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RESEARCH PAPER

An orthogeriatric quality improvement initiative from the European Academy for Medicine of Ageing (EAMA): enhancing osteoporosis treatment and fall prevention

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Abstract

Purpose To design and implement a structured international quality improvement initiative addressing two critical areas: post-fracture osteoporosis treatment and fall prevention programs.

Methods We developed a quality improvement initiative using the Plan–Do–Check–Act (PDCA) model across six European orthogeriatric units. After identifying common gaps, the intervention focused on three pillars: (1) education and training of multidisciplinary teams; (2) patient and caregiver engagement through flyers, posters, and videos; and (3) protocol standardization, through the development of Standard Operating Procedures and referral to fall-prevention clinics. Each orthogeriatric team selected a priority area based on local needs. We then collected process and outcome metrics and assessed them within each country's healthcare context.

Results The project led to a set of educational materials and clinical protocols, enhancing training, empowering patients and professionals, and improving service quality. Trained healthcare workers were satisfied with the program, and most of the patients declared themselves to be more informed than before. The development and introduction of an osteoporosis algorithm increased treatment rates significantly in Portugal and Finland. Bone-health and fall-prevention clinics were launched within the geriatric medicine department in Malta and Italy, respectively.

Conclusion This low-cost, scalable initiative shows early promise for adaptation across diverse European healthcare systems. The initiative aims to expand to additional orthogeriatric units and to launch a suite of standardized orthogeriatric tools and protocols that could support wider implementation.

Key summary points

Alves Mariana and Ana Gabriela Prada have contributed equally as co-first authors.

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Aim To develop and implement an international quality improvement initiative focused on enhancing post-fracture osteoporosis treatment and fall prevention in orthogeriatric units across Europe.
Findings The initiative, based on the PDCA cycle, led to improved multidisciplinary training, patient empowerment, the development of standardized clinical protocols and dedicated bone-health and fall-prevention clinic services.
Message A structured, low-cost, and scalable approach can strengthen orthogeriatric care and bridge implementation gaps in osteoporosis and fall prevention across European healthcare systems.

Keywords Orthogeriatrics · Falls · Fall prevention · Osteoporosis · Older adults · Quality improvement initiative

Background

Fragility fractures are among the most serious and costly consequences of aging, representing a major cause of disability, loss of independence, and mortality in older adults [1]. After an initial fracture, the risk of refracture increases two- to threefold, yet a large proportion of patients never receive appropriate assessment or treatment for underlying osteoporosis [2, 3]. Similarly, falls—the leading cause of injury-related hospitalizations among older adults—often go unaddressed after a hospital discharge, despite being largely preventable through multidisciplinary and evidence-based interventions [4].

In recent years, several international guidelines have outlined effective strategies for secondary fracture prevention, including systematic osteoporosis management and fall prevention programs [5]. However, their implementation across Europe remains inconsistent and fragmented. Variability in care pathways, limited multidisciplinary coordination, and insufficient patient and caregiver education continue to hinder progress [6, 7].

Orthogeriatric models of care—integrating geriatric, orthopedic, nursing, and rehabilitation expertise—have proven effective in improving outcomes after fragility fractures [8–10]. Nevertheless, many institutions lack structured quality improvement (QI) frameworks to ensure that best practices are consistently applied, monitored, and sustained.

Recognizing this gap, the OrthoGeriatric Group of the XV Course of the European Academy for Medicine of Ageing (EAMA) launched an international QI initiative to strengthen osteoporosis treatment and fall prevention within orthogeriatric settings. By leveraging collaboration among six European centers, this initiative aimed at sharing knowledge, standardizing procedures, and promoting patient-centered care through low-cost, scalable interventions that could be adapted across diverse healthcare systems.

Methods

Study design and setting

This international QI initiative was designed and implemented according to the Plan–Do–Check–Act (PDCA) model, a structured framework for continuous improvement in healthcare delivery [11]. The project was coordinated by the OrthoGeriatric Group of the XVth Course of the European Academy for Medicine of Ageing (EAMA) and conducted across six European orthogeriatric units, located in Finland, Germany, Italy, Malta, Portugal, and Romania. These centers represent a broad range of healthcare systems, institutional capacities, and cultural contexts, allowing for an inclusive understanding of barriers and facilitators to orthogeriatric QI in Europe.

Rationale and preliminary work

The planning phase was informed by the results of the preliminary study "Orthogeriatric Protocols and Challenges: Results from a Six-Country European Survey" [12], which collected responses from 157 healthcare professionals, including geriatricians, orthopedic surgeons, nurses, physiotherapists, and other allied health professionals. To achieve a high impact we installed "local champions" who were part of the EAMA QI working group in each of their departments. The workflow redesign was aimed at enhancing the care of post-fracture patients and improving or establishing, depending on each country's necessities. We have found that some countries needed the establishment of a pathway for post-fracture patients after the acute episode, while in other countries, the pathway needed better regulations. We have chosen a survey as a way to set the grounds for what the gaps were in each department. The materials used in disseminating the information were based on the existing materials available in each department, where flyers, brochures and workshops have proven useful before. The survey revealed good adherence to certain standards—such as timely unit admission, early postoperative mobilization, and nutritional assessments—but also significant deficiencies in key areas: delirium screening, catheter removal, osteoporosis secondary prevention, and referral to fall prevention programs. We also observed inconsistent use of femoral nerve blocks, limited emergency geriatric assessment, and communication gaps within multidisciplinary teams. These findings highlighted an urgent need for harmonized, practical, and sustainable strategies to enhance the quality of orthogeriatric care [12].

Objectives and overall framework

Based on these insights, the QI initiative focused on two critical priorities identified as shared weaknesses across all participating sites:

1. Inadequate initiation of post-fracture osteoporosis treatment.
2. Lack of systematic referral to fall prevention programs.

The overarching aim was to strengthen multidisciplinary practice, patient engagement, and standardization of care through low-cost and adaptable interventions, tailored to each local context but aligned with common European standards.

Planning phase (Plan)

Each participating unit conducted a local gap analysis to confirm priority needs and available resources. We structured the intervention based on the following three strategic pillars:

1. Education and training of healthcare professionals to enhance clinical knowledge and promote evidence-based practice.
2. Patient and caregiver engagement, through educational materials (flyers, posters, and videos) developed in local languages.
3. Protocol standardization, via the design of standard operating procedures (SOP) and referral pathways for osteoporosis treatment and fall prevention.

Based on the results of the situational analysis, countries were grouped by primary focus area: Portugal, Malta, and Finland prioritized osteoporosis treatment, while Germany, Italy, and Romania concentrated on fall prevention and referral pathways.

Implementation phase (Do)

The implementation phase took place between January and July 2025, following a coordinated but locally adapted approach. Regular online meetings ensured shared learning, progress monitoring, and exchange of materials among the six sites.

Osteoporosis treatment interventions

In Finland, Portugal, and Malta, actions targeted the post-fracture osteoporosis treatment gap through:

–Educational workshops for hospital physicians (orthopedic surgeons, geriatricians) on timely diagnosis, prescription of anti-osteoporotic medications, and secondary fracture prevention.
–Training sessions for general practitioners (GPs) on long-term osteoporosis management in the community, covering medication options, administration, and side effects.
–Visual reminders and educational posters are displayed in orthopedic and geriatric wards, emphasizing the importance of initiating osteoporosis treatment during hospitalization.
–Patient and caregiver flyers are distributed at discharge, providing accessible information on bone health, treatment adherence, and lifestyle recommendations.

Fall prevention interventions

In Germany, Italy, and Romania, interventions focused on building structured fall-prevention programs for post-hip-fracture patients and for primary prevention, through:

–Workshops for multidisciplinary hospital staff (doctors, nurses, physiotherapists, occupational therapists) on fall-risk factors, prevention strategies, and evidence-based interventions.
–Awareness materials, including posters, one-minute information cards ("one-minute wonders"), and short educational videos for staff, patients, and caregivers.
–Standard Operating Procedures (SOPs) for systematic fall-risk assessment during hospitalization, ensuring consistent screening and documentation.
–Pilot multidisciplinary outpatient falls clinics within geriatric departments, offering individualized assessments and follow-up programs including exercise, cognitive stimulation, medication review, and home safety evaluation.

Evaluation phase (Check)

Data collection combined process and outcome indicators using low-cost, standardized tools (e.g., Excel, Google Forms).

Process indicators included:

–Number of educational materials produced and displayed (flyers, posters, videos).
–Number of workshops delivered and healthcare professionals trained.
–Adoption and local adaptation of SOPs or referral pathways.

Outcome indicators included:

–Staff knowledge and satisfaction after training sessions.
–Patient and caregiver understanding of osteoporosis and fall prevention, assessed through short feedback surveys.
–Number of patients initiated on osteoporosis treatment in-hospital or within 1 month post-fracture
–Number of referrals made to fall-prevention clinics or services.

Feedback and adaptation phase (Act)

During the final stage, all sites participated in a collective review of outcomes to define sustainable strategies for integration into routine clinical care. Local advocates—typically geriatric medical residents, senior nurses, or physiotherapists—were identified to maintain the implemented protocols and ensure continuity beyond the project's duration. Lessons learned were documented to guide future QI cycles and to inform the development of a standardized set of orthogeriatric QI tools adaptable across European hospitals.

Ethical considerations

The project was conducted as a QI initiative, not involving experimental interventions or identifiable patient data. Consequently, formal ethics approval was not required in participating institutions.

Sustainability and dissemination

To promote sustainability, participating sites committed to embedding the newly developed SOPs, educational materials, and training modules into their routine clinical workflows. Ongoing professional education includes periodic refresher sessions and a "train-the-trainer" model, empowering local staff to deliver continued education and ensure long-term adherence to best practices.

This article represents the final report of the initiative and serves as the main tool for disseminating its methodology, outcomes, and materials. By sharing the developed templates, educational resources, SOPs, and evaluation tools with the scientific and clinical community, the project aims to foster replication and adaptation of this QI model across other orthogeriatric units and healthcare systems in Europe and beyond. The open exchange of knowledge is expected to accelerate the harmonization of care standards and strengthen multidisciplinary collaboration in orthogeriatrics.

Results

All six participating orthogeriatric units successfully completed the first Plan–Do–Check–Act (PDCA) cycle within the time allowed. Each center implemented the QI initiative according to its chosen priority area—osteoporosis treatment or fall prevention—resulting in tangible educational, clinical, and procedural outputs across Europe.

As summarized in Table 1, between March and May 2025, the project generated a wide array of educational materials, including more than 500 flyers, posters, PowerPoint sets, and videos, as well as SOPs and clinical algorithms adapted to local contexts. Over 250 healthcare professionals participated in multidisciplinary training workshops, and feedback consistently indicated high satisfaction and perceived improvement in clinical practice.

A standardized osteoporosis treatment algorithm was created to guide clinicians in initiating anti-osteoporotic therapy (Fig. 1). Its implementation in Portugal and Finland led to a notable increase in treatment initiation rates after fragility fractures. The algorithm integrates geriatric assessment, renal function, cognitive capacity, and dental evaluation into decision-making and specifies therapeutic options such as bisphosphonates, zoledronic acid, denosumab, and romosozumab.

The initiative also generated patient and caregiver education tools, including leaflets, posters, and videos designed to promote bone health and fall prevention. One example—the educational poster *"Why Bone Health Matters After a Fracture"*—is shown in Fig. 2. This resource outlines six key strategies for secondary prevention, addressing medication adherence, diet, vitamin D supplementation, physical exercise, and fall-risk reduction. A complementary visual aid, the poster *"6 Steps to Prevent Falls,"* is presented in Fig. 3 and provides practical, easy-to-implement actions to reduce fall risk in everyday life. For more examples, see Suppl data: Supplementary materials.

Clinical outcomes were also observed at the institutional level: in Malta, the bone-health clinics targeting secondary fracture prevention care were strengthened through structured education and standardization efforts, whereas new fall-prevention clinics were established in Italy and Romania. Germany piloted a rapid fall-risk screening tool and developed new SOPs for inpatient fall prevention. In Finland and Portugal, the integration of osteoporosis treatment protocols improved communication between acute and rehabilitation teams and standardized pharmacologic management.

Overall, these results confirm that a structured, low-cost, and collaborative QI model can enhance orthogeriatric practice, empower professionals and patients, and provide scalable tools for replication across European healthcare systems.

Table 1 Summary of national implementation results

Country	Priority area	Main educational materials developed	Workshops/staff trained	Key clinical actions/pilot clinics	Main outcomes and indicators
Finland	Osteoporosis	1 patient leaflet (~150 copies), 2 posters; paper published in Finnish Medical Journal	1 workshop (22 professionals: 7 physicians, 15 physiotherapists)	Reinforcement of osteoporosis assessment in rehabilitation center	~100 osteoporosis treatments initiated; patient satisfaction 4.8/5; improved communication between acute and rehab teams
Germany	Fall prevention	3 posters, 1 'One-Minute Wonder', ~100 flyers, 1 SOP; awareness film in progress	3 workshops (70 participants: 20 doctors, 30 nurses, 20 therapists)	New fall assessment tool ('rapid screening battery') and geriatric outpatient clinic	80 fall-risk screenings; 5 referrals; high staff engagement; improved visibility of fall prevention in hospital strategy
Italy	Fall prevention	2 posters, 40 flyers, 1 SOP	3 workshops (15 participants: nurses, physicians, physiotherapists, occupational therapists)	Fall prevention clinic was established in the geriatric department	32 referrals, 30 patients assessed; high staff engagement in fall-risk evaluation; 100% of patients and caregivers reported better understanding of fall prevention
Malta	Osteoporosis	3 PowerPoint sets (doctors, nurses, physiotherapists), 1 poster (in progress)	3 workshops (28 participants: 10 doctors, 8 nurses, 10 physiotherapists)	The Bone Health Clinics, initiated in 2024, in the geriatric department, were further strengthened through multidisciplinary education, collaboration and protocol development	> 80% professionals discuss fragility fractures regularly; improved continuity of bone health follow-up after a fragility fracture and increased uptake of osteoporosis treatment
Portugal	Osteoporosis	10 posters, 20 flyers, 1 SOP, 1 protocol (Day Hospital), 1 nursing video	2 workshops (57 participants: 45 doctors, 10 nurses, 2 pharmacists)	Pilot inpatient administration of Zoledronic acid 5–7 days post-surgery	18 new patients treated with Zoledronic acid; increased treatment rates; interdepartmental collaboration strengthened
Romania	Fall prevention	30 posters, 100 flyers, 1 SOP	3 workshops (50 participants: nurses, physicians, physiotherapists, orthopedic surgeon, medical residents, nurse assistants)	Fall prevention clinic was established in the geriatric department	60 fall-risk screenings, 30 referrals; 80% healthcare professionals perform daily fall-risk evaluation; 100% of patients reported better understanding of falls prevention

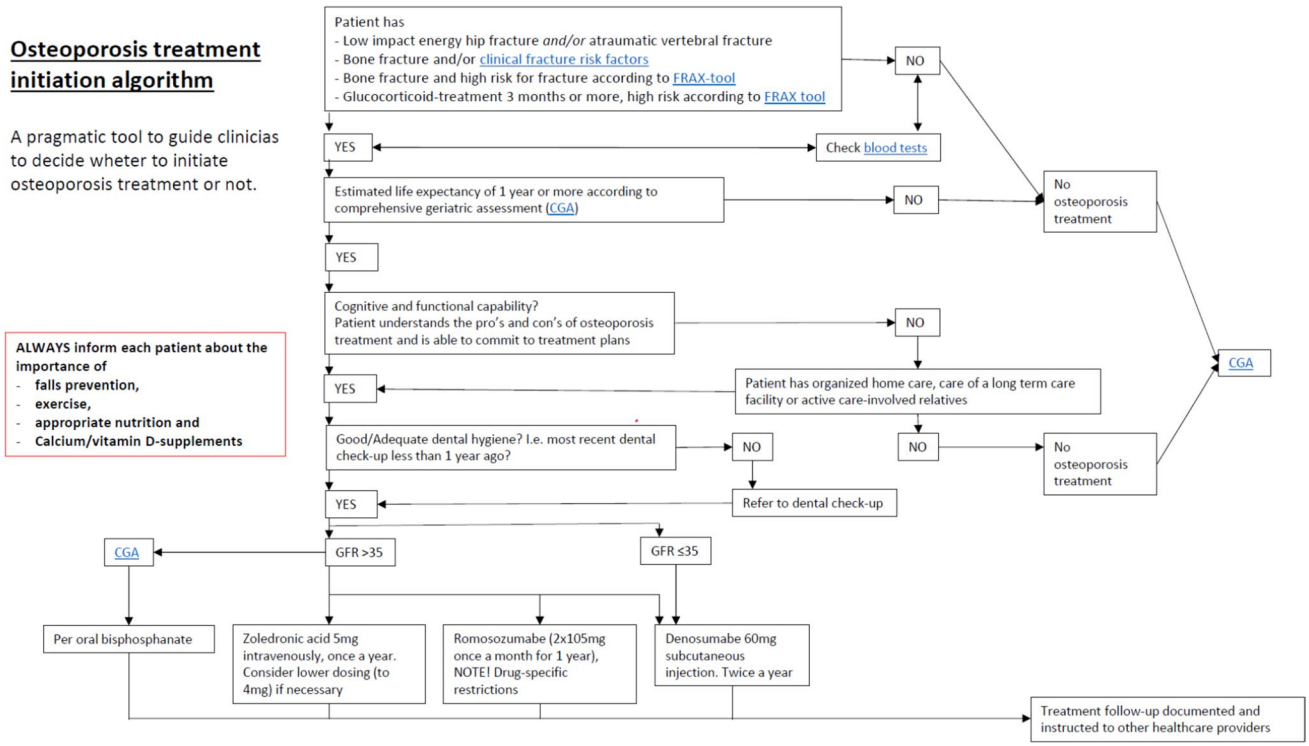

Fig. 1 Osteoporosis treatment initiation algorithm developed and implemented in Portugal and Finland (see Suppl files for additional details). *CGA* comprehensive geriatric assessment, *GFR* glomerular filtration rate

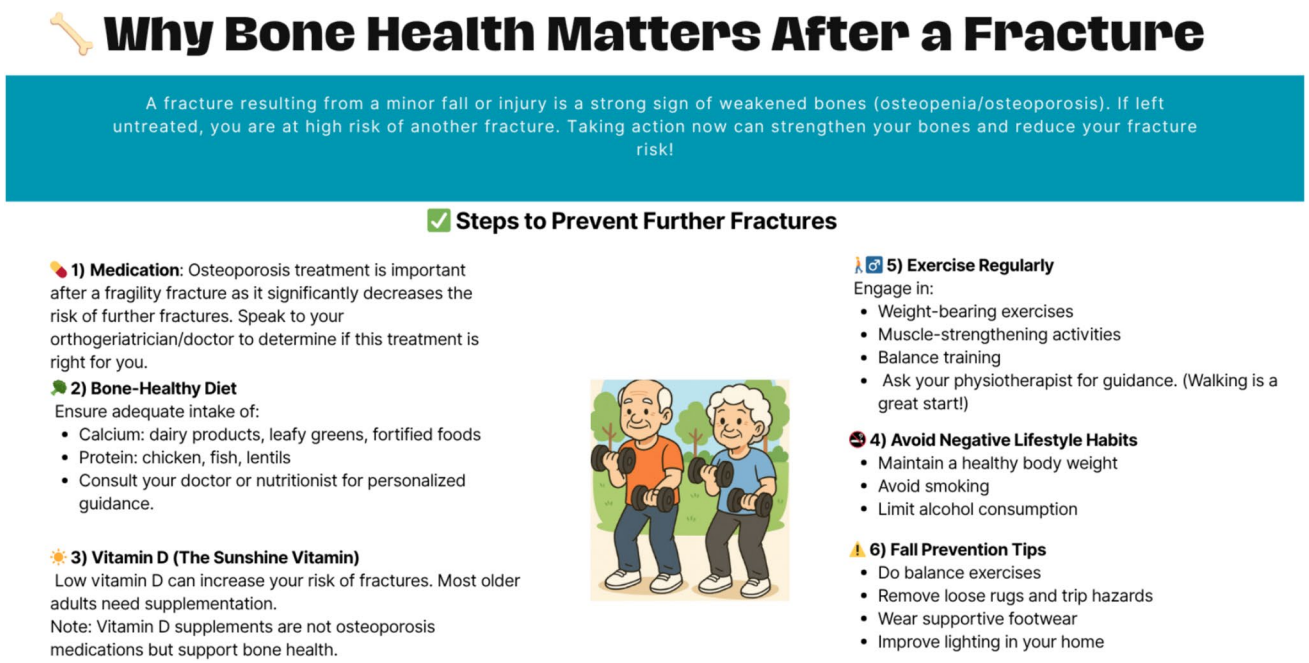

Fig. 2 Examples of posters developed for bone-health prevention

Fig. 3 Examples of posters developed for fall prevention

Discussion

This international QI initiative demonstrated that a structured, collaborative, and low-cost model can generate measurable improvements in orthogeriatric care across diverse European healthcare systems. Implemented across six orthogeriatric units in Finland, Germany, Italy, Malta, Portugal, and Romania, the project led to the development of standardized clinical protocols, educational materials, and patient-centered interventions aimed at enhancing osteoporosis treatment and fall prevention. The focus was specifically placed on these two high-impact and actionable targets because they represented the most significant shared clinical gaps across all participating centers. These domains were prioritized not only for their alignment with secondary prevention goals but also for their feasibility within the scope of this collaborative project. Together, these results underscore that small-scale, coordinated actions—even in resource-limited settings—can effectively translate guideline recommendations into clinical practice. The success of this initiative relies on three core mechanisms: structured education, protocol standardization, and patient and caregiver engagement. Together, they created a culture of accountability and shared purpose within participating teams, a critical component for sustaining long-term improvement.

The primary catalysts for change in this initiative were the role of local champions and the strategic redesign of clinical workflows. Rather than top-down mandates, the authors acted as internal leaders within their departments, leveraging their clinical expertise to foster peer-to-peer buy-in and institutional commitment. This human element was complemented by a practical redesign of existing workflows, such as integrating the osteoporosis algorithm directly into discharge planning. The effectiveness of the educational and patient materials stemmed from their development process: they were selected for their brevity and clarity, ensuring they could be easily integrated into time-pressed clinical environments. By focusing on materials that provided immediate utility—such as the 'rapid screening battery' or standardized ZA protocols—the initiative minimized the cognitive load on staff, which was instrumental in overcoming resistance to change in diverse resource-limited settings.

International guidelines have long emphasized secondary fracture prevention as a key component of post-fracture care [5]. However, as highlighted in prior European reports, implementation remains inconsistent, and treatment gaps persist, with less than 30% of eligible patients receiving osteoporosis therapy after a fragility fracture in many countries [13, 14].

Although other aspects of hip-fracture care could be targeted for QI [15], the World Health Organization—within the UN Decade of Healthy Ageing – has proposed two key benchmark indicators to monitor health-system performance: the proportion of patients receiving surgery within

48 h and the proportion receiving pharmacological osteoporosis treatment after a fracture [16].These global benchmarks underline the need for systematic, in-hospital approaches to secondary fracture prevention.

Other authors have also examined osteoporosis management through structured QI initiatives, particularly within implementation of Fracture Liaison Services (FLS) [17, 18], which could be a heterogeneous approach regarding models of care [19]. In this context, our initiative is not intended to replace the FLS but rather to serve as a pragmatic entry pathway toward its development, particularly in resource-limited settings. By establishing a preliminary in-hospital framework for systematic bone health assessment, this model can accelerate the transition toward more complex, long-term FLS structures. Few articles focus on increasing inpatient delivery of zoledronic acid and fall prevention after hip fracture. In a 2023 conference abstract, Gemma et al. described a QI project that achieved zoledronate administration in ≥ 90% of eligible inpatients with neck-of-femur fractures. Their approach included close collaboration between the FLS team and an orthogeriatrician working alongside the service, which supported clinical decision-making and facilitated consistent prioritisation of bone-health assessments. Over eight months of iterative Plan–Do–Study–Act cycles, workflow refinement and strengthened multidisciplinary communication, the team succeeded in reaching their treatment target [20].

Building on these local initiatives, the Australian "Quality Improvement for Osteoporosis" toolkit [21]—developed primarily for use in primary care—introduces a broader structural perspective. It suggests that while clinician-led projects can generate meaningful improvements, more sustained and scalable impact is usually achieved when these efforts are supported or coordinated at a governmental or health-system level.

Complementing these community-based efforts, recent evidence further supports the importance of early inpatient administration of zoledronic acid (ZA) as part of secondary fracture prevention. Studies have shown that ZA delivered during hospitalization is associated with significantly lower 24-month mortality and refracture rates compared with usual care [22]. In parallel, international expert consensus now supports in-hospital initiation of ZA as a safe, clinically effective, and cost-efficient strategy, recommending that treatment be offered before discharge to maximize adherence and reduce the risk of re-fracture [23].

This evidence is consistent with the experience reported in Portugal and Finland within the current initiative, where a standardized protocol for in-hospital ZA administration was successfully implemented. The integration of this approach into routine orthogeriatric workflows demonstrated feasibility, multidisciplinary acceptance, and clear potential for improving post-fracture outcomes among frail older adults.

The osteoporosis algorithm developed within the initiative represents a pragmatic clinical pathway grounded in comprehensive geriatric assessment, a cornerstone of orthogeriatric practice. By integrating functional status, cognition, and renal function into treatment decision-making, it aligns pharmacological management with the principles of individualized geriatric care [24].

In Malta, the bone-health clinics established by the local lead during participation in the EAMA course provided an existing structure on which to build. Through the QI project, the clinics were further consolidated and standardized, enhancing their sustainability and alignment with international best practices. This aligns with the literature, which shows that dedicated bone-health clinics achieve higher treatment rates [25].

In the published literature, structured fall-prevention initiatives at the individual level are predominantly nurse-led and largely focused on reducing in-hospital falls or on primary prevention of falls, rather than addressing secondary prevention after hip fracture [26–29]. Despite overlap in recommended strategies, investing in fall-risk reduction in these high-risk patients remains essential. Evidence from a network meta-analysis in patients with osteoporosis showed that exercise alone, or combined with medication, was the most effective approach for reducing falls. Although exercise may also help prevent fractures, the certainty of evidence remains low, underscoring the need for further high-quality trials. These findings support integrating structured exercise-based interventions into secondary fracture-prevention pathways [30].

In Germany, the development of educational materials, interprofessional workshops, and the introduction of a rapid screening battery enhanced staff awareness and institutional commitment. High engagement and visibility within the hospital strategy indicated successful cultural integration of fall prevention. In Italy, the participating center established a falls prevention clinic within the geriatric department, supported by educational tools and multidisciplinary training. Daily fall-risk assessments were performed by most professionals, and all patients and caregivers reported improved understanding, reflecting effective professional and patient education. In Romania, the broad dissemination of materials, interprofessional workshops, and the creation of a fall prevention clinic within the geriatric department led to routine screening and referrals, both for patients discharged after a hip fracture and for those identified as being at higher risk of falling. High rates of daily risk evaluation and full patient understanding highlighted strong implementation at both staff and patient levels.

Collectively, these initiatives show that structured education, standardized screening, and clinic-based coordination are key enablers for embedding fall prevention into everyday geriatric practice across diverse healthcare settings.

A unique strength of this project lies in its origin within the European Academy for Medicine of Ageing (EAMA), an educational platform fostering leadership and innovation in geriatric medicine. By leveraging the expertise and motivation of EAMA fellows, the initiative successfully linked clinical QI with academic training and international networking.

This collaborative structure proved crucial to success. The heterogeneity of healthcare systems among the six participating countries—ranging from university hospitals to rehabilitation centers—provided a robust testing ground for adaptability and scalability. Through shared learning, the group overcame local barriers such as limited resources, fragmented services, and varying levels of integration between orthopedics and geriatrics. The EAMA network functioned as a living laboratory for QI, demonstrating that cross-national cooperation can accelerate the translation of evidence into practice.

Although the initial development of this initiative required a significant investment of time, its long-term sustainability is rooted in the formalization of standardized operating procedures (SOPs) that streamline clinical workflows. By providing ready-to-use algorithms and educational tools, the project reduces the daily cognitive and administrative burden on staff, ensuring that improved practices are maintained as a new institutional standard. The 'train-the-trainer' model further protects this progress against staff turnover by decentralizing leadership. Moving forward, the next critical step will be to assess the long-term clinical impact of these systemic changes. We aim to utilize a harmonized dataset across the participating centers to track key outcomes, such as refracture rates and fall incidence, transitioning from process-based evaluation to the measurement of long-term patient benefits.

The next phase of this initiative will transition from process improvement to a structured research agenda focused on long-term impact. Future PDCA cycles will prioritize the collection of harmonized patient-level outcomes across all sites, specifically tracking 12-month refracture rates and medication adherence to validate clinical efficacy. Furthermore, we aim to conduct comparative evaluations between inpatient and post-discharge treatment initiation to optimize the timing of secondary prevention. The integration of digital dashboards and electronic health record prompts will be explored to automate quality monitoring, while formal cost-effectiveness analyses will be conducted to provide the economic evidence necessary for national-level policy uptake.

Supporting this research agenda is the creation of a transferable framework for ongoing improvement. All sites are committed to incorporating the developed SOPs, training modules, and educational materials into their standard clinical workflows. The "train-the-trainer" model ensures sustainability by empowering local champions to lead further dissemination.

Beyond institutional integration, this article itself serves as a vehicle for wider dissemination: by sharing the tools, templates, and algorithms used, the initiative aims to enable replication across other orthogeriatric units in Europe. The scalability of the PDCA model makes it adaptable not only for osteoporosis and fall prevention but also for other domains of geriatric medicine, such as delirium management, medication review, and nutrition.

Future PDCA cycles could include the collection of patient-level outcomes—such as refracture rates, functional recovery, and treatment adherence—and the assessment of cost-effectiveness. Integration into digital health systems, including electronic records and dashboards for quality indicators, could further enhance transparency and continuous monitoring.

Despite its encouraging results, several limitations should be acknowledged. The assessment phase of the project was conducted over a relatively short timeframe (March–May 2025), which limited the ability to capture long-term sustainability and clinical outcomes. In addition, the diversity of participating institutions, while enriching, introduced variability in implementation fidelity and data collection methods. Additionally, the participating sites are not fully representative of their respective countries—except for Malta, which was comprehensively represented. Moreover, most outcome measures were process-based—number of staff trained, materials produced, or patients reached—rather than clinical endpoints such as mortality, refracture, or quality of life. This reflects the initial focus on improving care delivery systems rather than patient outcomes. Another limitation to note is that feedback from patients and caregivers regarding the initiatives and the design of the PDCA was not included. Finally, some feedback data relied on self-reported satisfaction surveys, which may be prone to response bias.

Nevertheless, these limitations are inherent to the early stages of QI projects. Importantly, they highlight opportunities for future refinement and evaluation within subsequent PDCA cycles, aiming to consolidate gains and expand the evidence base for orthogeriatric quality initiatives.

This international QI initiative demonstrated that education, protocol standardization, and patient engagement can rapidly enhance orthogeriatric care delivery. Conducted under the umbrella of the European Academy for Medicine of Ageing, it exemplifies how cross-national collaboration can translate evidence-based recommendations into practical, sustainable change. By openly sharing its methodology, tools, and results, the initiative contributes to building a common European framework for high-quality, patient-centered care after fragility fractures—and lays the foundation for a sustainable, learning-oriented orthogeriatric network.

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Data availability Data is available upon reasonable request.

Declarations

Conflicts of interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Ethical approval This article does not contain any studies with human participants or animals performed by any of the authors.

Informed consent For this type of study formal consent is not required

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