




Growth. Performance. Success.

NCPA 2025 ANNUAL CONVENTION



1



**Longevity Medicine as a
Revenue Stream in
Pharmacy Practice**

➤ **NCPA 2025 Annual Convention and Expo**



2

Speaker



Jennifer Palazzolo, BSPHarm, RPh
Pharmacist, Owner
Flatirons Family Pharmacy



3

Disclosure Statement

There are no relevant financial relationships with ACPE defined commercial interests for anyone who was in control of the content of the activity.



4

Pharmacist and Technician Learning Objectives

1. Identify pharmaceutical products commonly used in longevity medicine through 503A and 503B pharmacies.
2. Discuss strategies for integrating longevity medicine services into pharmacy practice and communicating realistic outcomes to patients.
3. Describe approaches for collaborating with providers in longevity care.
4. Outline marketing strategies to grow longevity services in your pharmacy.



5

What is Longevity Medicine?

Prevention-first approach

- Detects and addresses risks before disease manifests.
- Uses labs, biomarkers, and advanced diagnostics.

Personalization

- Tailors interventions to genetics, lifestyle, environment, and individual physiology.
- Often uses functional medicine and precision-health models.

Optimization vs. disease treatment

- Goes beyond treating illness → focuses on *enhancing resilience, vitality, and performance*.

- **Metabolic health** → insulin resistance, weight, energy balance.
- **Hormonal balance** → bioidentical HRT, thyroid, adrenal, sex hormones.
- **Cellular health** → mitochondrial function, NAD+ support, oxidative stress reduction.
- **Cognitive health** → neuroprotection, memory, focus.
- **Inflammation & immunity** → gut health, immune modulation, lowering chronic inflammation.
- **Lifestyle integration** → nutrition, movement, sleep, stress management, supplements.



7

Why Longevity?

A growing emphasis on aging well, not just living longer

Consumers want to maintain function, cognitive capacity, their appearance and independence.

The population is looking for ways to have more energy.

The Global Anti Aging Market expected to hit \$140.9B by 2034

U.S. Supplements (Longevity and Wellness) expected to grow to \$10.13B by 2033



<https://www.precedenceresearch.com/anti-aging-market>, August 2025

8

Framework of Offering Longevity Services

Needs Assessment

- Identify which longevity services fit your patient demographics (e.g., hormone optimization, NAD+ injections, metabolic health consults).
- Review state scope of practice laws to determine what pharmacists can prescribe, order labs, or administer.

Clinical Infrastructure

- Build consult rooms for private longevity visits.
- Train pharmacists in functional medicine and anti-aging certifications.
- Partner with local physicians or NPs for prescribing authority if needed.



9

Framework of Offering Longevity Services

Testing & Data

- Offer point-of-care and send-out labs (hormones, inflammation markers, nutrient panels).
- Integrate EHR systems that track longitudinal patient data.

Therapeutics & Interventions

- Stock FDA-approved longevity-related prescriptions (metformin, testosterone, GLP-1s, rapamycin).
- Partner with 503B outsourcing facilities for sterile injectables (e.g., NAD+, glutathione, sermorelin).
- Bundle medications with nutraceuticals, diet, and lifestyle programs.



10

Patient Longevity Consult



Step 1: Screening – wellness intake forms, lab work, patient goals.



Step 2: Consultation – pharmacist reviews medications, labs, and lifestyle.



Step 3: Treatment Plan – blend prescriptions, compounded therapies, supplements, nutrition, and exercise.



Step 4: Monitoring – structured follow-up at 3, 6, 12 months to track biomarkers and outcomes.



Step 5: Adjustment – tweak protocols based on patient results and evolving evidence.



11

Communicating Realistic Expectations

Avoid	Explain	Use
Avoid Anti-Aging Hype: Frame longevity medicine as health-span optimization rather than a guarantee of "living longer."	Explain Variability: Outcomes differ based on genetics, lifestyle, and adherence.	Use Evidence-Based Language: Share what studies do and don't show for medications like metformin, rapamycin, or NAD+.

Provider Collaboration

- **Potential Provider Partners**
- **Functional & Integrative Medicine Physicians** – already longevity-oriented, need compounding support.
- **Nurse Practitioners / PAs** – often run telehealth wellness clinics, looking for compounding partners.
- **Endocrinologists & Geriatricians** – may co-manage hormone therapy or metabolic aging.
- **Dermatologists / Aesthetics Providers** – for anti-aging skin formulations and nutraceutical tie-ins.
- **Fitness & Lifestyle MDs / DOs** – interested in supplements, testing, hormone support.



Utilizing Telehealth to Drive Business



Accessibility: Patients can consult with longevity-focused providers (MDs, DOs, NPs, PharmDs) regardless of geography.

Convenience: Ongoing monitoring (labs, symptom tracking, medication adjustments) is easier remotely.

Growth Trend: we have seen telehealth use accelerate post-COVID and it appears to remain strong in cash-pay wellness and functional medicine sectors.



14



Pharmacist Role

• **Compounding Pharmacy Role:** Partner with telehealth prescribers to fill longevity-focused prescriptions.

• Offer alternative dosage forms (troches, creams, sublinguals, injectables).

• **Retail Pharmacy Role:** dispense 503b compounded longevity medications that patients would otherwise not have easy access to

• **Collaboration Models:**

- Referral partnerships: telehealth MD/NP writes → pharmacy compounds + counsels.
- Co-branded wellness services: pharmacy provides point-of-care testing, intake, supplement sales; telehealth handles prescribing.



15

QUESTION 1:

Your pharmacy is interested in offering compounded sermorelin injections. What is the most strategic first step to successfully launch this service?

- a. Begin compounding and dispensing therapies without prescriptions
- b. Focus only on selling OTC supplements instead
- c. Wait until state laws change to allow pharmacists to prescribe
- d. Partner with a functional or integrative medicine provider to co-manage patients



16

QUESTION 1:

Your pharmacy is interested in offering compounded sermorelin injections. What is the most strategic first step to successfully launch this service?

- a. Begin compounding and dispensing therapies without prescriptions
- b. Focus only on selling OTC supplements instead
- c. Wait until state laws change to allow pharmacists to prescribe
- d. **Partner with a functional or integrative medicine provider to co-manage patients**



18

Medications and Longevity Medicine



NAD⁺ (Nicotinamide Adenine Dinucleotide)

- Essential coenzyme in every cell, critical for **energy (ATP) production**.
- Supports **DNA repair, mitochondrial health, circadian rhythm, and gene expression**.
- Activates **sirtuins and PARPs**, proteins linked to longevity and stress resistance.



<https://www.nature.com/articles/s41580>
<https://pmc.ncbi.nlm.nih.gov/articles/PMC9917998>

19

NAD⁺ and Longevity



- **NAD⁺ levels decline with age** (up to 50% drop by midlife).
- Low NAD⁺ contributes to:
 - Mitochondrial dysfunction → fatigue, metabolic decline.
 - DNA damage accumulation.
 - Neurodegeneration and cognitive decline.
 - Immune dysfunction and inflammation.



<https://www.nature.com/articles/s41580>
<https://pmc.ncbi.nlm.nih.gov/articles/PMC9917998>

20

Medications and Longevity Medicine



- Sermoralin
- Synthetic analog of **Growth Hormone-Releasing Hormone (GHRH 1-29)**.
- Stimulates the **pituitary gland** to release **growth hormone (GH)**.
- Different from direct GH therapy — works by **enhancing natural pulsatile secretion**.



<https://www.iconmd.com/massachusetts/medical-spa-laser-services-boston/sermorelin-anti-aging/#:-:text=Unlike%20GH%20therapy%2C%20which%20involves,on%20longevity%20and%20balanced%20wellness,>

21

Sermoralin and Longevity

GH and **IGF-1** levels decline steadily after age 30 ("somatopause").

Decline is linked with:

- Reduced lean body mass and muscle strength.
- Increased fat mass, especially visceral fat.
- Lower energy, slower recovery, poor sleep quality.
- Reduced skin elasticity, bone density, and immune resilience.

May support:

Improved body composition (more muscle, less fat).

Better sleep quality (stimulates slow-wave sleep).

Enhanced recovery and repair.

Skin and hair vitality.

Bone health and immune support.



<https://www.iconmd.com/massachusetts/medical-spa-laser-services-boston/sermorelin-anti-aging/#:-:text=Unlike%20GH%20therapy%2C%20which%20involves,on%20longevity%20and%20balanced%20wellness,>

22



Medications and Longevity Medicine

Glutathione

A **tripeptide antioxidant** (glutamine + cysteine + glycine).
Produced endogenously in cells, especially in the liver.
Known as the body's “**master antioxidant**” because of its central role in detoxification and redox balance.

NCPA
NATIONAL COMMUNITY
PHARMACISTS ASSOCIATION

23

Glutathione and Longevity

Glutathione levels decline with age, chronic illness, stress, poor diet, and toxin exposure.

Low GSH is linked to:

- Oxidative stress & DNA damage.
- Mitochondrial dysfunction.
- Inflammation and immune dysregulation.
- Increased risk of age-related diseases (cardiovascular, neurodegenerative, metabolic).

NCPA
NATIONAL COMMUNITY
PHARMACISTS ASSOCIATION

24

Glutathione and Longevity

Reduces oxidative stress → protects against cellular aging.

Supports detoxification → neutralizes heavy metals, pollutants, and xenobiotics.

Immune support → maintains lymphocyte and NK cell function.

Neuroprotection → potential role in Parkinson's, Alzheimer's prevention/support.

Skin health & vitality → widely used for pigmentation and cosmetic "anti-aging."



<https://www.frontiersin.org/journals/nutrition/articles/10.3389/fnut.2022.1007816>

25

Other Medications and Longevity Medicine



Metformin – insulin sensitizer, lowers inflammation; linked to reduced age-related disease risk (TAME trial ongoing).

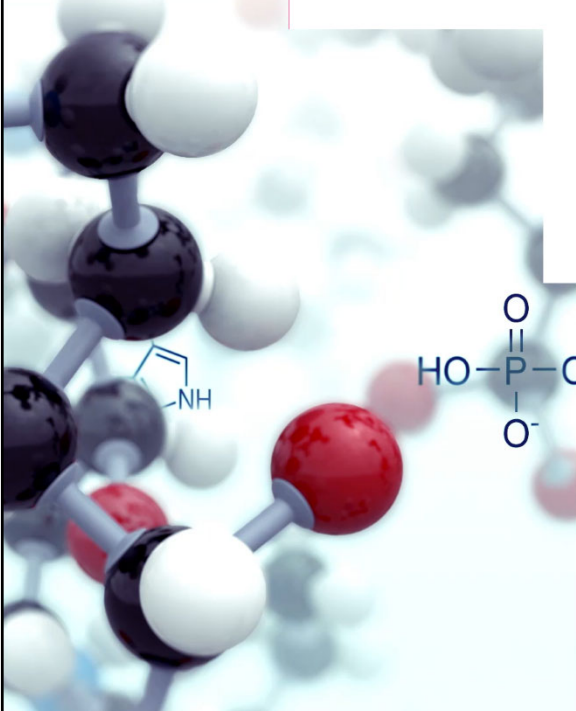
Rapamycin (Sirolimus) – inhibits mTOR, extends lifespan in multiple species.

Dasatinib (with Quercetin) – clears senescent cells; studied in idiopathic pulmonary fibrosis and frailty.

Bioidentical Hormone Replacement Therapy (BHRT) – estrogen, progesterone, testosterone, DHEA, thyroid for age-related decline.



26



Other Medications and Longevity Medicine

Peptides (Thymosin alpha-1, BPC-157, Epitalon, MOTS-c, FOXO4-DRI) – experimental, regenerative applications.

Low-Dose Naltrexone (LDN) – immune modulation, anti-inflammatory.

Coenzyme Q10 (CoQ10, Ubiquinol) – supports mitochondrial energy production.

GLP-1 receptor agonists (Semaglutide, Tirzepatide) – weight loss, metabolic health, CV protection.

NCPA
NATIONAL COMMUNITY
PHARMACISTS ASSOCIATION

27

Repurposed Medications

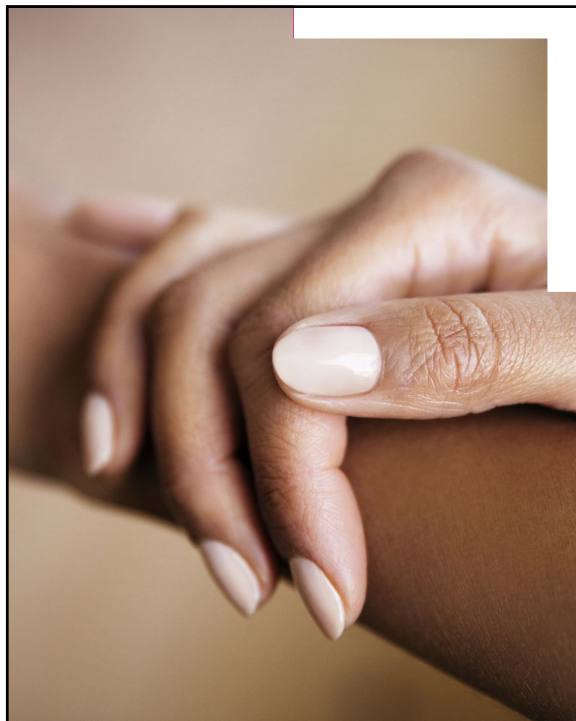
- Longevity medicine currently blends **repurposed drugs (metformin, statins, rapamycin, GLP-1s, LDN)** with **hormones, peptides, senolytics, and mitochondrial boosters**. Many are **off-label, compounded, or experimental**, so patient education and realistic expectations are crucial.
- Many of the **most promising longevity interventions are FDA-approved drugs being repurposed off-label** (metformin, rapamycin, GLP-1s, statins, ARBs, LDN, etc.). None yet carry an FDA label for “aging,” but clinical studies are expanding rapidly.

28

Don't forget the “face” of Longevity



29



Anti-Aging Dermatology

1. Why Dermatology Belongs in Longevity Care

Visible results build trust → skin health is tangible and motivating.

Skin = window to internal health (oxidative stress, hormones, nutrition, hydration).

Patient demand → aesthetic and anti-aging skincare is a **multi-billion-dollar global market** with high growth.



30

Compounded & Pharmacy-Based Dermatology Options

Topical Hormone & Peptide Creams

- Estrogen/progesterone for skin elasticity.
- Growth factors and peptides (GHK-Cu, matrixyl).

Compounded Retinoids

- Tailored strengths, combinations with niacinamide or antioxidants.

Topical Antioxidants

- Vitamin C, resveratrol, glutathione formulations.

Skin Lightening & Pigment Balancing

- Hydroquinone blends, kojic acid, arbutin.

Barrier & Repair Formulas

- Customized ceramide, hyaluronic acid, niacinamide creams.



31

Getting Started with Longevity Medicine



32

Growing Your Longevity Business



33

Marketing Your Pharmacy

1. Define Your Value Proposition

Positioning Statement:

"We help patients extend their health span with personalized compounded therapies, testing, and consults—right in their local pharmacy."

Focus on:

- **Personalization** (custom dosing, compounding).
- **Accessibility** (pharmacist-led, local, affordable vs. big city longevity clinics).
- **Prevention & Vitality** (not just treating illness).

34

Who Are You Marketing To?

2. Identify Your Target Audience

Demographics:

- Middle-aged professionals (40–65) seeking vitality.
- Retirees aiming to stay independent and active.
- Health-conscious younger adults investing in prevention.

Psychographics:

- Biohackers, functional medicine enthusiasts, proactive patients.
- Those dissatisfied with conventional “reactive” care



35

Branding and Outreach

- **Wellness & Longevity Branding:** Market your pharmacy as a “Longevity & Wellness Center,” not just a dispenser.
- **Message Focus:** Use phrases like “Healthy Aging,” “Cellular Renewal,” “Metabolic Health” instead of just “anti-aging.”
- **Collaborate with Functional & Integrative Practitioners:** Create referral pipelines with MDs, NPs, chiropractors, and wellness clinics.
- **Physician Detailing Kits:** Prepare one-pagers outlining dosing protocols, compounding options, and your pharmacy’s safety/sterility credentials.



36

Options for Patient Education

Workshops & Seminars: Host monthly “Longevity Health Nights” on topics like hormone optimization, NAD+, or mitochondrial health.

Printed Guides & Infographics: Provide take-home education on “Top Prescriptions in Longevity Medicine” (e.g., Metformin, Rapamycin, NAD+, Testosterone).

In-Pharmacy Learning Corners: Create a “Longevity Wall” with posters explaining injectable therapies, repurposed medications, and anti-aging science.



37

Carefully Chosen Messaging

• Focus on Function, Not Just Years

- Say: “We’re working to improve your energy, resilience, and quality of life as you age.”
- Avoid: “This will make you live 20 years longer.”

• Highlight Incremental Wins

- Improved sleep, better recovery, weight stabilization, lab marker improvements.
- Encourage patients to celebrate *biological age shifts* (lab-based) instead of promising extended lifespan.



38

QUESTION 2:

You're creating marketing materials for your new longevity program. Which message is the most effective way to promote your services?

- a. Reverse aging and guarantee 20 more years of life!
- b. Improve your energy, resilience, and quality of life as you age.
- c. Longevity therapies work for everyone, no matter their health.
- d. Our treatments will make you look 10 years younger.



39

QUESTION 2:

You're creating marketing materials for your new longevity program. Which message is the most effective way to promote your services?

- a. Reverse aging and guarantee 20 more years of life!
- b. Improve your energy, resilience, and quality of life as you age.**
- c. Longevity therapies work for everyone, no matter their health.
- d. Our treatments will make you look 10 years younger.



41

Longevity Medicine in Pharmacy

Longevity medicine in pharmacy combines **compounding, testing, and preventive consults** to help patients stay vibrant and healthy for decades. Independent pharmacies are uniquely positioned to lead in this space by offering **personalized, accessible, and trusted care.**



42

Contact Information

Jennifer Palazzolo, BScPharm, RPh
 Pharmacist-Owner,
 Flatirons Family Pharmacy
jen@flatironsrx.com



44