

*Empathy is at the heart  
of our process. The  
personas and use cases  
in this document are the  
reference point for the  
people and experiences  
central to the Healthy  
Bones Healthy Aging  
Challenge*

# Overview

*To catalyze and guide your thinking, we are providing personas and their use cases that represent the diverse challenges of those living with osteoporosis and those who care for them. Please note that the personas do not represent real health care providers or real patients.*

*These are guide points providing a representation of the challenges each persona faces. The personas and use cases are certainly not an exhaustive illustration of who innovations may support or touch.*

## Providers

Healthcare providers close to the fracture care journey—nurses, doctors, social workers, bone specialists, etc.—are under certain strain as they work to provide equal and quality healthcare for a diverse spectrum of patients, often with consistently dwindling resources. As populations grow and our healthcare systems or policies become more standardized, they struggle to provide authentic, human-centered quality care tailored to the needs of each patient, and can fail to avoid burnout themselves.

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## Hamsi, Orthopedic Surgeon

Hamsi is a board-certified orthopedic surgeon, working in the specialty of hip fracture (with some experience in vertebral fracture repair). She feels supremely confident in her role in the healthcare system and her abilities. She is somewhat less focused on the ‘whole patient.’ Her goal is to fix the fracture and send the patient on their way—she’s a specialist and other doctors handle the rest. Her priorities include finding efficiencies in her practice to ensure she can perform as many surgeries as possible. Her practice is less focused on future fracture/osteoporosis prevention than on addressing the patient’s trauma from their bone break, and her administrators want to ensure she is generating as much revenue as possible from her surgical practice.



### Use case

Hamsi is on a night shift and has just received a patient from the emergency room. The patient is a 70-year-old woman who fractured her hip when she tripped and fell getting a glass of water that evening. Hamsi performs the hip surgery and observes that her patient is showing all the warning signs of a fracture due to Osteoporosis. Hamsi makes a note on the patient’s electronic medical record and continues on with the surgery—it will be up to someone else to connect the dots later, right now she needs to fix the problem and get her patient back on her feet.

## Coordinators

Some health systems have designated coordinators meant to provide continuity between moments of care. Often viewed as a luxury rather than an essential part of healing, coordinators are scarce and manage many patients at a time, all while navigating the complicated worlds of health institutions and insurance coverage. Yet they are incredible advocates and guides for patients, and are well positioned to spot patterns and underlying causes like osteoporosis.

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## Andre, Community Health Coordinator

Andre was a nurse in a hospital Orthopedics department until his colleague started an initiative to pair patients with Community Health Coordinators who could help to connect the dots between their appointments in different departments. The colleague nominated him because of his attention to detail, his motivated attitude, and his patience and thoughtfulness when dealing with patients. Now Andre spends most of his day coordinating care for patients, guiding them through the post-fracture pathway and helping them to understand the importance of managing and treating their Osteoporosis. Because of his background as a nurse and his natural business acumen, he feels confident in making recommendations, advocating for ongoing support for the program, and working with his long-time doctor colleagues.

### Use case

A patient has just been treated for their fracture and Andre is meeting with the patient for the first time. Andre loves his new job, but his caseload is starting to get overwhelming. He wants to connect patients with a variety of resources available to them including clinical interventions such as a DEXA scan for bone mineral density to evidence-based community resources such as A Matter of Balance. Unfortunately, he is just one person and not everyone is onboard with the coordinated care approach. Breaking down silos is hard work—Andre imagines the impact he could make with a few more coordinators on the team.



## Patients

On top of the pain and anxiety of their fractures, patients face a disjointed system where the appropriate next step may not be recommended. The most successful in healing are often those who take a very proactive approach to their care, researching and asking questions to connect recommendations from care providers throughout the health system.

However, not every patient has the time, will, or ability to do so, and some don't feel it's necessary because they trust the medical authority or because they've always been relatively healthy.

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## Diana, Living with osteoporosis

Diana is a divorced 66-year-old woman with three children. Two years ago, after a fall in her home in Vancouver, Canada, Diana broke three ribs and fractured bones in her foot. Even after recovery, she's slowing down somewhat and becoming inwardly focused on family. She's a caregiver of her son, Robert, since he's got health conditions. When the fracture happened, her thoughts were to blame herself, at least partially, "I was just being clumsy. I guess this is part of getting older." She's never been diagnosed with Osteoporosis. In fact, she hasn't been concerned about bone health. She has an uninvolved attitude toward health because she's never had severe or chronic health problems. She's afraid to learn more because of what it might mean. She is indifferent about her relationship with her doctor and doesn't always know the right questions to ask. Her fractures are excruciating, but she sometimes feels like her doctor doesn't believe her pain. Most days she drives herself to a Community Center to have lunch with her friends, catch up on the goings on in the neighborhood. She participates in an exercise class for seniors which is proven to build strength and balance for fall prevention. She also likes to peruse the Community Center resource library brochures for ideas on living her best life, and recently took home brochures on retrofitting her home to prevent falling.

### Use case

Diana enjoys gardening and was moving some large pots full of soil when she feels a sharp pain in her hip. Her first thought is, "Oh no, not again..." She is in so much pain that she goes to the emergency room. An emergency physician orders imaging and determines surgery is needed for her broken hip. After a long wait in triage for an open operating room, the surgery takes place. Afterwards, an orthopedic nurse takes Diana to in-patient physical therapy on the orthopedic floor of the hospital. The therapist explains the do's and don'ts of recovery. Diana thinks, "Wow, this is going to be a lot of work." She isn't ready to go home, and is discharged to a Skilled Nursing Facility where she spends the next two weeks. When she's finally ready to go home, she reviews the orthopedic doctor's instructions and schedules appointments with a new physical therapist outside the hospital which the surgeon recommended. This therapist is inconvenient and difficult for Diana to visit. When she sees her Primary Care doctor nine months later, she's focused on new health problems and forgets to mention her fracture.



## Caregivers

Caring for aging community members takes a village. Who else, besides patients and providers, support the journey, and may also be served by new innovations? Partners, extended family members, and local community organizations are only a few examples of those influenced by the fracture care experience. They can be incredible advocates and persistent solution seekers. By supporting them and solving for their challenges, we inadvertently solve for the challenges of the patient and their health providers. In addition to sometimes feeling forced into ‘being their own expert’, caregivers with a chronic condition can feel frustrated with the lack of coordination among providers. Poor care coordination may lead to suboptimal care, including health care issues being adequately addressed, poor patient outcomes, and unnecessary or even harmful services that both raise costs and degrade quality.

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## Maria, Family caregiver

Maria is a 46-year-old wife, mother, and daughter who cares for her aging 83-year-old father. A former attorney, she moved into semi-retirement two years ago to explore a second career in pro-bono work and spend more time with family, but now managing her parents' health, taking them to appointments, and checking in on them in their retirement home occupies most of her time. In the past five years, her father fractured his spine twice and an ankle during outdoor activities. As a result, he has lost several inches of height, become stooped, and suffers from chronic pain that prevents him from walking far and that sometimes confines him to a bed for several days. Maria invests a great deal of time and energy finding lifestyle adaptations for him, such as walking canes, non-slip tape for his stairs, and foot braces, and is eager to find solutions to prevent more fractures to keep him out of a wheelchair. Maria, her father, and her father's care providers don't know he has osteoporosis.

### Use case

Maria is beginning to suspect that Lee's fractures are NOT just the result of getting older and that something else may be going on. She makes an appointment with his primary care physician to get checked out. Maria takes her father to an appointment, and is along for his entire journey. They navigate the building together, sit in the waiting room, and meet with the doctor in the exam room. She has prepped her notes based on her father's progress on the doctor's last recommendations, and her online research and questions. During the consultation, she receives pamphlets on fall prevention and advice on hastening her father's recovery.

