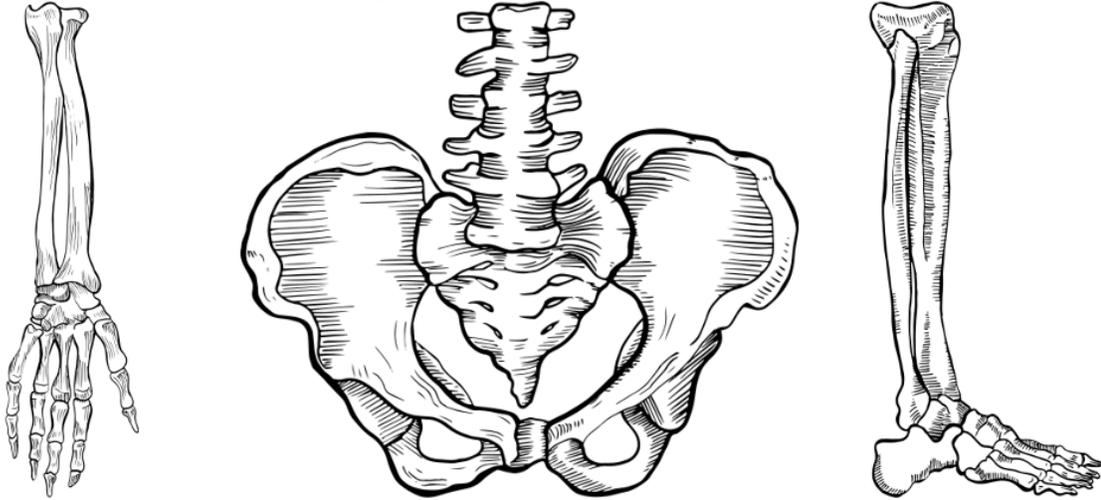


Strong Foundations



Building Bone Health for Life

An Osteoporosis Prevention Program for Post-Menopausal Women

In coordination with Women's Health Specialists, PLLC Clinic in Murfreesboro, TN

The University of Georgia

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HPRB 4400

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Program Description

1.2 Mission Statement

Strong Foundation aims to reduce Osteoporosis incidence rates among postmenopausal women in Murfreesboro, TN. This will be done by raising awareness, educating women on prevention strategies, and increasing access to bone density screenings. This will also require a partnership with Women’s Health Specialists, PPLC. This partnership will provide the necessary resources to empower and inform women on how to protect their bone health and prevent fractures.

1.3 Goals and Objectives

I. Assess knowledge gaps and barriers and improve access to information

SMART Objective: Conduct 3 focus groups with at least 30 postmenopausal women in Murfreesboro to identify their knowledge gaps, cultural beliefs, and barriers to accessing osteoporosis prevention services.

- a. Conduct focus groups
- b. Partner with women’s health clinic as a resource for distribution of information, nutritionists, primary health care providers
- c. Distribute 1,000 brochures and post 20 social media messages on osteoporosis awareness by the end of month 6

II. Increase rate of bone density screenings

- a. Provide bone density screenings at 5 community events in Murfreesboro by the end of year 1
- b. Increase screening rate at Women’s Health Specialists Clinic through coordination with clinic

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III. Increase knowledge of other preventative measures

SMART Objective: By the end of year 1, deliver 10 educational workshops on osteoporosis prevention.

- a. Deliver educational workshops
- b. Train healthcare providers at the clinic to counsel patients on osteoporosis prevention and management, and performing bone density screenings
 - i. By the end of each workshop, 75% of participants will demonstrate a measurable increase in knowledge of osteoporosis prevention strategies, as assessed by pre- and post-workshop surveys.
 - ii. By the end of month 6, 40% of women will meet their recommended daily intake of calcium and vitamin D, based on a follow-up survey.
- b. Conduct post-workshop surveys
 - i. Identify changes in beliefs or knowledge

IV. Improve health status and quality of life

SMART Objective: By the end of each workshop, 75% of participants will demonstrate a measurable increase in knowledge of osteoporosis prevention strategies, as assessed by pre- and post-workshop surveys.

- a. Identify women at high risk and refer them to appropriate follow-up appointments or provide preventative care information
- b. Increase participation in weekly weight-bearing exercises
- c. Improve self-reported rates of calcium and vitamin D intake among participants
- d. Decrease number of reported symptoms with Osteoporosis

Needs Assessment

2.2 Preliminary Information

Osteoporosis is a debilitating bone disease that affects millions of people around the world. It is characterized by weak and brittle bones due to the degradation of bone tissue. New bone is continuously being produced, broken down, and the replaced. For an individual with Osteoporosis, bone is not being replaced as quickly as it is being broken down.⁴ According to the epidemiology statistics provided by the International Osteoporosis Foundation, approximately 75 million people are affected by Osteoporosis in Europe, USA, and Japan alone.² Osteoporosis affects both men and women, but women are at higher risk with approximately one in two women fracturing a bone in their lifetime due to Osteoporosis compared to one in four men. Age is one of the most significant risk factors with one in two adults over the age of 50 are at risk of

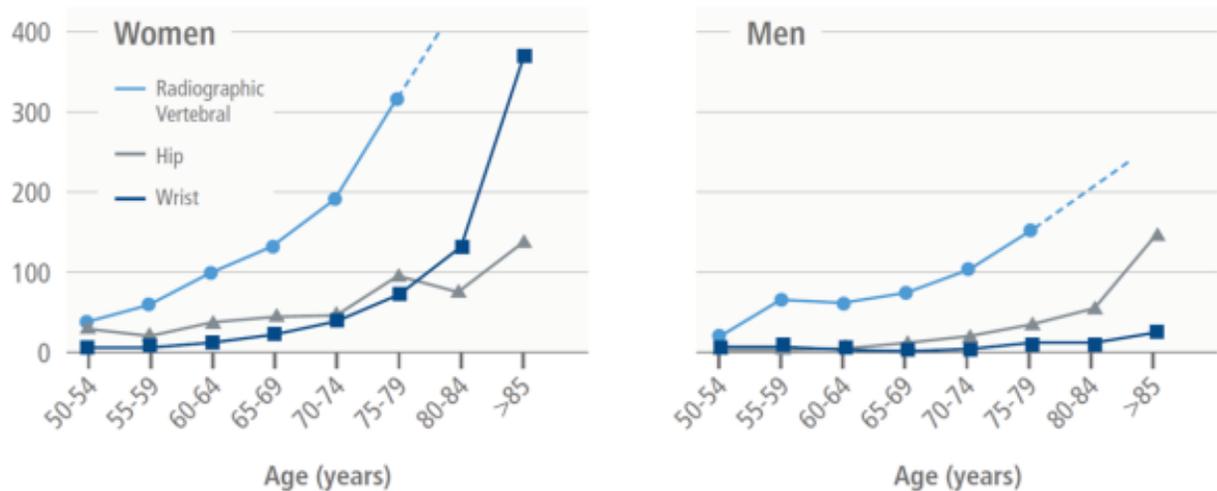


Fig. 1 Age-specific and sex-specific incidence of radiographic vertebral, hip, and distal forearm fractures.¹²

2.3 Target Population

Osteoporosis. There are an estimated 200 million women affected by Osteoporosis worldwide. Of these 200 million, 10% are age 60, 20% are age 70, 40% age 80, and 67% age

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90.² For women over the age of 50, Osteoporosis accounts for more days spent in the hospital than any other chronic disease. This is one example of the economic toll Osteoporosis can have on individuals. Experts are predicting that by 2025 Osteoporosis will be responsible for \$25.3 billion in related costs.⁶ Fractures and other Osteoporosis-related injuries are also associated with a lower quality of life and higher risk of mortality.¹ Menopause is also a very prominent risk factor regarding this disease. According to the Endocrine Society, menopause is considered the most common cause of Osteoporosis.¹ During menopause, bone loss is significantly sped up, which ultimately increases the risk for osteoporosis. Estrogen levels begin to drop, which causes significant breakdown and weakness of bones. An extra 20% of bone loss can occur in postmenopausal women, and 50% of postmenopausal women suffer a fracture due to Osteoporosis.¹

Even with high incidence rates, Osteoporosis is still considered a preventable chronic disease. Prevention begins in childhood, with the goal of reaching and maintaining peak bone mass. The more bone mass an individual has throughout childhood, the less likely they are to have weak and brittle bones later in life. Prevention mainly consists of exercise, diet, and abstaining from smoking or drinking. It is important that a healthy and balanced diet is maintained, while also making sure to include Vitamin D, Calcium, and protein.⁹ Exercise is also advised for healthy weight, and regular weight-bearing and endurance exercises are recommended as prevention techniques.¹¹ Smoking and heavy drinking have also been associated with an increased risk in Osteoporosis.¹⁰ These are all risk factors that are preventable and therefore necessary to include in health education and preventative measures.

My target audience for this program is postmenopausal women since they are a population that is at high risk for Osteoporosis. This literature review poses as a hypothetical

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planned program which would take place in Murfreesboro, TN at a women's health clinic. This clinic known as Women's Health Specialist's Clinic Providers would allow access to women in menopause with and without Osteoporosis symptoms, and younger women at risk of developing Osteoporosis during menopause.⁷ Preventative education will be crucial in decreasing the number of women affected by Osteoporosis.

2.4 Previous Programs

While there have been many public health campaigns with the aim to reduce the number of people affected by Osteoporosis, Healthy People 2030 is a multi-faceted national public health plan with a similar goal. Included in this public health plan is an Osteoporosis workup. This is done through advocacy of bone mineral density testing and tracking. Another core objective of this plan is to reduce hip fractures.⁵ Another notable public health campaign relating to Osteoporosis is "Project Osteoporosis" a campaign based in Florida which aimed to educate Florida residents about osteoporosis and included a risk assessment survey, educational presentations, and bone density scans.³ The Medicare Bone Mass Measurement Coverage Standardization Act was a notable change in policy which increased access to bone mineral density testing among individuals 65 years or older.⁸

Osteoporosis is an extremely prevalent and debilitating chronic disease that is affected millions of people around the world. While there has been previous work done to minimize the damage and those affected, there is still a major need for Osteoporosis public health campaigns. My program focuses on postmenopausal women—specifically treatment, minimizing risk, and how education can be vital in limited the continued growth of this disease.

Logic Model

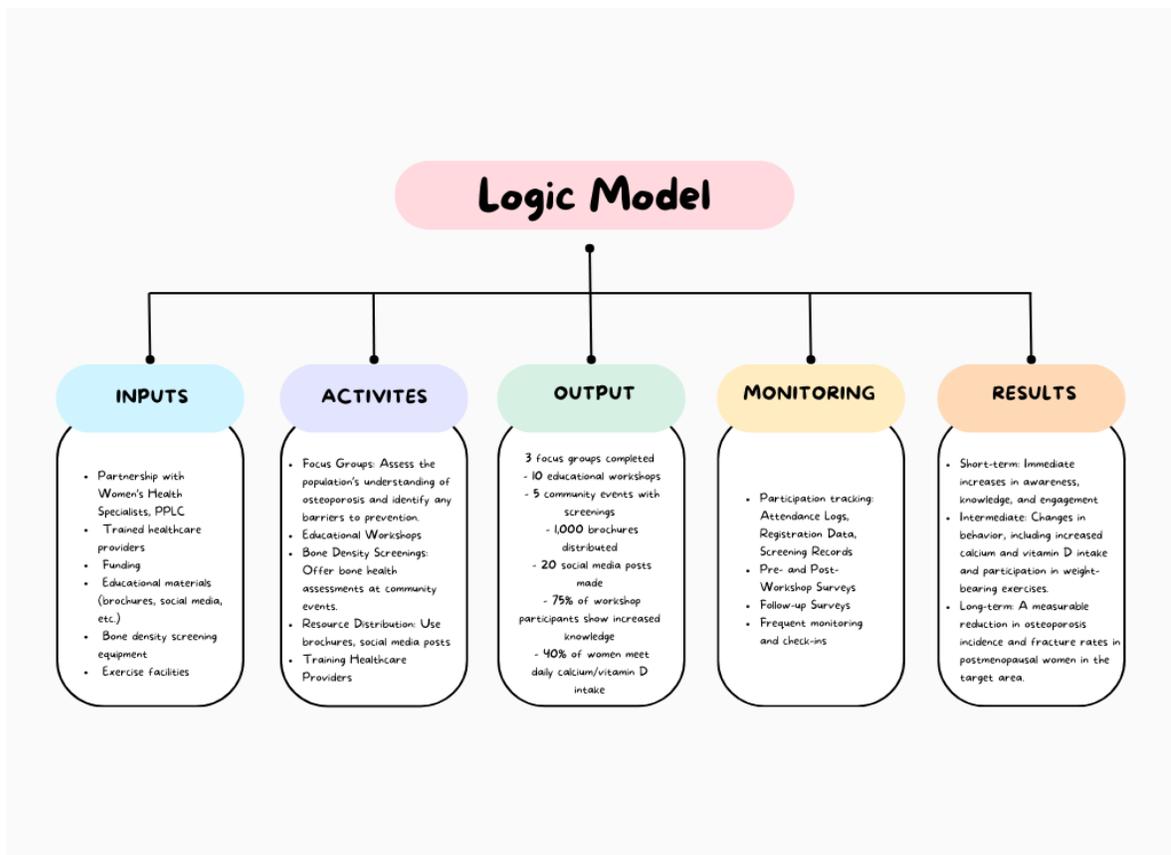


Fig 2. Logic Model ¹³

3.2 Figure/Model Breakdown

- I. Perceived Susceptibility: This component involves helping participants understand their personal risk for developing. Activities for this program include:
 - a. Surveys and Questionnaires: These tools measure participants' awareness and beliefs about osteoporosis risk.
 - b. Educational Discussions: Facilitators could explain how factors like age, menopause, family history, and lifestyle habits contribute to susceptibility.
 - c. Risk Assessment Tools: Use of tools like FRAX (Fracture Risk Assessment) to provide individualized risk scores.

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- II. Perceived Severity: Refers to Belief about the seriousness of the condition, or leaving it untreated and its consequences.¹⁵
 - a. Personal Testimonials: Sharing stories of individuals with osteoporosis to highlight its impact on mobility and quality of life.
 - b. Data-Driven Facts: Presenting statistics on fracture rates, recovery challenges, and healthcare costs.
 - c. Interactive Activities: Demonstrations of the physical challenges caused by reduced bone density, such as difficulty lifting or increased risk of falls.
- III. Perceived Benefits: The focus here is on showing how behavior change can lead to improved bone health:
 - a. Workshops: Hands-on sessions that teach weight-bearing exercises and their effects on bone strength.
 - b. Nutritional Guidance: Recipes and meal plans rich in calcium and vitamin D.
 - c. Highlighting Evidence: Presenting research studies demonstrating the effectiveness of prevention strategies like regular exercise and supplements.
- IV. Perceived Barriers: participants may face various barriers that need addressing, such as:
 - a. Lack of Motivation: Providing supportive group settings can make physical activities more enjoyable.
 - b. Fear of Injury: Modifying exercise routines to suit different fitness levels can alleviate fears.
 - c. Cost Concerns: Offering low-cost or free options for supplements or screenings.
- V. Cues to Action: strategies to prompt individuals to take action include:

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- a. Reminders: Sending text messages or app notifications about upcoming workshops, exercise routines, or supplement doses.
 - b. Social Media Campaigns: Posting educational content and reminders on platforms frequented by the target demographic.
 - c. Community Support Groups: Setting up peer-led sessions to keep participants engaged.
- VI. Behavior Change: The goal is for participants to adopt sustainable osteoporosis prevention behaviors:
- a. Regular Physical Activity: Incorporating weight-bearing exercises into their weekly routine.
 - b. Balanced Diet: Maintaining consistent calcium and vitamin D intake.
 - c. Routine Screenings: Ensuring periodic bone density assessments to monitor progress.

Health Belief Model

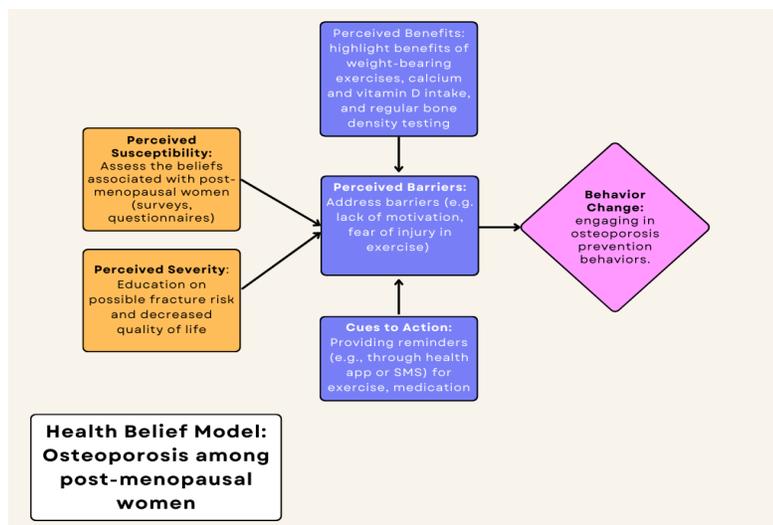


Figure 3. Health Belief Model ¹⁴

4.2 Theory Guide: Health Belief Model (HBM)

I. Perceived Susceptibility

Assess the beliefs associated with post-menopausal women and their risk of osteoporosis

II. Perceived Severity

Education on possible fracture risk and decreased quality of life

III. Perceived Benefits

Highlight the benefits of weight-bearing exercises, calcium and vitamin D intake, and regular bone density testing

IV. Perceived Barriers

Address barriers (e.g., lack of motivation, fear of injury in exercise)

V. Cues to Action

Providing reminders (e.g., through health app or SMS) for exercise, medication

VI. Self-Efficacy

Empowering women with knowledge and tools

Program Description

The proposed program, **Strong Foundations**, addresses the critical health concern of osteoporosis among postmenopausal women, focusing on prevention, education, and empowerment. This initiative is tailored for participants at the Women's Health Specialist Clinic in Murfreesboro, TN, leveraging evidence-based strategies to improve bone health and reduce the risk of fractures. The program incorporates a multi-component intervention comprising educational workshops, guided exercise sessions, nutritional counseling, and routine bone density screenings. By combining accessible services with individualized support, the program aims to foster sustainable lifestyle changes that prioritize long-term bone health.

Program Theory

The intervention is guided by the Health Belief Model (HBM), which emphasizes modifying health behaviors by influencing individuals' perceptions of their susceptibility to osteoporosis, the severity of its consequences, and the benefits of preventive actions. For example, participants will be educated about their fracture risk and the detrimental impact of osteoporosis on their quality of life (perceived severity). By highlighting the benefits of weight-bearing exercises, adequate calcium and vitamin D intake, and regular screenings, the program seeks to enhance participants' perceived benefits while addressing barriers such as fear of injury during exercise or lack of motivation.

To activate change, the program will employ *cues to action* like text reminders for exercise and supplement intake. Building participants' confidence through small, achievable goals and hands-on workshops will strengthen their self-efficacy in managing their bone health effectively.

Program Implementation

The program will unfold in three phases: development, delivery, and sustainability. In the development phase, content and activities will be tailored to the unique needs of postmenopausal women. Evidence from clinical studies underscoring the benefits of exercise, nutrition, and education will inform the design of the program. Resources such as weights, yoga mats, and bone density scanners will be procured, and staff—including healthcare professionals trained in osteoporosis management—will undergo specialized training to ensure safety and efficacy.

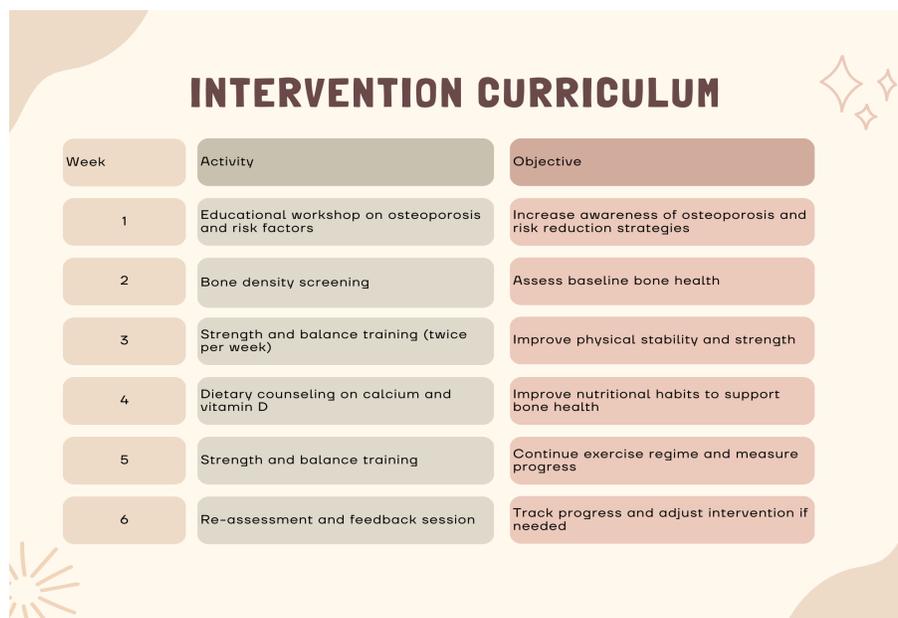
The delivery phase will involve biweekly educational workshops and exercise sessions held at the Women's Health Specialist Clinic. Workshops will cover topics such as

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understanding bone density reports, integrating calcium-rich foods into meals, and debunking common myths about osteoporosis. Exercise classes, focusing on strength, balance, and flexibility, will provide participants with guided, low-impact routines to promote bone strength and reduce fall risks. Participants will also receive personalized dietary counseling to optimize their calcium and vitamin D levels.

Finally, the sustainability phase will focus on maintaining engagement and progress. Follow-up communications, access to online exercise tutorials, and periodic bone health assessments will ensure participants remain committed to their health goals. Regular feedback from participants will help refine the program and sustain its relevance and impact.

By integrating the principles of the HBM with a robust implementation plan, **Strong Foundations** is positioned to make a meaningful difference in mitigating osteoporosis risks among postmenopausal women, fostering healthier aging, and empowering participants to take control of their bone health.



Week	Activity	Objective
1	Educational workshop on osteoporosis and risk factors	Increase awareness of osteoporosis and risk reduction strategies
2	Bone density screening	Assess baseline bone health
3	Strength and balance training (twice per week)	Improve physical stability and strength
4	Dietary counseling on calcium and vitamin D	Improve nutritional habits to support bone health
5	Strength and balance training	Continue exercise regime and measure progress
6	Re-assessment and feedback session	Track progress and adjust intervention if needed

Figure 4. Intervention Curriculum

7.2 Components of Program

- I. Development: The intervention is based on evidence supporting the role of exercise, nutrition, and education in reducing osteoporosis-related fractures
- II. Efficacy Evidence: Studies emphasize that regular exercise improves bone density and dietary adjustments (increasing calcium and vitamin D intake) help maintain bone health.
- III. Components:
 - a. Educational workshops on osteoporosis risk factors and prevention.
 - b. Exercise classes focused on strength, balance, and bone health.
 - c. Dietary counseling to increase calcium and vitamin D intake.
 - d. Bone density screening for participants.
- IV. Adaptation: This intervention will be tailored to meet the needs of older women, i.e., physical limitations or comorbid conditions
- V. Staffing
 - a. Utilize healthcare professionals at Women's Health Specialist Clinic in Murfreesboro, TN
 - b. Train staff on osteoporosis management and prevention
 - i. Exercise safety for older adults
- VI. Setting: Women's Health Specialist Clinic in Murfreesboro, TN
 - a. 1800 Medical Center Pkwy #350, Murfreesboro, TN 37129
- VII. Equipment Needs
 - a. Weights for resistance training
 - b. yoga mats

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- c. nutrition materials
- d. bone density scanners

VIII. Special Considerations

- a. Provide healthy snacks post-exercise.
- b. Safety
 - i. Ensure there are clear safety protocols for exercises
 - ii. including supervision by trainers during all physical activities.

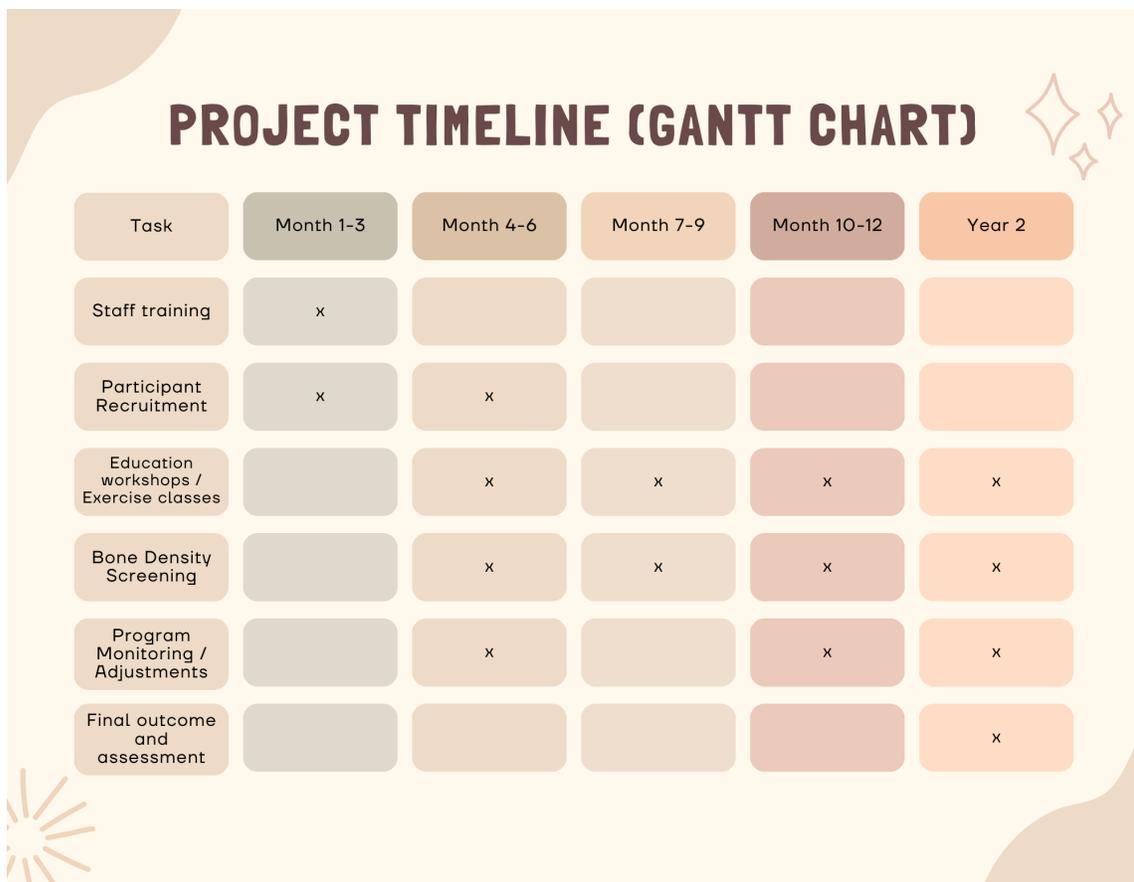


Figure 5: Project Timeline (GANTT Chart)¹⁶

7.3 GANTT Chart Description

The GANTT chart for the **Strong Foundations** program provides a detailed timeline for planning, implementing, and evaluating the initiative.¹⁶ The chart is divided into three main

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phases: Development, Program Delivery, and Evaluation & Sustainability. Each phase outlines specific activities, their corresponding timeframes, and the individuals or teams responsible for their execution.

- I. Development Phase (Months 1-3):
 - a. This phase focuses on designing the program framework, developing educational materials, and recruiting staff.
 - b. Activities include conducting a needs assessment, preparing workshop content, and securing resources such as exercise equipment and nutritional supplements.
- II. Program Delivery Phase (Months 4-10):
 - a. During this phase, biweekly workshops and exercise sessions will be delivered at the Women's Health Specialist Clinic.
 - b. Participants will also engage in one-on-one nutritional counseling sessions and attend scheduled bone density screenings.
 - c. Ongoing communication strategies, such as text reminders and social media updates, will be implemented to encourage adherence.
- III. Evaluation & Sustainability Phase (Months 11-12):
 - a. This phase includes collecting feedback from participants, analyzing program outcomes, and identifying areas for improvement.
 - b. Activities include post-program surveys, data analysis to measure changes in bone density or behavioral outcomes, and meetings to develop strategies for long-term program sustainability, such as online resources and follow-up workshops.

Program Plans

8.2 Evaluation Plan

The osteoporosis program aims to improve bone health and reduce the risk of osteoporosis in post-menopausal women through education, behavioral change, and clinical monitoring. Evaluation efforts will occur before, during, and after program implementation to ensure program effectiveness and identify areas for improvement. Data collection and analysis will include qualitative and quantitative methods to assess the program's progress and impact. The program coordinator will oversee the evaluation process, with input from health educators and program staff. Below is an expanded description of the formative, process, and summative evaluation plans.

The evaluation plan will be conducted before, during, and after the program is finished through a three-part series of evaluation processes: formative, process, and summative evaluation. These evaluation plans will be compared and cross-referenced to the Health Belief Model throughout the program to identify ways to increase screening rates, create prevention techniques, and refine treatment models. This all will pertain specifically to post-menopausal women with Osteoporosis.

Formative

Formative evaluation will ensure the program's materials and structure meet the participants' needs. Before formative evaluation can even begin, a thorough needs assessment will need to be conducted. This is crucial to identify gaps in knowledge, behaviors, and access to resources. This will be conducted in the following ways:

- I. Focus groups

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- A. Feedback on cultural applications, relevance, clarity, and overall delivery of program materials.
 - B. Baseline data of participants' knowledge, behaviors, and access to resources
 - C. Existing barriers
- II. Bone density screening

This baseline data will inform the evaluation of changes over time and serve as a benchmark for program success. The formative evaluation will take place before the program launch, ensuring all components are well-prepared and aligned with participant needs. After analyzing the data from focus groups such as demographic data, baseline health indicators, and existing barriers to maintaining bone health, adjustments to the materials, and any areas where additional clarity or emphasis is needed will be made.

Formative evaluation will also include the development and validation of measurement tools that will be used during the program, such as pre-and post-program surveys and knowledge quizzes. Tools will be tested for reliability and validity to accurately measure knowledge gains, behavior changes, and other program outcomes. The baseline data will benchmark against which program impact can be measured. Through these formative evaluation activities, the program will be fine-tuned to ensure it is effective, culturally relevant, and aligned with the needs of post-menopausal women.

Process Evaluation

Throughout the program, process evaluation will monitor implementation fidelity and participant engagement. Process evaluation ensures the program is delivered as intended and that

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participants find the sessions engaging and resourceful. This evaluation focuses on assessing fidelity to the program design, the reach of the program within the target population, participant engagement, and logistical feasibility. This will be conducted in the following ways:

- I. Attendance logs and registration forms
 - A. Track the percentage of the target population and number of sessions attended
- II. Post-session surveys
 - A. Likert scale
 1. Assess the quality and relevance of content and delivery

By tracking these elements, process evaluation helps identify strengths and areas needing improvement in real-time, ensuring program quality and effectiveness. It also ensures that the program remains on track, participants are engaged, and barriers are addressed.

Key aspects include *fidelity of implementation, attendance tracking, participant feedback, and coverage.*

- I. Fidelity of Implementation: refers to how closely the program aligns with the planned curriculum and objectives.
 - A. Staff and facilitators will complete checklists to ensure the program is being run efficiently
 - B. Participant feedback throughout to ensure staff and facilitators are competent and delivering content accurately
- II. Attendance Tracking: monitor participation
 - A. Attendance logs for each session
 - B. Help identify patterns of drop-off and inactivity

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1. Improve retention
- III. Participant Feedback: evaluate participant satisfaction
 - A. Post-session surveys
 1. Likert scale
 - B. Assessment of acceptability of the program
 - IV. Coverage: Assess the reach and effectiveness of the program
 - A. Demographics
 1. Data collected during registration
 - a) Identify if the program is reaching diverse groups of post-menopausal women
 - b) Identify disparities in participation

Summative Evaluation

The purpose of summative evaluation is to measure the short- and long-term program outcomes. These measures will assess whether participants gain knowledge and adopt healthier behaviors during the 12-week program. By comparing pre- and post-program results, the summative evaluation will determine the program's overall effectiveness. This will be done in the following ways:

- I. Short term
 - A. Participant evaluation using pre- and post-program surveys
 - B. Self-reported logs
 1. Identify previous knowledge of osteoporosis
 2. Exercise habits

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II. Long term

A. Quality of life improvements

1. Measure changes in bone density

a) Regular bone density screenings

2. Surveys

a) Realistic ways to reduce osteoporosis risk over time

Evaluation Table

Objective	Evaluation Type	Indicator	Evaluation Tool	Timeframe
Ensure material relevance	Formative	Participant feedback	Focus groups	Pre-program
Collect baseline data	Formative	Knowledge scores, DXA results	Surveys, clinical measures	Pre-program
Track engagement	Process	Attendance rates	Attendance logs	During sessions
Assess satisfaction	Process	Session ratings	Likert scale surveys	After sessions
Improve knowledge	Impact	Quiz score improvement	Pre-/post-program quizzes	Before and after program
Increase exercise habits	Impact	Frequency of exercise	Self-reported activity logs	Weekly during program
Improve bone density	Outcome	DXA scan improvements	Clinical assessments	One-year post-program
Enhance quality of life	Outcome	SF-36 scores	Surveys	One-year post-program

Figure 6: Evaluation Table¹⁷

8.3 Marketing Plan

I. Inclusion and Exclusion Criteria

This program is specifically designed for post-menopausal women who are at risk for or have been diagnosed with osteoporosis. Participants must self-report low bone density or be referred by a healthcare provider. Additional criteria include a willingness to engage in physical activity, dietary education, and health monitoring sessions. Participants should be able to attend sessions regularly and not have any severe mobility issues that would prevent participation in exercise activities. Exclusion criteria include those with significant medical conditions unrelated to osteoporosis, such as advanced cardiovascular diseases or conditions that prevent physical movement, and individuals currently enrolled in a similar osteoporosis management program.

II. Recruitment

The recruitment strategy will aim to enroll up to 40 participants. Recruitment efforts will focus on community-based strategies. Relationships with clinics, pharmacies, and senior centers will be useful during this period. Flyers will be distributed in these locations, gyms, stores, etc., where post-menopausal women are likely to frequent. In addition, social media campaigns targeting older women and healthcare-focused platforms will be launched to raise awareness.

Collaboration with the Women's Health Specialists, PLLC clinic in Murfreesboro, TN will also be used during recruitment. Clinicians will receive informational packets about the program to encourage them to recommend eligible patients. An additional \$1,200 will cover marketing materials such as flyers, posters, social media advertisements, and outreach to healthcare providers. Outreach will also include partnerships with local organizations that cater to women's health, such as women's clubs, support groups, and community health fairs.

III. Retaining the Population

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Participant retention is crucial to ensure program success and valid data collection. At the beginning of the program, each participant will sign an agreement outlining expectations and the program's benefits. Regular reminders will be provided via phone calls, emails, or text messages before each session. To further enhance retention, the program will incorporate a feedback loop where participants can share their experiences and suggestions. Any participant indicating a potential dropout will be contacted by the program director to understand their concerns and explore solutions to encourage them to stay. Flexibility in session timing and alternative learning resources, such as online content or recorded sessions, may be offered to accommodate participants' schedules and preferences.

IV. Special Considerations

All participants will be required to sign an informed consent form prior to enrollment to ensure they understand the program's goals, activities, and potential benefits. For participants who agree, photos and videos may be taken during sessions for educational and promotional purposes, with explicit consent secured separately.

To maintain confidentiality, all participant data, including health assessments and session attendance, will be stored securely in both physical and digital formats. Any materials distributed, such as exercise plans or dietary guides, will also be shared electronically for participants who prefer a digital format. Ongoing communication will ensure participants feel supported and engaged throughout the program.

Budget and Resources

I. Personnel:

- a. Project Director – 1.8 calendar months (15% effort) in Years 1–2

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- This position will most likely be held by a public health expert with over 10 years of experience designing and managing community health programs, particularly focused on chronic disease prevention.¹⁸
- Duties / Job Description:
 - oversee all project operations
 - ensure the goals are met
 - supervise the project team
 - provide strategic guidance
 - manage partnerships with local health organizations
 - Ensure the project complies with all regulatory requirements
- Year 1: The project director will begin by leading and coordinating outreach to healthcare providers to gain their support for osteoporosis screenings and awareness campaigns
 - Ensure that all staff receive the necessary training to deliver education and materials related to osteoporosis prevention
 - Ensure partnership agreements with local fitness centers to offer bone-strengthening exercise classes
- Year 2: Continue managing relationships and oversee the evaluation of program outcomes
 - Lead project meetings and ensure that data is analyzed correctly
 - prepare the final report and findings
- b. Project / Outreach Coordinator – 2.4 calendar months (20% effort) in Years 1–2
- This position will likely have an MPH with a focus on community health education and has managed several health promotion programs.¹⁹

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- Duties / Job Description:
 - responsible for day-to-day coordination of the project activities
 - manage outreach to local clinics and fitness centers for osteoporosis screening days
 - Aid in overseeing data collection
 - Aid Project Director in appropriate ways
 - Year 1: The Project Coordinator will coordinate osteoporosis screening events
 - Ensure that all materials are ready
 - Brief clinic staff on procedures
 - Oversee data collection on participant health behaviors and awareness
 - Year 2: Continue coordinating screening events and begin focusing more on program evaluation
 - Assist in the analysis of collected data
 - Prepare results for publication
 - Work with community health organizations to further expand outreach efforts
- c. Health Educator / Counselor – 3.0 calendar months (25% effort) in Years 1–2
- This position will likely be a licensed social worker with a specialization in working with aging populations²⁰
 - Duties / Job Description:
 - serve as a counselor for the program
 - assist in educating participants
 - osteoporosis prevention strategies
 - importance of bone health

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- available treatment options
- Year 1: Participate in training related to osteoporosis prevention
 - conduct education sessions in the community
 - in-person and online
 - ensure individuals understand risk factors and the importance of regular screenings
 - support the project coordinator in recruitment
- Year 2: Continue community education efforts
 - focus on participant retention
 - ensure that individuals are completing recommended screenings and following prevention guidelines
 - assist in reviewing program feedback and suggesting improvements
- d. Data Analyst – 1.2 calendar months (10% effort) in Years 1–2
- This position will likely hold a master’s degree in Public Health with a concentration in epidemiology and biostatistics ²¹
- Duties / Job Description:
 - manage the data collected from the osteoporosis awareness events
 - analyze trends in screening outcomes and participant behavior changes
- Year 1: set up the project’s data management systems
 - ensure all data is collected securely and accurately
 - run initial analyses to identify trends and participant demographics
- Year 2: take the lead on the full analysis of program data
 - prepare findings for publication

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- make recommendations on how to improve screening uptake and prevention education

II. Travel

a. In-State Travel for Screening Events (\$3,000 each year)

- i. Funds to cover travel expenses for project personnel to organize screening events at local clinics and fitness centers
- ii. cover travel to rural areas where access to osteoporosis screening is limited

III. Equipment and Supplies

a. Laptop Computers (\$5,000 Year 1)

- i. Funds are requested for the purchase of laptops with portable bone density scanners to be used during screening events. This equipment will be dedicated entirely to this project to ensure accurate and efficient screenings for participants.

b. Educational Materials (\$800 each year)

- i. Request of \$800 to cover the cost of educational materials and program promotional items

c. Paper Materials (\$450)

- i. Request of \$450 to cover any paper materials related costs such as paper, pens, folders, etc.

d. Printing/Photocopying (\$600)

- i. Request of \$600 to cover cost of printing and copying

e. Postage and Printing (\$800 each year)

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- i. We request \$800 per year to cover the cost of printing educational materials and program

IV. Other/Miscellaneous Expenses

a. Consultant (\$8,500, Year 1 and \$9,000, Year 2)

- i. We will hire a leading osteoporosis expert to consult on the project and guide the educational content development and training

b. Marketing (\$600 each year)

- i. Request of \$600 for marketing related cost which include creating and distributing flyers and social media campaigns

c. Community Workshops (\$5,200 each year)

- i. Request of \$5,200 to cover costs of rent and refreshments for community workshops and outreach

9.2 Budget Table

Project Title: Intervention-Based Health Education Program for Post-Menopausal Women and Osteoporosis						
Period of Performance: July 1st 2026 to June 30th 2028						
Personnel	Salary	% effort	Calendar Months	Year 1	Year 2	Total
Project Director	75,000 benefits @	15	1.8	11,250 4,500	11,588 4,635	22,838 9,135
Outreach Coordinator	52,000 benefits @	20	2.4	10,400 4,680	10,712 4,820	21,112 9,500
Health Educator	42,000 benefits @	25	3.0	10,500 4,725	10,815 4,867	21,315 9,592
Data Analyst	50,000 benefits @	10	1.2	5,000 2,500	5,150 2,575	10,150 5,075
			0.0	-	-	-
	benefits @			-	-	-
			0.0	-	-	-
	benefits @			-	-	-
Total Personnel				53,555	55,162	108,717

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Equipment				5,000	-	5,000
Laptop Computers x3						
Travel				3,000	3,000	6,000
Foreign						
Domestic				3,000	3,000	
Supplies				1,850	1,850	3,700
Educational Materials (pamphlets, brochures, etc.)				800	800	
Paper Materials				450	450	
Printing/Photocopying				600	600	
Other Expenses				14,300	14,800	29,100
Osteoporosis Consult				8,500	9,000	
Marketing (flyers, social media)				600	600	
Community Workshops (rent, refreshments)				5,200	5,200	
Total Direct Costs				77,705	74,812	152,517
	Indirect Costs @	30%		23,312	22,443	45,755
Total Costs				101,017	97,255	198,271

Conclusion

The **Strong Foundations** program is a comprehensive and evidence-based initiative aimed at addressing the critical issue of osteoporosis among postmenopausal women. By integrating the Health Belief Model, the program effectively emphasizes the importance of understanding personal risk, overcoming barriers, and adopting proactive preventive measures. Through a combination of educational workshops, guided exercise sessions, nutritional counseling, and routine bone density screenings, the program empowers participants to take control of their bone health and mitigate their risk of fractures.

The program's phased implementation—encompassing development, delivery, and sustainability—ensures a structured approach to promoting long-term behavior change. By providing participants with the tools, knowledge, and support needed to make sustainable lifestyle adjustments, the program not only improves their immediate health outcomes but also

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fosters a sense of confidence and self-efficacy. Moreover, ongoing evaluation and feedback mechanisms allow for continuous refinement, ensuring that the program remains relevant and impactful.

As osteoporosis continues to pose significant challenges to aging populations, programs like **Strong Foundations** play a vital role in improving quality of life and reducing the healthcare burden associated with bone fractures. By addressing this critical health concern, the program contributes to healthier aging and demonstrates the value of prevention-focused public health interventions. With sustained efforts and community engagement, this initiative has the potential to serve as a model for similar programs in other communities, further extending its impact.

Resources

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