small communities, an alternative model based on electronic surveillance of the national X-ray repository system has been very effective. This illustrated the real need for variation in service provision in response to population differences.

Dr Inder Singh, the National Clinical Lead for Falls and Frailty for the Welsh Government described the All Wales approach to equity in Fracture Liaison Services. Dr Singh has worked in partnership with all the Welsh Health Boards, Trusts and third sector organisations to establish All Wales FLS Development and Quality Assurance Board (Wales). The FLS Board is underpinned by quality trilogy – quality planning, quality control and quality improvement. Based on the Prudent Healthcare principles and a Healthier Wales vision, these three priorities are set to promote bone health in Wales including:

- raising awareness and education on bone health
- wider integration and partnership
- improve fragility fracture identification, management and care

Dr Singh described the wider roles of this Board including undertaking a national review of services, working closely with Welsh Value in Health Centre, Six Goals for Urgent and Emergency Care and the Royal College of Physicians in Wales, to raise osteoporosis awareness. The Royal Osteoporosis Society (ROS) has supported the FLS network team to help shape policy by using cost-benefit analysis regarding the benefits of FLS. The Board, which is accountable to the

minister for health and social services, ensures high-quality fracture care for everyone across Wales. Excitingly, the Welsh Health Minister has become the first health minister in the country to mandate universal Fracture Liaison Services for everyone aged over 50 by September 2024. Inder clearly described how to facilitate the political and clinical will for change through SURE.

Professor Ailsa Welch highlighted new and emerging research, which has found a number of vitamin and minerals (micronutrients), besides calcium and vitamin D, are important for bone and muscle health. These micronutrients may also be important for preventing fragility fractures. Recent research findings relating micronutrients and musculoskeletal health include the vitamins C, B6, B12, the plant sourced carotenoids, and the minerals, iron, magnesium and zinc. The research suggests that these nutrients may be protective. Dietary patterns, or styles of eating, for example the Mediterranean diet, are rich in micronutrients due to high consumption of micronutrient dense foods such as vegetables. The UK dietary recommendations, 'The Eatwell Guide', provide guidelines for achieving a healthy diet that are also supportive for musculoskeletal health.

However, inequity in nutritional status exists in the UK. Evidence from the UK National Diet and Nutrition Survey and the UK Biobank shows that socioeconomic factors such as:

- being of older age,
- living in an area of disadvantage
- in residential care,
- being on a low income
- belonging to an ethnic group is associated with deficiency
- low intakes of several micronutrients: including the vitamins D and C, magnesium, and iron deficiency anaemia.

Since these deficiencies impact on musculoskeletal health in terms of prevention and recovery from osteoporosis and fractures, inequity of access to diets high in micronutrients probably exacerbates the existing inequity in their treatment.

Although randomised controlled trials have yet to be done to understand the efficacy of specific micronutrients and healthy dietary patterns on bone density, fractures and sarcopenia, clinicians can still encourage people to eat a healthy diet and follow the Eatwell Guide. Resources to guide dietary intake for supporting musculoskeletal health can also be found on the ROS website.

Professor Kate Ward also spoke about worldwide inequalities and substantial disparities in the recognition and treatment of osteoporosis, fractures and other musculoskeletal conditions.

The unique briefing for all speakers at our conference yielded a thought-provoking focus, adding additional depth to the submitted abstracts and workshops. Presentations and posters not only presented data highlighting the inequity of provision of osteoporosis services across the UK, variation in service provision, but also methods to harmonise care with a focus on quality improvement.

It was a great privilege to listen to a patient addressing the audience and sharing her personal experiences of suffering from osteoporosis, the unknowns, the lack of clarity in her care and the long waits for scans and to see a specialist. Her powerful address reminded every person in the audience why they were there and how important striving to reduce inequity is to patients.

So we hope the focus on equity within the conference may be a step in the right direction. 'The synergy of small gains' as mentioned by Prof Gregson, leads to the greatest positive impact for patients. These small gains may include researchers striving to involve research participants from all backgrounds in osteoporosis research; a cultural shift within bone health teams towards open review of equity of services; and a change to current delivery of care so that patients with hip fractures are not outliers. All this supported by better collection of relevant data including coding of ethnicity within healthcare databases and hospital systems, for example. The conference was part of the new strategy of the Royal Osteoporosis Society called 'Breaking the Silence', aiming to grab the attention of the public and change the minds of policy makers. Our conference also fits in with the NHS Constitution, highlighted by Dr Owen Williams, which states the NHS has 'a wider social duty to promote equality through the services it provides and to pay particular attention to groups or sections of society where improvements in health and life expectancy are not keeping pace with the rest of the population'. Clearly, more needs to be done to improve equity of services for people with osteoporosis and fractures but the focus of our conference has highlighted the ways that this can be achieved at the organisational and national level.