

Deep Knowledge Group Longevity Blueprints Advanced Management System

(DKG LBams)

DKG Longevity Blueprints Advanced Management System (LBam)

- Meta-System for Navigation, Management, and Optimization of various Longevity Blueprints

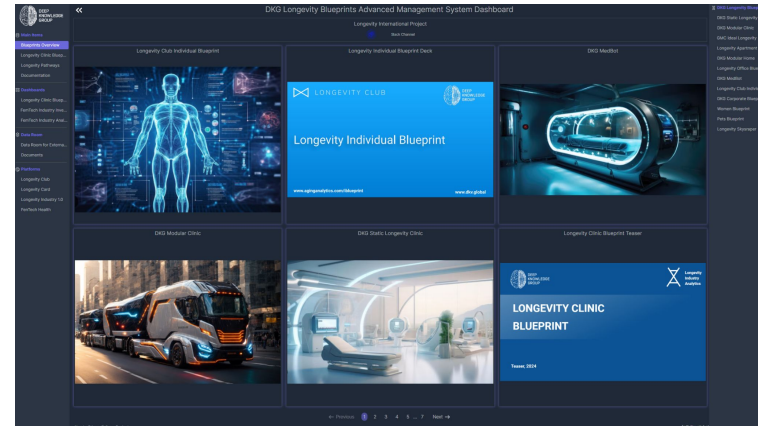
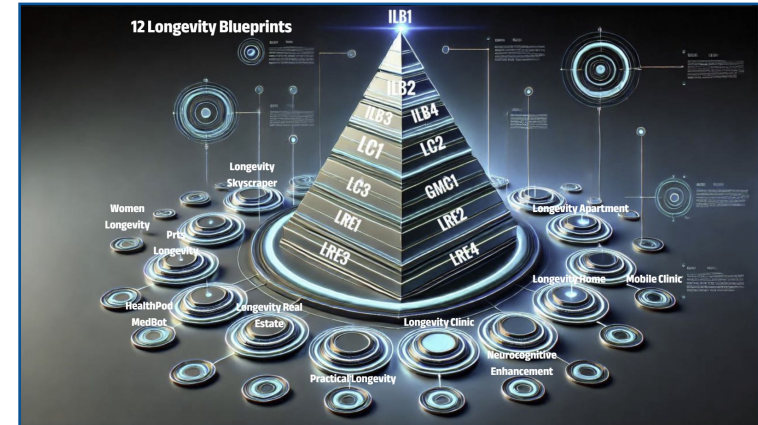
- Enables configuration of Longevity Blueprint variations, adjusted specific cases and White Labels

- On stage 2.0 to be integrated with dedicated AI Co-Pilots and AI Recommendation System

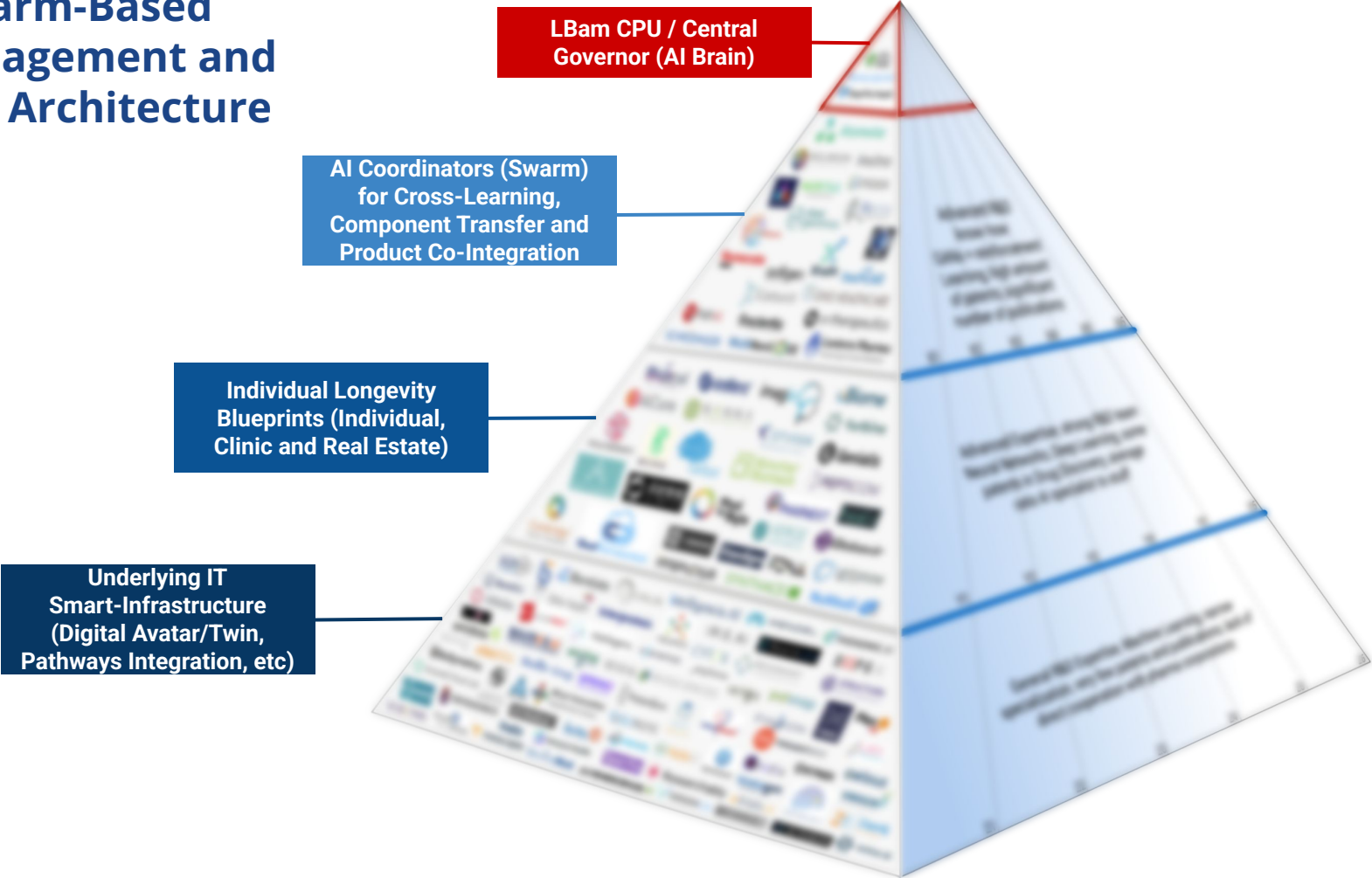
- Developed due to the high level of project complexity and high demand for blueprint reconfigurability in DKG

- Optimal Solution for Configuring and Utilizing Multiple Co-Integrated Longevity Blueprints in Synergy

- Dual Use as Internal DKG Resource Management System and Commercially Viable White Label Solution



LBam AI Swarm-Based System Management and Governance Architecture

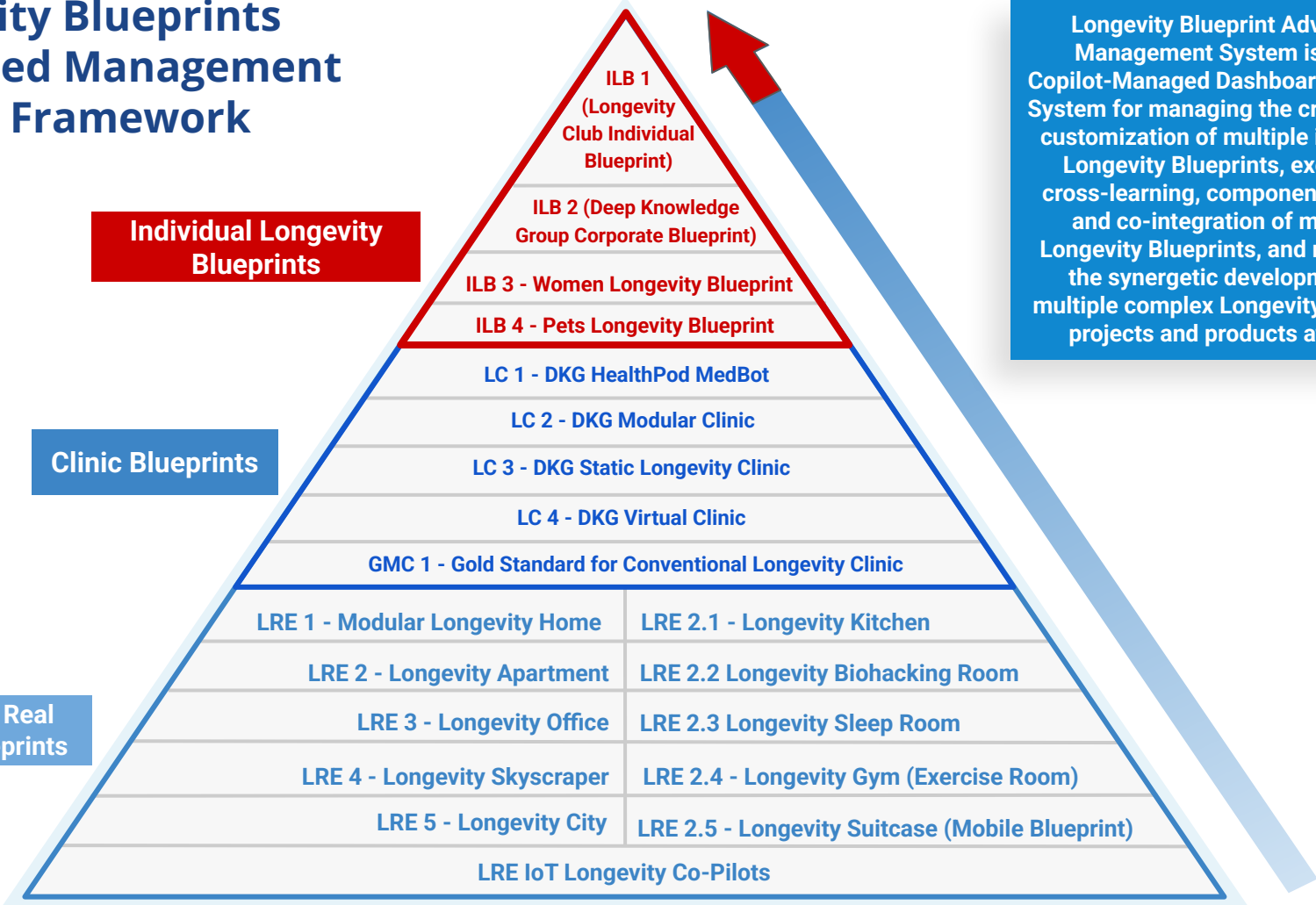


Longevity Blueprints Advanced Management System Framework

Individual Longevity
Blueprints

Clinic Blueprints

Longevity Real
Estate Blueprints



Longevity Blueprint Advanced Management System is an AI Copilot-Managed Dashboard-based IT System for managing the creation and customization of multiple individual Longevity Blueprints, executing cross-learning, component transfer and co-integration of multiple Longevity Blueprints, and managing the synergetic development of multiple complex Longevity Blueprint projects and products at once.

Executive Summary

Deep Knowledge Group (DKG) has pioneered the development of Longevity Blueprints – comprehensive frameworks defining the ideal components and configurations for various Longevity-focused solutions. These solutions span practical applications such as individual Longevity protocols, neurocognitive performance enhancements, and advanced wellness systems. They also encompass infrastructure projects like Longevity Clinics, modular HealthPods, and Longevity Real Estate, which includes specialized apartments, homes, and even entire community skyscrapers.

These blueprints typically feature both an ideal list of components, including equipment and protocols, as well as AI Co-Pilots to execute protocols and integrate methodological components with physical components, specifying not just composition but the logic and architecture of their assembly into an ideal use-case specific end product.

Blueprint Components and AI Co-Pilots

DKG's Longevity Blueprints are underpinned by the integration of both physical and digital elements to create an ideal end-use product tailored for specific applications. Each blueprint specifies:

Components: Equipment, materials, and protocols that form the foundation of the blueprint's implementation. For example, in the Longevity Kitchen, advanced health-conscious technologies are paired with real-time dietary recommendations to optimize health outcomes.

AI Co-Pilots: These systems dynamically integrate methodological and physical components. They leverage IoT sensors and advanced analytics to execute protocols, personalize configurations, and provide real-time recommendations. For instance, an AI Co-Pilot in a Longevity Biohacking Room adjusts protocols based on diagnostics and environmental sensors.

This dual approach ensures that the assembly of the components not only meets functional requirements but also delivers optimized user experiences through intelligent automation.

Executive Summary

DKG's Longevity Blueprints are categorized into two principal types to cover multiple use cases:

Compositional Blueprints: These focus on defining the ideal set of components, equipment, and methodologies. Examples include the pipelines for health protocols or room-specific technologies like the Longevity Biohacking Room.

Construction Blueprints: These detail the step-by-step assembly and structural configurations for creating larger infrastructures, such as clinics, modular homes, and Longevity Skyscrapers. For instance, the Longevity Skyscraper Blueprint includes both a registry of ideal equipment and the architectural instructions to mitigate environmental hazards unique to tall buildings.

This dual categorization enables customization and scalability, accommodating both individual and large-scale implementations in the Longevity ecosystem.

Pathways Integration and Digital Avatars in Longevity Blueprints

Deep Knowledge Group (DKG) incorporates two proprietary technological stacks into its Longevity Blueprints, enabling dynamic implementation and user-specific customization:

Pathways Integration: This system provides detailed methodological instructions for implementing blueprints, making them adaptable to specific user needs. Hard-coded into DKG's proprietary IT infrastructure, Pathways transforms static blueprints into dynamic, personalized solutions. For instance, it enables individualized configurations for clinical and home settings to maximize health and longevity outcomes.

Digital Avatars and Digital Twins: Leveraging advanced 3D and VR modalities, these tools visualize the impacts of blueprint implementations on their subjects. For instance: **Healthcare Applications:** Digital Avatars track biomarker data and simulate therapeutic interventions in real-time, offering predictive and personalized healthcare recommendations; **Real Estate Applications:** Digital Twins model physical assets like Longevity Apartments or Clinics, enabling stakeholders to see how changes in infrastructure or protocols affect outcomes.

These technologies ensure that every blueprint not only aligns with theoretical standards but also delivers practical, measurable benefits tailored to individual and organizational needs.

Executive Summary

DKG's Longevity Blueprints are designed for dual utility, making them available in two primary formats:

Standalone Products: These blueprints can be purchased individually to address specific needs, such as constructing a personalized Longevity Home or implementing a targeted wellness protocol.

Embedded Solutions: Blueprints are frequently integrated within larger thematic products, such as the Longevity Real Estate Big Data Analytics Dashboard. These integrations enhance utility by aligning with broader systems for market monitoring, competitive intelligence, and investment analysis.

This approach ensures the flexibility to serve both specialized and comprehensive Longevity applications, enabling diverse stakeholders to access tailored solutions or broader ecosystem-driven platforms.

DKG's Longevity Blueprints are inherently complex projects due to their multidimensional integration of physical, digital, and methodological components. The high degree of co-integration among these elements intensifies the challenge of administration.

Current Scope: With 12 fully developed blueprints already in operation, the logistical burden of management is substantial.

Planned Growth: DKG anticipates introducing dozens more blueprints throughout 2025, aiming to diversify applications and address broader Longevity use cases.

These ambitions have led to **unique logistical challenges**, including ensuring seamless inter-component functionality across varied use cases, streamlining coordination between technical teams and system interfaces, and scaling up IT infrastructure to accommodate dynamic growth while maintaining efficiency.

To overcome these hurdles, DKG leverages its **Longevity Blueprints Advanced Management System (LBams)**, an AI-augmented platform designed to facilitate real-time navigation, project reconfiguration, and execution optimization. This ensures that the system remains adaptable and robust even as the complexity and scale of blueprint applications increase.

Longevity Club Individual Blueprint



Longevity Individual Blueprint Deck



DKG MedBot



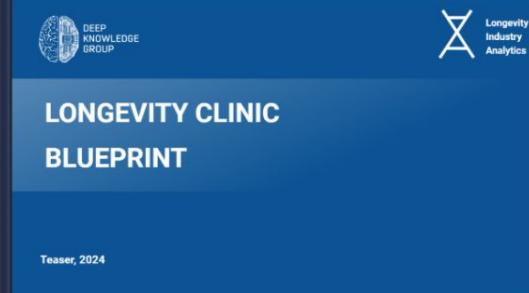
DKG Modular Clinic



DKG Static Longevity Clinic



Longevity Clinic Blueprint Teaser



DKG Modular Home



Longevity Apartment

Longevity Suitcase (Mobile Blueprint)



A 10 kg travel case packed with devices for on-the-go Longevity Diagnostics and Treatments

Sleeping Room



The Sleep Room Blueprint enhances sleep with advanced technologies

Longevity Biohacking Room



The Longevity Room Blueprint offers a comprehensive approach to well-being, health and longevity

Longevity Kitchen



The Longevity Kitchen Blueprint aggregates health-conscious technologies and protocols for optimized diet all inside the kitchen

Longevity Home

Corporate Office Blueprint



Longevity Skyscraper





DEEP
KNOWLEDGE
GROUP



Ideal Individual Longevity and Neurocognitive Performance Enhancement Blueprint- ILB1



12 Individual Longevity Blueprint



4 Open Source Platform



1 B2C VR Recommendation System

Data Room

Pathways Integration

Compositional Blueprint

Blueprint Overview

Benchmark

Compositional Blueprint...

Database

Blueprint Visualizations

MindMap

Comparative Assessments

Advanced Frameworks

Digital Avatar Integration

Open Source

Longevity Club

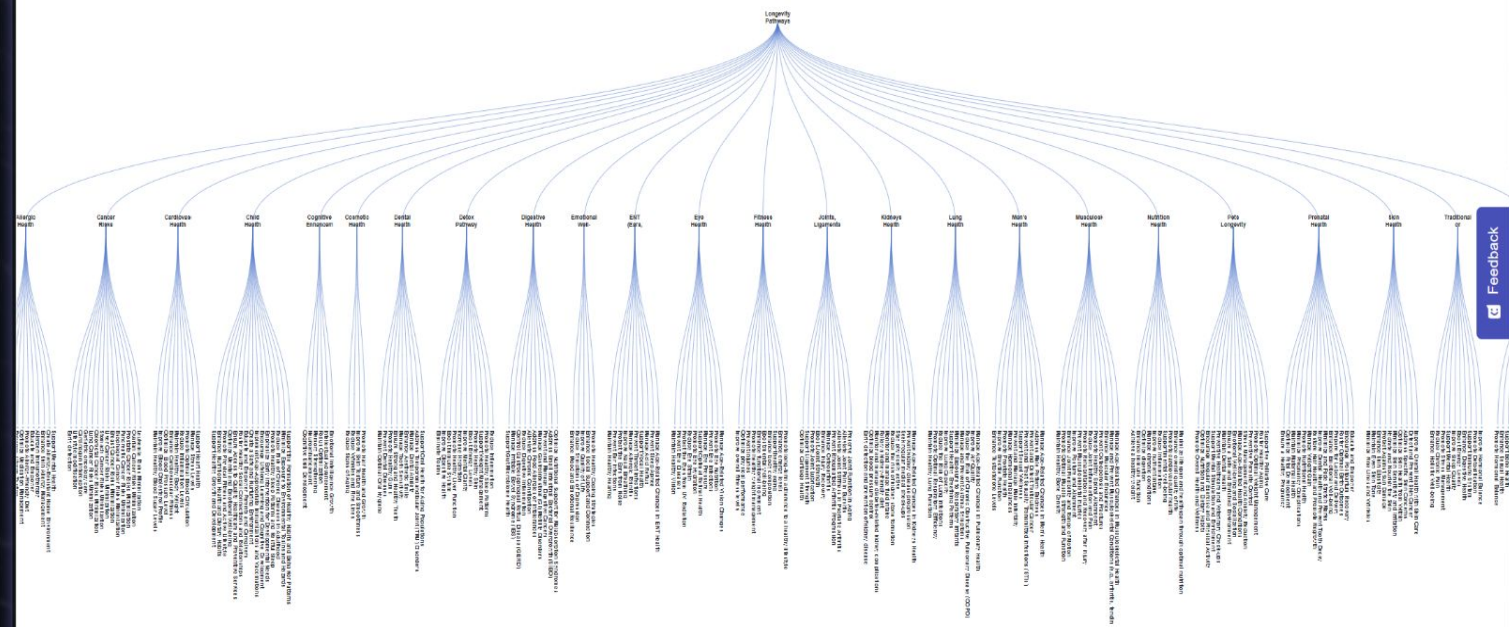
Longevity Card

Longevity Industry 1.0

FemTech Health



Longevity Pathways



Feedback

Other Individual Long...

Longevity Blueprints Ad...

Corporate Blueprint - ILB2

Women Blueprint - ILB3

Pets Blueprint - ILB4

DKG MedBot - LC1

DKG Modular Clinic - LC2

DKG Static Longevity Cli...

Ideal Longevity Corpora...

Modular Home - LRE1

Longevity Apartment - L...

Blueprint Longevity Offi...

Longevity Skyscraper - L...

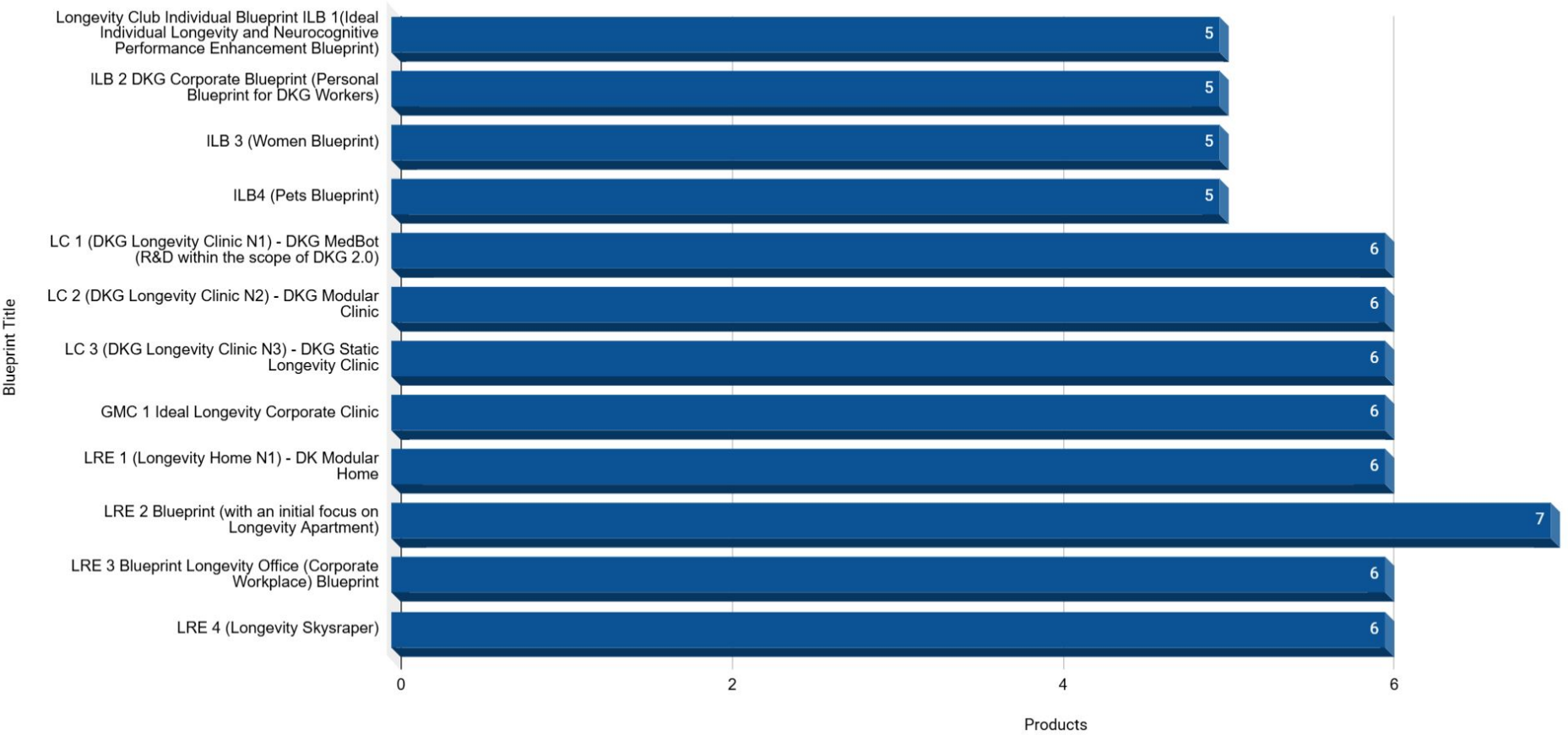
Components of Longevity Blueprints		Longevity Blueprints	ILB 1	ILB2	ILB 3	ILB4	LC 1	LC 2	LC 3	GMC 1	LRE 1	LRE 2	LRE 3	LRE 4
BizDevTech & MarTech Setup														
	Public Platform	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
	Promo Page	🔴	✅	✅	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
	Data Room	🔴	✅	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
	Dashboard White Label	✅	✅	✅	✅	✅	✅	✅	✅	✅	✅	✅	✅	✅
Products														
	Composition Blueprint	✅	✅	✅	✅	✅	✅	✅	✅	✅	✅	✅	✅	✅
	Construction Blueprint	N/A	✅	✅	N/A	N/A	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
	Pathways Intergration and Visualization	🔴	✅	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
	Digital Avatar (or Digital Twin) Emulation (Integration and Visualization)	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
	B2C VR Recommendation System	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	🔴	N/A	N/A
	Benchmark	🔴	✅	✅	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
	Recommendation System	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
Tools														
		Equipment and Devices												
1	Air Purification System		✅	✅	✅	✅	✅	🔴	✅	✅	✅	✅	✅	✅
2	Blood Pressure Monitor		✅	🔴	✅	✅	✅	✅	✅	✅	✅	✅	🔴	🔴
3	Body Composition Analyzer		✅	✅	✅	✅	✅	🔴	✅	✅	✅	✅	🔴	🔴
4	ECG/Heart Rate Monitor		✅	✅	✅	✅	✅	✅	✅	✅	✅	✅	🔴	🔴
5	Sleep Quality Analyzer		✅	✅	✅	🔴	🔴	🔴	✅	🔴	✅	✅	🔴	✅
6	Environmental Control System		✅	🔴	✅	✅	✅	🔴	✅	✅	✅	✅	✅	✅
7	Water Filtration System		🔴	🔴	🔴	✅	🔴	🔴	🔴	🔴	✅	✅	✅	✅
8	Temperature Control System		🔴	🔴	✅	✅	✅	✅	✅	✅	✅	✅	✅	✅
9	Patient Education Display Systems		✅	🔴	✅	🔴	✅	🔴	✅	✅	🔴	🔴	🔴	✅
10	UV-C Sterilization Units		✅	🔴	✅	✅	✅	✅	✅	✅	🔴	✅	✅	🔴
11	Circadian Lighting Systems		✅	✅	✅	🔴	🔴	✅	✅	🔴	✅	🔴	🔴	✅
12	Health Monitoring Systems		✅	✅	✅	✅	✅	✅	✅	✅	✅	✅	✅	✅
13	Smart Wake-Up Technology		✅	🔴	✅	🔴	🔴	🔴	✅	🔴	🔴	✅	🔴	✅
14	Geiger Counter/Radiation Detector		✅	🔴	✅	🔴	🔴	🔴	✅	🔴	✅	🔴	🔴	🔴
15	VO2 Max Testing Equipment		✅	✅	✅	🔴	🔴	🔴	✅	✅	🔴	🔴	🔴	🔴
16	Neurofeedback Devices		✅	✅	✅	🔴	✅	✅	✅	🔴	🔴	🔴	✅	✅
17	Brain Stimulation Tools		✅	✅	✅	🔴	✅	✅	✅	🔴	🔴	🔴	🔴	✅
18	Advanced Imaging Systems		✅	✅	✅	✅	✅	✅	✅	✅	🔴	🔴	🔴	✅
19	Compact iHHT Device		✅	🔴	✅	🔴	🔴	🔴	✅	🔴	✅	🔴	🔴	🔴
20	Stem Cell Processing Systems		✅	🔴	✅	🔴	✅	✅	✅	🔴	🔴	🔴	🔴	✅
21	Hyperbaric Chambers		✅	🔴	✅	🔴	✅	✅	🔴	🔴	🔴	✅	🔴	✅
22	DNA Diagnostic Tools		✅	🔴	✅	✅	✅	✅	✅	✅	✅	🔴	🔴	✅
23	Red Light Therapy Panels		✅	✅	✅	✅	✅	🔴	🔴	🔴	✅	🔴	🔴	🔴
24	Exercise Equipment		🔴	🔴	✅	✅	🔴	🔴	✅	✅	✅	✅	✅	✅
25	Biofeedback Systems		✅	✅	✅	🔴	✅	🔴	✅	🔴	🔴	🔴	🔴	🔴
26	Digital Stethoscope		🔴	🔴	🔴	✅	✅	🔴	✅	✅	🔴	🔴	🔴	🔴
27	PRP Therapy Kit		🔴	🔴	✅	✅	✅	✅	🔴	🔴	🔴	🔴	🔴	✅
28	Cryotherapy Unit		🔴	🔴	🔴	🔴	✅	✅	🔴	🔴	🔴	🔴	🔴	✅
29	Glucose Monitoring System		🔴	🔴	🔴	✅	✅	🔴	✅	✅	✅	🔴	🔴	🔴
30	Ultrasound Equipment		🔴	🔴	✅	✅	✅	✅	✅	✅	🔴	🔴	🔴	✅

Components of Longevity Blueprints		Longevity Blueprints	ILB 1	ILB2	ILB 3	ILB4	LC 1	LC 2	LC 3	GMC 1	LRE 1	LRE 2	LRE 3	LRE 4
	#	Diagnostic Tools												
1	Biomarker Testing Platforms	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	⬢	✓
2	Health Analytics Systems	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Genetic Testing Systems	✓	✓	✓	✓	✓	✓	✓	✓	✓	⬢	✓	⬢	✓
4	Sleep Assessment Tools	✓	✓	✓	⬢	✓	✓	⬢	✓	✓	✓	✓	✓	✓
5	Cognitive Function Testing	✓	✓	✓	⬢	✓	✓	✓	✓	✓	⬢	✓	✓	✓
6	Metabolic Testing Systems	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	⬢	✓
7	Hormonal Testing Equipment	✓	⬢	✓	✓	✓	✓	✓	✓	✓	⬢	✓	⬢	✓
8	Microbiome Analysis Tools	✓	✓	✓	⬢	✓	⬢	⬢	✓	✓	⬢	⬢	⬢	✓
9	Cardiovascular Assessment Tools	✓	⬢	✓	✓	✓	✓	✓	✓	✓	✓	✓	⬢	✓
10	Inflammatory Marker Testing	✓	⬢	✓	✓	✓	✓	✓	✓	✓	⬢	✓	⬢	✓
11	Epigenetic Clock Testing	✓	✓	✓	✓	✓	⬢	⬢	✓	✓	⬢	⬢	⬢	✓
12	Blood Chemistry Analyzers	✓	⬢	✓	✓	✓	✓	✓	✓	✓	✓	✓	⬢	✓
13	Digital Health Tracking Systems	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
14	Nutritional Analysis Platforms	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
15	Toxicity Screening Tools	⬢	⬢	⬢	✓	✓	✓	⬢	✓	✓	⬢	⬢	⬢	✓
	#	Treatment and Therapy Systems												
1	IV Therapy Systems	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	⬢	✓
2	Peptide Therapy Units	✓	✓	✓	⬢	✓	✓	✓	✓	⬢	⬢	⬢	⬢	✓
3	NAD+ Administration Systems	✓	✓	✓	⬢	✓	✓	✓	✓	⬢	⬢	⬢	⬢	✓
4	Ozone Therapy Equipment	⬢	⬢	⬢	⬢	✓	✓	✓	✓	⬢	✓	✓	⬢	✓
5	Hormone Optimization Systems	✓	✓	✓	✓	✓	✓	✓	✓	✓	⬢	✓	⬢	✓
6	Regenerative Therapy Units	✓	⬢	✓	✓	✓	✓	✓	✓	⬢	⬢	⬢	⬢	✓
7	Light Therapy Systems	✓	⬢	✓	✓	✓	✓	⬢	✓	⬢	✓	⬢	⬢	✓
8	Sound Therapy Equipment	✓	⬢	✓	⬢	⬢	⬢	⬢	✓	⬢	✓	⬢	✓	✓
9	Hyperbaric Treatment Units	✓	⬢	✓	⬢	✓	✓	✓	✓	⬢	⬢	✓	⬢	✓
10	Cryotherapy Systems	⬢	⬢	⬢	⬢	✓	✓	✓	✓	⬢	⬢	⬢	⬢	✓
	#	Software and AI Systems												
1	Health Data Management Platform	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Patient Monitoring Software	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	AI-Powered Analytics Dashboard	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	Predictive Health Algorithms	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	Treatment Optimization AI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6	Biomarker Tracking Software	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7	EMR Integration System	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	Cognitive Performance Software	✓	✓	✓	⬢	✓	✓	✓	✓	✓	⬢	⬢	✓	✓
9	Sleep Optimization AI	⬢	⬢	✓	⬢	⬢	⬢	⬢	✓	✓	✓	✓	✓	✓
10	Nutritional Planning System	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11	Environmental Control AI	✓	⬢	✓	✓	✓	✓	⬢	✓	⬢	✓	✓	✓	✓
12	Security and Safety AI	✓	⬢	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
13	Medication Management System	⬢	✓	✓	✓	✓	✓	✓	✓	✓	⬢	⬢	⬢	✓
14	Patient Engagement Portal	✓	✓	✓	✓	✓	✓	✓	✓	✓	⬢	⬢	⬢	✓
15	Telemedicine Platform	⬢	⬢	✓	✓	⬢	✓	✓	✓	✓	⬢	⬢	⬢	✓

Components of Longevity Blueprints		Longevity Blueprints	ILB 1	ILB2	ILB 3	ILB4	LC 1	LC 2	LC 3	GMC 1	LRE 1	LRE 2	LRE 3	LRE 4
		#	Consumables and Supplies											
1	Diagnostic Testing Kits		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	⦿	✓
2	Nutraceutical Supplements		✓	✓	✓	✓	✓	✓	✓	✓	⦿	✓	✓	✓
3	IV Therapy Solutions		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	⦿	✓
4	Medical Grade Sanitization Products		⦿	⦿	⦿	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	Blood Collection Supplies		✓		✓	✓	✓	✓	✓	✓	✓	✓	⦿	✓
6	Clinical Chemistry Reagents		✓	⦿	✓	✓	✓	✓	✓	✓	⦿	⦿	⦿	✓
7	Hormone Testing Kits		✓	✓	✓	✓	✓	✓	✓	✓	⦿	✓	⦿	✓
8	Genetic Testing Materials		✓	✓	✓	✓	✓	✓	✓	✓	⦿	✓	⦿	✓
9	Microbiome Testing Supplies		✓	✓	✓	✓	⦿	✓	✓	✓	⦿	⦿	⦿	✓
10	PRP Preparation Kits		✓	✓	✓	✓	✓	✓	✓	⦿	⦿	⦿	⦿	✓
11	Stem Cell Therapy Materials		✓	⦿	✓	✓	✓	✓	✓	⦿	⦿	⦿	⦿	✓
12	Peptide Formulations		✓	✓	✓	⦿	✓	✓	✓	⦿	⦿	⦿	⦿	✓
13	Growth Factor Solutions		✓	⦿	✓	✓	✓	✓	✓	⦿	⦿	⦿	⦿	✓
14	Exosome Therapy Kits		✓	⦿	✓	⦿	✓	✓	✓	⦿	⦿	⦿	⦿	✓
15	Clinical Grade PPE		⦿	⦿	⦿	✓	✓	✓	✓	✓	⦿	✓	✓	✓
16	Sterilization Supplies		⦿	⦿	✓	✓	✓	✓	✓	✓	✓		✓	✓
17	Laboratory Consumables		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
18	Quality Control Standards		⦿	⦿	✓	✓	✓	✓	✓	✓	⦿	⦿	✓	✓
19	Calibration Materials		⦿	⦿	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
20	Emergency Response Supplies		⦿	⦿	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		#	Safety and Monitoring Systems											
1	Environmental Monitoring System		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Air Quality Control System		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Radiation Detection System		✓	⦿	✓	⦿	⦿	⦿	✓	⦿	✓	⦿	⦿	✓
4	EMF Protection System		⦿	⦿	✓	⦿	⦿	⦿	✓	⦿	⦿		⦿	✓
5	Fire Safety System		⦿	⦿		✓	⦿	⦿	✓	✓	✓	✓	✓	✓
6	Security Monitoring System		⦿	⦿	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7	Patient Safety Monitoring		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	Emergency Response System		⦿	⦿	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9	Biohazard Control System		⦿	⦿	⦿	✓	✓	✓	✓	✓	⦿	⦿	⦿	✓
10	Temperature Monitoring System		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11	Humidity Control System		✓	⦿	✓	✓	✓	⦿	✓	✓	✓	✓	✓	✓
12	Power Backup System		⦿	⦿	⦿	✓	✓	⦿	✓	✓	⦿	✓	✓	✓
13	Water Quality Monitoring		⦿	⦿	✓	✓	⦿	⦿	✓	✓	✓	✓	✓	✓
14	Noise Level Control System		✓	⦿	✓	✓	⦿	⦿	✓	✓	✓	✓	✓	✓
15	Lighting Control System		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		#	Infrastructure Components											
1	Medical Gas Systems		⦿	⦿	✓	✓	✓	✓	✓	✓	⦿	⦿	⦿	✓
2	Clinical Storage Systems		⦿	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Waste Management Systems		⦿	⦿	✓	✓	✓	✓	✓	✓	⦿	✓	✓	✓
4	Data Center Infrastructure		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	Power Distribution Systems		✓	⦿	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6	Network Infrastructure		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7	Access Control Systems		⦿	⦿	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	Ventilation Systems		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9	Water Treatment Systems		⦿	⦿	✓	✓	⦿	⦿	✓	✓	✓	✓	✓	✓
10	Thermal Management Systems		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11	Acoustic Management Systems		✓	⦿	✓	✓	⦿	✓	✓	✓	✓	✓	✓	✓

Components of Longevity Blueprints		Longevity Blueprints	ILB 1	ILB2	ILB 3	ILB4	LC 1	LC 2	LC 3	GMC 1	LRE 1	LRE 2	LRE 3	LRE 4
	#	Personnel Support Systems												
1	Medical Staff Management		🟡	🟡	🟢	🟡	🟡	🟢	🟢	🟢	🟡	🟡	🟡	🟢
2	Patient Care Coordination		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
3	Clinical Operations Support		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟡	🟢	🟢
4	Facility Management System		🟡	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
5	Quality Assurance System		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
6	Training and Education Platform		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
7	Documentation Management		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
8	Resource Scheduling System		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
9	Inventory Management		🟡	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
10	Compliance Monitoring		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
11	Staff Performance Analytics		🟡	🟡	🟢	🟡	🟡	🟢	🟢	🟢	🟡	🟡	🟢	🟢
12	Emergency Response Team		🟡	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟡	🟢	🟢
13	IT Support Infrastructure		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
14	Maintenance Management		🟡	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
15	Patient Service Support		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
	#	Treatment Protocols												
1	Personalized Health Protocol Design		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
2	Longevity Optimization Protocol		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
3	Cognitive Enhancement Protocol		🟢	🟢	🟢	🟡	🟢	🟢	🟢	🟢	🟢	🟡	🟢	🟢
4	Sleep Optimization Protocol		🟢	🟢	🟢	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
5	Nutrition and Supplementation Protocol		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
6	Hormonal Optimization Protocol		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟢
7	Stress Management Protocol		🟢	🟢	🟢	🟡	🟢	🟢	🟢	🟢	🟡	🟢	🟢	🟢
8	Physical Performance Protocol		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
9	Detoxification Protocol		🟢	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟢	🟢	🟢
10	Regenerative Therapy Protocol		🟢	🟡	🟢	🟢	🟢	🟢	🟢	🟡	🟢	🟡	🟡	🟢
11	Metabolic Health Protocol		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
12	Immune System Protocol		🟢	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
13	Cardiovascular Health Protocol		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
14	Brain Health Protocol		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
15	Cellular Health Protocol		🟢	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟢
	#	Diagnostic Methods												
1	Molecular Biomarker Testing		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟢
2	Physiological Assessment		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
3	Digital Biomarker Monitoring		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
4	Body Composition Analysis		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟢
5	Metabolic Panel Testing		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟢
6	Cardiovascular Assessment		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟢
7	Cognitive Function Testing		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟢	🟢	🟢
8	Sleep Quality Assessment		🟢	🟢	🟢	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
9	Hormone Panel Testing		🟢	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟢
10	Inflammatory Marker Analysis		🟢	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟢
11	Genetic Risk Screening		🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟢	🟡	🟢
12	Immune Function Testing		🟢	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟢
13	Gut Microbiome Analysis		🟢	🟢	🟢	🟢	🟡	🟢	🟢	🟢	🟡	🟡	🟡	🟢
14	Heavy Metal Screening		🟡	🟡	🟢	🟢	🟡	🟢	🟢	🟢	🟡	🟡	🟡	🟢
15	Epigenetic Analysis		🟢	🟢	🟢	🟢	🟡	🟢	🟢	🟢	🟡	🟡	🟡	🟢

Products vs Blueprint Title



ILB4	Name	Description
MVP.1	Compositional Blueprint Components Registry	Spreadsheet and Document Format
MVP.2	Compositional Blueprint Technical Documentation	1-3 pages of documentation and description of each component
MVP.3	Construction / Assembly Blueprint Components Registry	Spreadsheet and Document Format
MVP.4	Construction / Assembly Blueprint Documentation	1-3 pages of documentation and description of each component
MVP.5	User Apartment Visualization System (B2C Platform)	VR Platform where user can upload photos and blueprints / schematics of their apartment, and the system will provide costed options and structured recommendations on how they can transform their apartment into a Longevity apartment, complete with pricing and potential equipment and service suppliers
MVP.6	MarTech Set-Up	Deck, Teaser, Video and Textual 2-Pager
MVP.7	BizDevTech Set-Up	including BI, BD, UDM, and ERMS-style Dashboard for making and monitoring business engagements
MVP.8	LegalTech Set-Up	for sales, White Label Solutions, joint ventures, and partnerships on the topic of the blueprint
MVP.9	MarTech Page	Tier 3 Equilant, Publicly Accessible
MVP.10	White Label Solution Platform Page	Tier 4 and 5 equilant; shall include Data Room and be made on the approved DKG White Label Solutions Platform https://white-label.dashboards.dkv.global/
MVP.11	Benchmark	Valuation-style CCQQ benchmark against leading competitor projects
MVP.12	Black Dashboard (Type 2)	Dedicated Black Dashboard, or embedment into existing thematic Dashboard (e.g., LRE, GMC, etc.)
MVP.13	Pathways Integration or Specification	Development of custom variant of the Digital Avatar visualization system, integrated with the specific pathways component of the Longevity Blueprint
MVP.14	Digital Avatar Integration	Encompassing the actual Dashboard, website or mobile-app embedded visualization modalities of the blueprint's Pathways and Digital Avatar components; minimum 1 (and ideally several) interactive mindmaps (specific visualization modality will vary based on blueprint type; honeycombs, static mindmaps, interactive / interconnection mindmaps).

Individual Longevity Blueprints

ILB N1 - N4

ILB 1: Individual Longevity Blueprint N1

Ideal Personal Longevity and Neurocognitive Performance Enhancement Blueprint

This blueprint outlines a tailored approach to achieving optimal longevity, health, and neurocognitive performance, designed specifically for high-performing professionals with access to significant resources, including capital and advanced analytical systems.

Built upon Deep Knowledge Group General Partner Dmitry Kaminskiy's proven Personal Blueprint, it focuses exclusively on a comprehensive protocol and equipment pipeline. Unlike other blueprints, this version is streamlined for practical application without requiring dual composition or construction formats.

Central to this blueprint is the proprietary **H5I2T protocol** (Hypoxic, Hyperoxic, Hypercapnic, Hypocapnic High-Intensity Interval Training). This innovative method enhances neurocognitive performance, combats procrastination, and boosts motivation through controlled breathing techniques and stress modulation. It is a cutting-edge solution for individuals with exceptional cognitive demands.

The Longevity Club Individual Blueprint (ILB 1) delivers a strategic and proven pathway to achieving peak mental and physical performance, ensuring a competitive edge in both professional and personal pursuits.



Pathways and Digital Avatar Integration

An Individual Blueprint is an engaging and interactive 3D visualization platform for customers, allowing them to explore and monitor their health, wellness, and longevity data through personalized 3D avatars and dynamic dashboards.

The Digital Avatar incorporates real-time data integration from wearable devices and health sensors, providing a comprehensive view of one's biomarkers and physiological parameters.

It offers personalized insights and recommendations based on the analysis of biomarker trends, empowering individuals to make informed decisions about their health and well-being.

With its interactive features, users can track progress, set goals, and engage in virtual health coaching, creating a dynamic and immersive experience that enhances their journey towards longevity.

By leveraging AI-driven insights and predictive analytics, it can suggest tailored lifestyle modifications, preventive measures, and treatment plans based on the individual's unique health profile.



The central element of Individual Blueprint is a Digital Health Avatar, an AI-driven information analysis hub that collects and analyzes all data from Individual Blueprint components

Longevity Pathways Algorithm

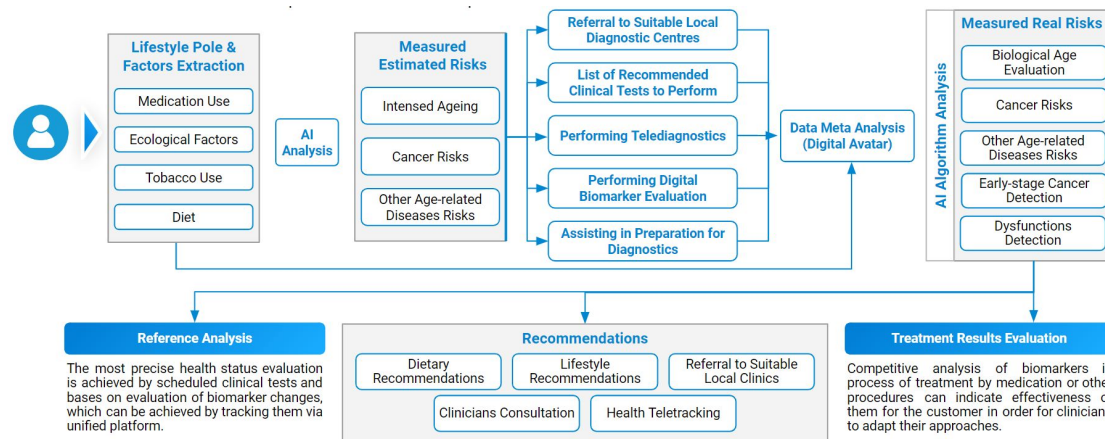
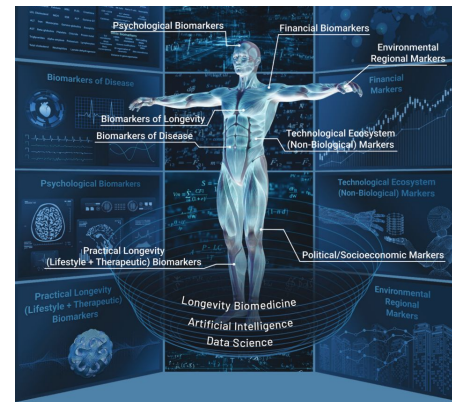
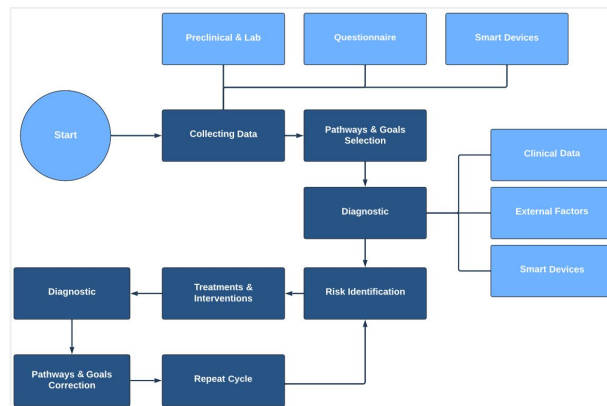
The current Blueprint Algorithm guides customers through a circular process of longevity actions in a clinic. It starts by collecting data from smart devices, preclinical and lab data, and questionnaires.

Next, diagnostic medical evaluations, home device monitoring, and external factor analysis are conducted to identify mortality and age-related disease risks.

Based on this assessment, personalized health pathways and goals are chosen. Treatments and interventions are implemented accordingly.

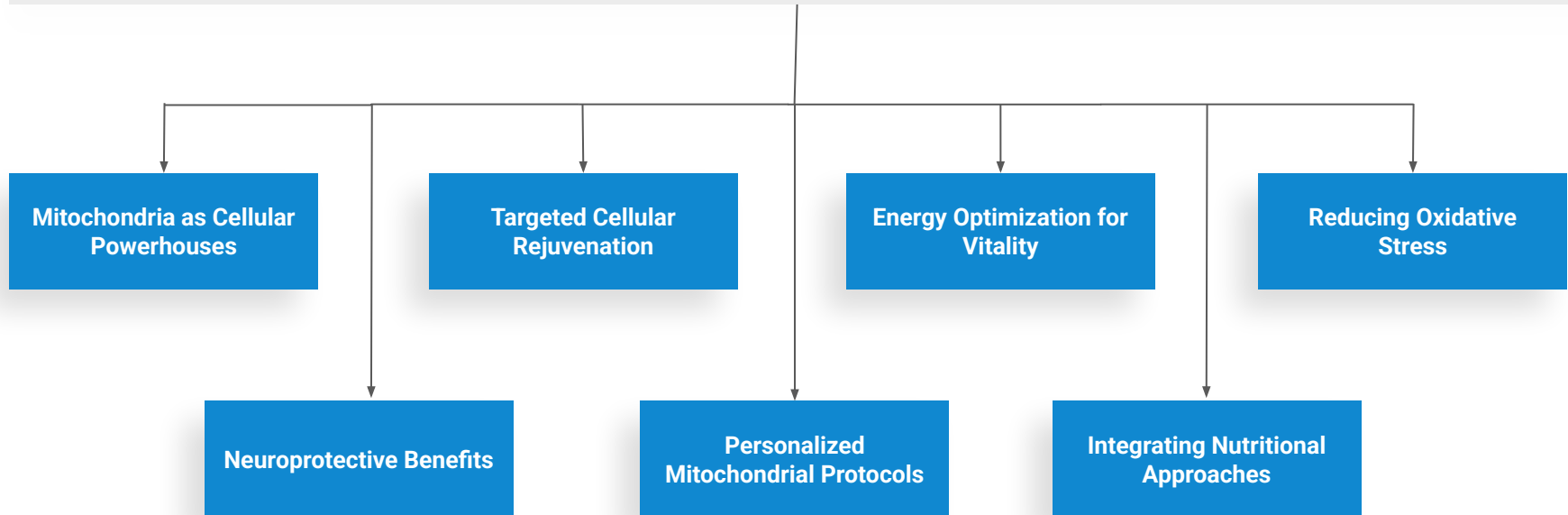
The algorithm then performs diagnostic evaluations to fine-tune and adjust treatments.

This circular process ensures continuous optimization of personalized healthcare interventions for improved longevity and well-being.



Mitochondrial Medicine

Mitochondrial Medicine revolutionizes the **Longevity Clinic Blueprint** by spotlighting mitochondria's crucial role as cellular powerhouses. This innovative approach seeks to enhance mitochondrial function, unleash cellular vitality, and foster overall health, offering a comprehensive blueprint for individuals striving for longevity and well-being.



Space Medicine

In the ever-evolving landscape of longevity medicine, the integration of **space-inspired technologies** stands as an advanced approach, offering innovative solutions for life extension on Earth. Drawing from advancements developed for space exploration, these technologies paving the way for an enhanced quality of life and prolonged **human longevity**.

Take, for instance, advancements in **regenerative medicine**. In space, where conditions such as microgravity accelerate the aging process and impair bodily functions, researchers have been compelled to develop innovative approaches to tissue regeneration and repair. These same techniques hold immense promise for addressing **age-related degeneration** on Earth, offering potential treatments for conditions ranging from osteoporosis to neurodegenerative diseases.

Space Medicine

Gravitational Impact on Cellular Aging

Regenerative Therapies Inspired by Microgravity

Telemedicine and Remote Monitoring

Environmental Adaptation for Cellular Resilience

Advanced Nutritional Solutions

Hyperbaric and Oxygen Therapy Innovations

AI-Driven Health Monitoring

Genomic Adaptation Strategies

ILB 2: Individual Longevity Blueprint N2

DKG Corporate Blueprint (Personal Blueprint for DKG Workers)

This blueprint constitutes the ideal Personal Longevity Blueprint for optimizing Health, Longevity and Performance of Deep Knowledge Group's own workforce.

Besides Health, Wellness and Longevity, it also incorporates elements meant to optimize high-intensity professional work (neurocognitive enhancement modalities), and methods for preserving health under high-intensity work conditions (burnout prevention, etc).

It will be constructed on the basis of the Longevity Club Individual Blueprint (Priority Blueprint #2 above), utilizing components from Deep Knowledge Group General Partner Dmitry Kaminksiy's own protocol, but with an overall lower degree of intensity and comprehensiveness.

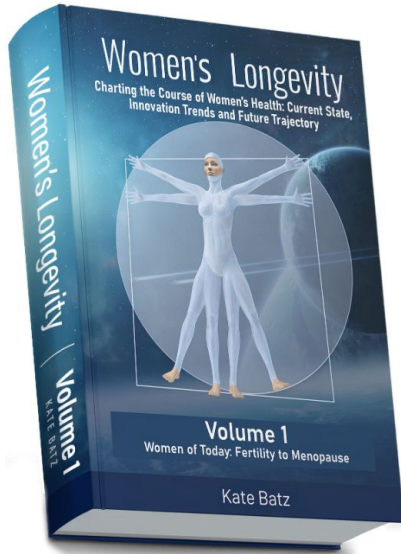
Whereas Longevity Blueprint ILB 1 is optimized for Level 4 intensive work, Priority Blueprint ILB 2 will be optimized for Level 2 work intensity; additionally, whereas Priority Blueprint ILB 1 assumes a higher degree of available resources (monetary and otherwise) at the individual's disposal, Priority Blueprint ILB 2 will be optimized for average individuals, including middle and low-income, and will generally be more obtainable in practice by a wider demographic of people.



ILB 3: Women Longevity Blueprint

This blueprint replicates the scope of functionality, use-cases and overall composition of ILB 1, but tuned to the specifics of female biology, biomarkers, Longevity and life goals.

To some extent, it has a higher proportion of components focused on Longevity and Functional Medicine, and a slightly lesser proportion of components focused on neurocognitive performance enhancement. Additionally, it has optional components focused on fertility, bodily health during pregnancy, and optimizing fetus and gestating baby health during pregnancy.



The blueprint is developed on the basis of protocols developed under the strategic guidance of DKG Partner and Head of DKG US Operations Kate Batz.

It lays the groundwork for full lifecycle Longevity optimization, from pre-conception onward, which necessarily starts with the mother, as well as lays the basis for Longevity, Health and Fertility in Space, which is necessary for long-term survival of humanity.



ILB 4: Pets Longevity Blueprint

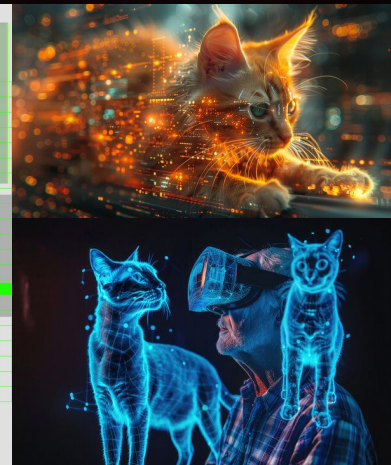
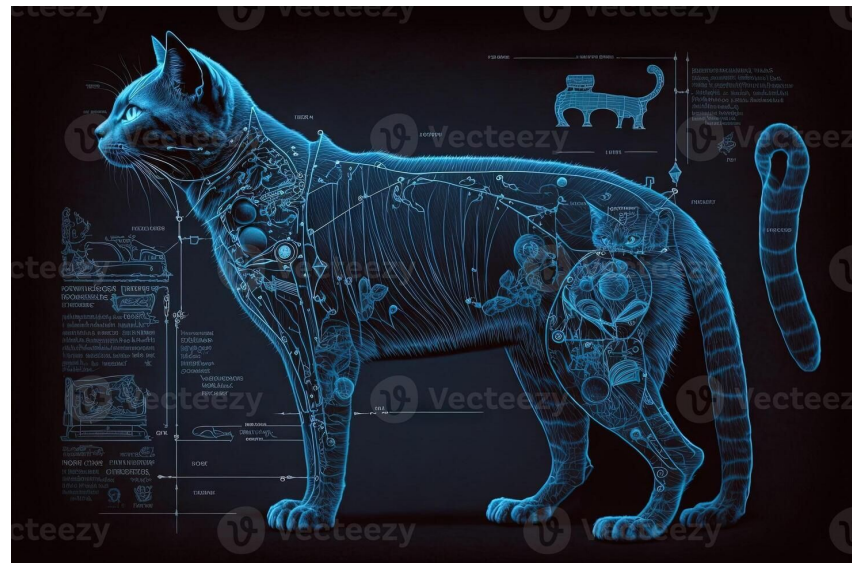
This blueprint mirrors the comprehensive scope and functionality of the ILB 1 framework, yet it is distinguished by its 100% focus on advancing health and Longevity specifically for domestic animals.

Unlike its predecessors, it excludes components dedicated to neurocognitive performance enhancement, tailoring its design to meet the unique physiological, behavioral, and medical needs of pets.

Crucially, this initiative leverages a distinct corpus of scientific and veterinary medical literature, drawing upon species-specific insights, protocols, and methodologies optimized for non-human applications.

The protocols and data utilized are substantially divergent from those informing ILB 1 and ILB 2, ensuring that every aspect of the framework aligns with the complexities and nuances of animal health.

This approach represents a pioneering step in veterinary science, offering groundbreaking applications for extending pet lifespans, enhancing quality of life, and supporting owners with predictive, preventive, and precision pet healthcare solutions.



Longevity Medical Clinic and Corporate Longevity Blueprints

LC N1 - N3 and GMC 1

LC 1 (DKG Longevity Clinic N1 - HealthPod MedBot)

DKG HealthPod MedBot (R&D within the scope of DKG 2.0)

This blueprint is a scaled-down version of LC 3, with a less comprehensive scope of equipment configurations, but which generally correspond to all functional categories of diagnostics, prognostics and treatment as LC 3.

It can be simplistically thought of as a “Longevity clinic on wheels”, similar to the concept of RVs or motor-homes. Importantly, it needs to have disassemblable wheels, to enable it to be attached to the back of a car or truck, for travel to new destinations.

The blueprint for LC 2 encompasses dual composition and construction formats, (one blueprint for protocol and equipment pipeline composition, and one blueprint for construction and assembly).

Diagnostic services: Electrocardiogram; Omics-biomarkers assessments, including results from recommended self-testing kits; Blood-based biomarkers assessment; Full body composition analysis; Physical examination.

Treatment services: IV treatments; Intermittent hypoxia treatments; Oxygen treatment; Massages; Carboxytherapy; Facial treatments.



LC 2 (DKG Longevity Clinic N2)

DKG Modular Clinic

This blueprint is similar in nature to LRE1, and consist of a self-contained pod (enclosable containment system) in which a variety of health, Longevity and medical equipment is built into the walls (the interior space between the inner and outer walls or surfaces of the pod). Its function will be to enclose human users and patients and provide a variety of diagnostic, prognostic and therapeutic services for health and Longevity optimization and medical treatment.

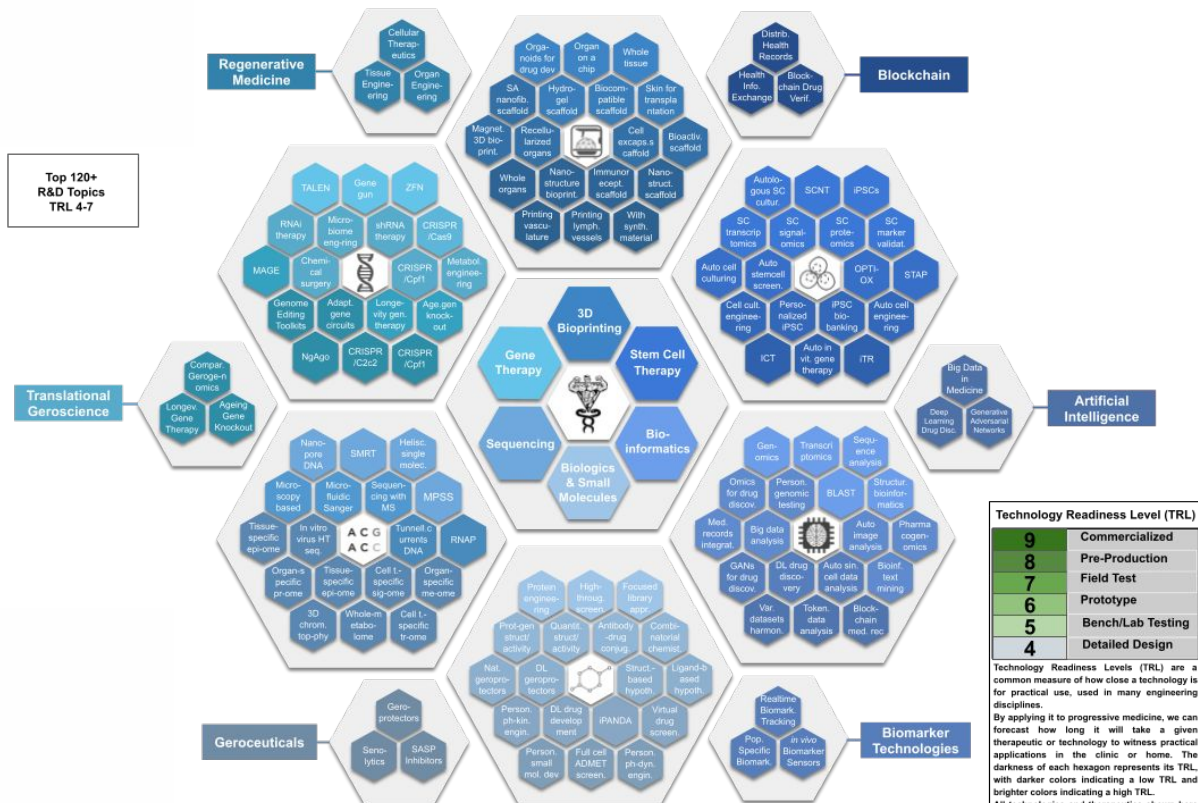
Its equipment configurations will be modularly assembled for easy custom personalization, and plug-and-play assembly (removal and addition of alternative equipment modules). Its dimensions will be variable, and come in a variety of options (capable of housing or enclosing one person, two people, ten people, etc).

The comprehensivity and intensity of its equipment configurations will also be variable according to price range (less comprehensive and intensive variants available for more economical price, and more comprehensive and intensive variants available for more expensive price) and according to the destination in which it will be embedded (in the user's home, in an undersea environment, on an airplane, in a corporate office). It shall be designed to be portable - either capable of fitting inside a 'moving van' or else containing wheels and capable of being attached to the back of a car (similar to a motorhome or RV).



Complex Technology Readiness Level (TRL) Assessment of Clinic Pipeline

Top 120+
R&D Topics
TRL 4-7



Technology Readiness Level (TRL) scoring is a measure of overall market readiness from 1 (highly conceptual) to 9 (already commercialized on the market)

Precision Medicine Clinic Pipeline Benchmarking



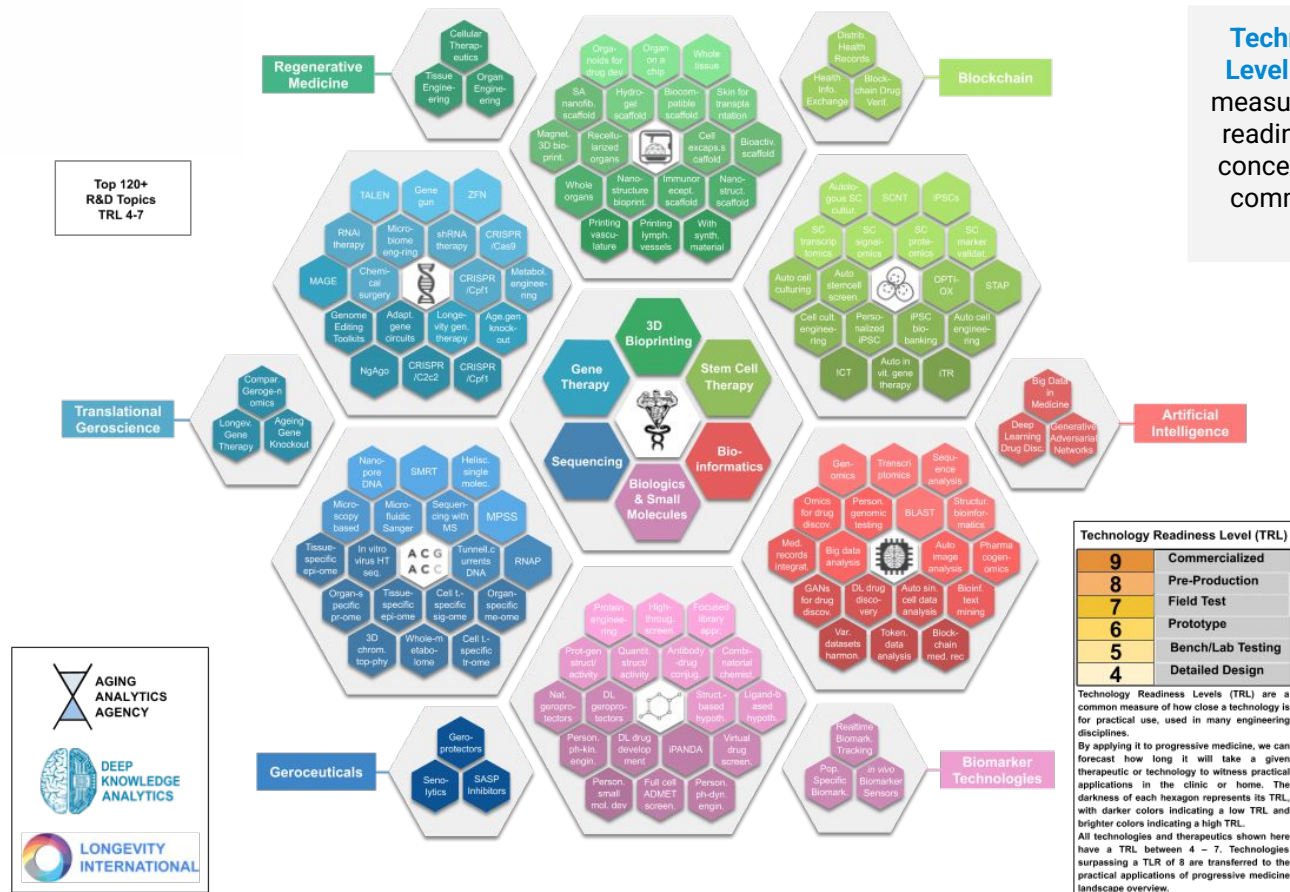
Technology Readiness Level (TRL)	
9	Commercialized
8	Pre-Production
7	Field Test
6	Prototype
5	Bench/Lab Testing
4	Detailed Design

Technology Readiness Levels (TRL) are a common measure of how close a technology is for practical use, used in many engineering disciplines.

By applying it to progressive medicine, we can forecast how long it will take a given therapeutic or technology to witness practical applications in the clinic or home. The darkness of each hexagon represents its TRL, with darker colors indicating a low TRL and brighter colors indicating a high TRL.

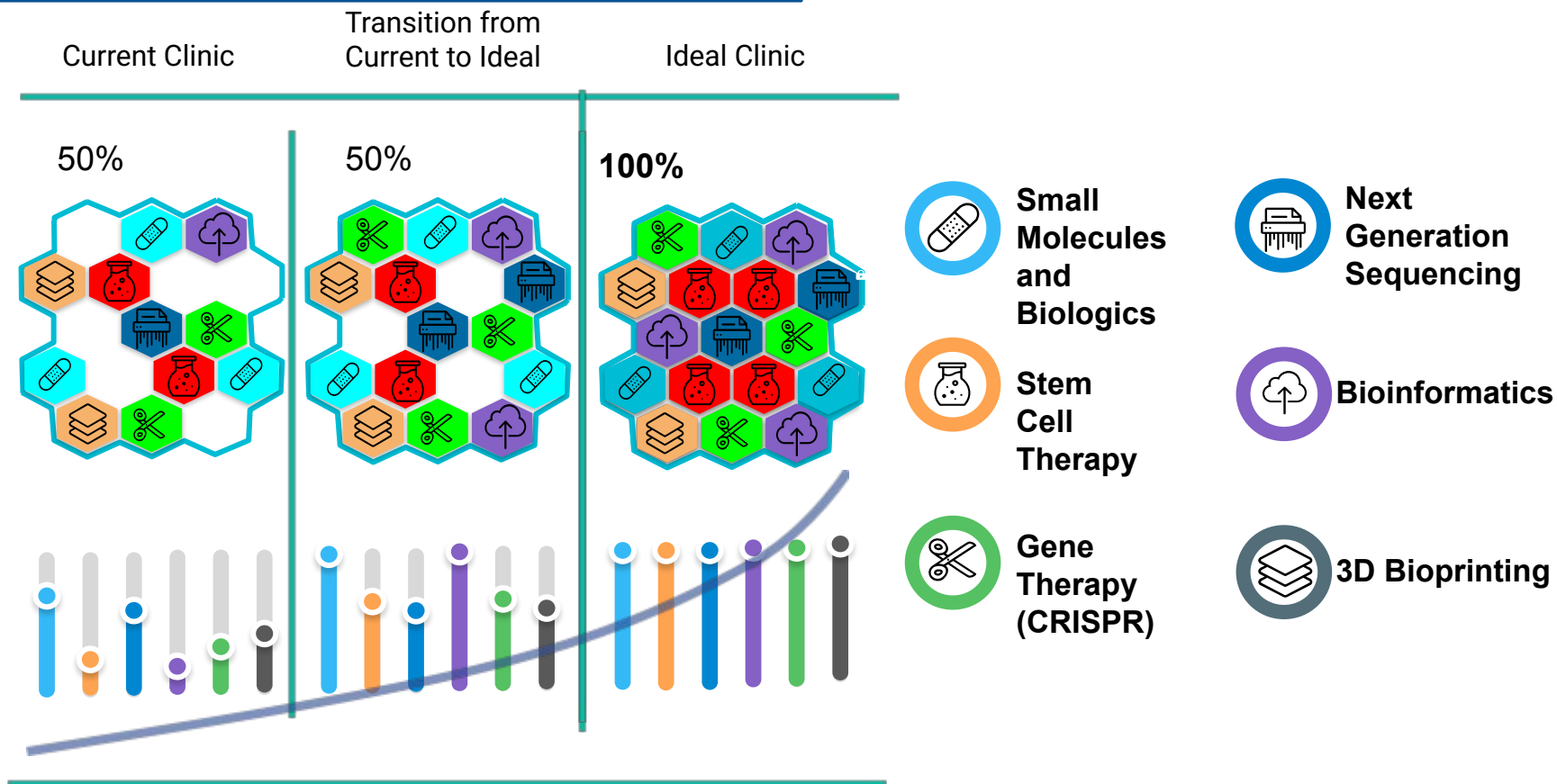
All technologies and therapeutics shown here have a TRL between 4 – 7. Technologies surpassing a TLR of 8 are transferred to the practical applications of progressive medicine landscape overview.

Innovation Monitoring System: Forecasting Protocols Approaching Market Readiness



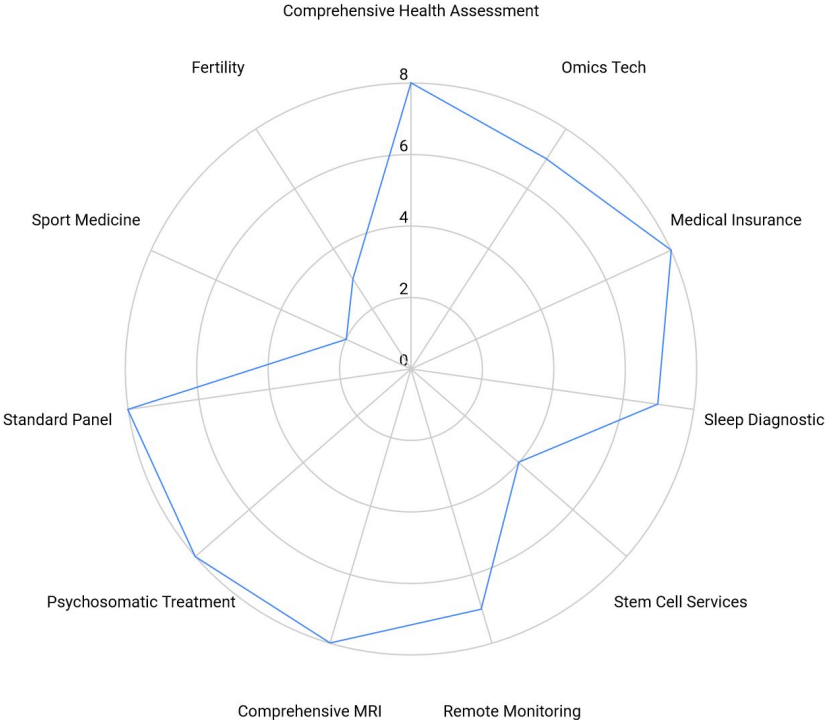
Technology Readiness Level (TRL) scoring is a measure of overall market readiness from 1 (highly conceptual) to 9 (already commercialized on the market)

Roadmap Optimization: Forecasting Protocols Approaching Market Readiness

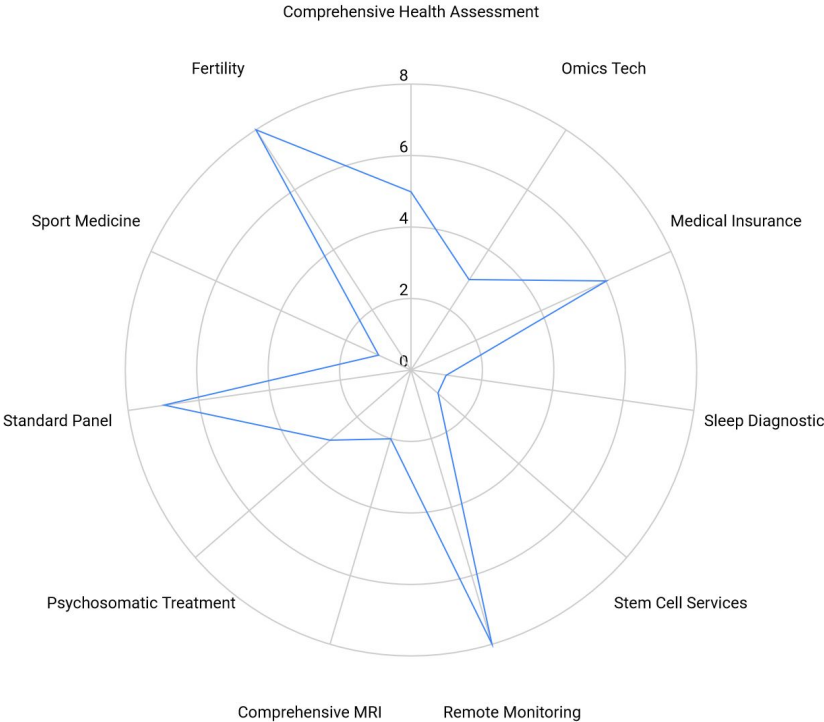


End-to-End SWOT Analysis of Clinics

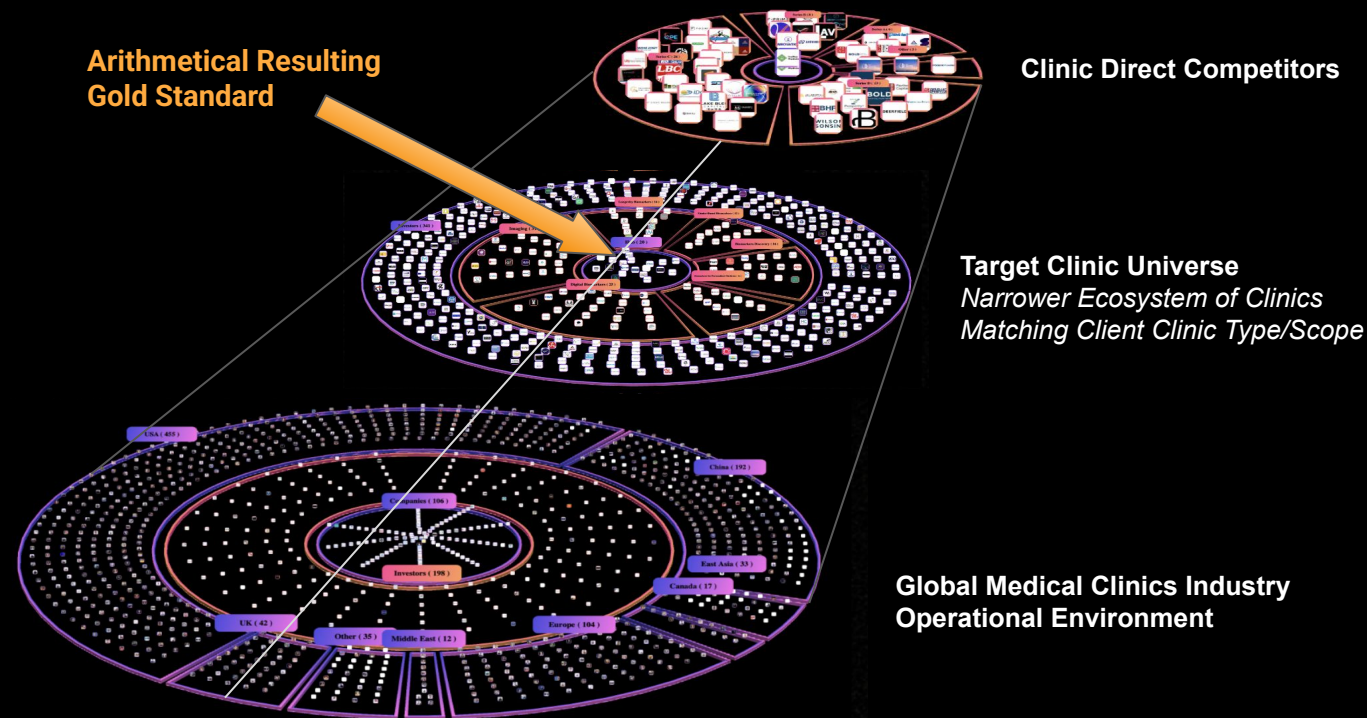
Longevity Clinic SWOT Analysis



Precision Medicine Clinic SWOT Analysis



End-to-End SWOT Analysis of Clinics



A targeted, qualified shortlist of clinic competitors is obtained by first mapping the full operation environment of the Global Medical Clinics Industry, and then filtering the subset of clinics that match the client according to clinical type and scope.

Narrow targeting then enables identification of the direct competitors of the clinic; however, parallel analysis of the full Global Medical Clinics industry also enables identification of gold standards and best practices both from similar and dissimilar clinics (e.g., obtaining clinical pipeline adjustment recommendations from related clinics but marketing strategy from gold-standard global clinics).

Longevity Clinic AI-Copilot

In the rapidly evolving field of longevity healthcare, the Big Data Analytics Driven Copilot stands at the forefront, transforming the landscape with its cutting-edge approach.

This AI-powered system is not just a tool; it's a partner in navigating the complexities of modern healthcare protocols and solutions, ensuring that clinics and patients alike receive the most advanced and effective treatments available.

Data-Driven Decision Making

Market Intelligence

Predictive Analysis

Interactive Dashboards

In the truly modern clinic, the development of protocols should include AI-driven analysis of the best practices of competitors

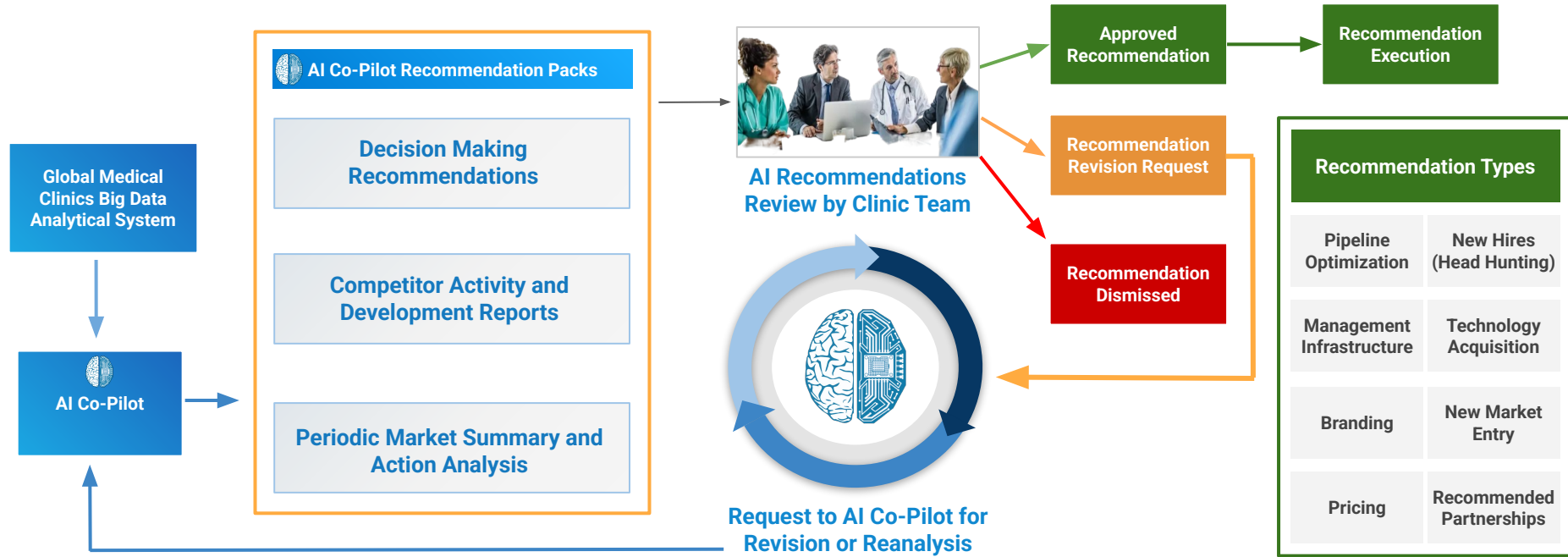
The Copilot maximizes big data's impact on market intelligence, providing clinics with a deep understanding of market trends

At its core, the Copilot utilizes machine learning algorithms for predictive analysis to anticipate global medical clinics development trends

The Copilot implements interactive dashboards, to make complex data understandable at a glance

AI Augmentation Medical Clinic Intelligence: Doctor + AI Hybrid Synergy

Longevity Club's AI-augmented hybrid solution is designed to provide both doctors (clinic practitioners) and executives (clinic owners and decision makers) with an end-to-end hybrid solution to augment and enhance their strategic and day-to-day operations.



The system serves both as a virtual second layer to clinic services by clients, as well as a data-driven AI recommendation system to optimize clinic operations according to monitoring and analysis of the global medical clinics industry landscape.

LC 3 (DKG Longevity Clinic N3)

DKG Static Longevity Clinic

This blueprint is similar in scope to GMC 1 (Longevity Clinic N4), but with a slightly expanded scope of equipment configurations, protocols and corresponding AI Co-Pilots which encompass:

- (1) a greater intensivity of treatment across all use-cases (Longevity, disease treatment and management, etc)
- (2) the same use-cases and treatment modalities as ILB 1, including neurocognitive performance enhancement equipment and protocols.

In simplistic terms, it can be considered as a more intensive version of GMC 1 with added infrastructure to enable neurocognitive performance enhancement.

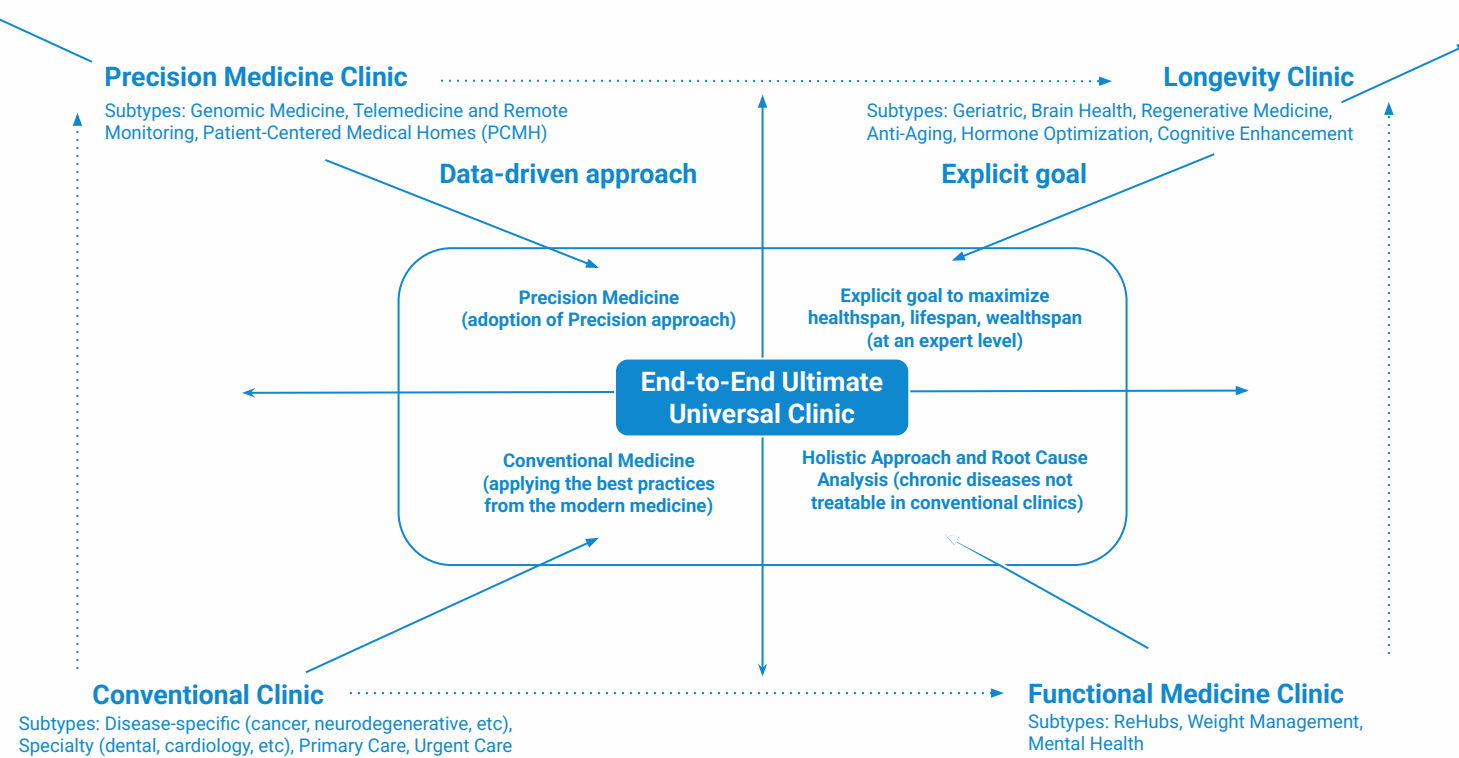
Compared to GMC 1, it places a proportionally greater emphasis on H⁵I²T (Hypoxic, Hyperoxic, Hypercapnia, Hypocapnia High-Intensity Interval Training)-derived protocols for enhancing neuro-performance and cognitive function, particularly for advanced professionals who face extraordinary cognitive demands.



Personalized treatment plans
Improved disease prediction

Clinics Logical Analytical Framework

Extended lifespan potential
Enhanced quality of life



Established treatment protocols
Widely accessible care

*All clinics can have additional labeling for patient specificity
(women/men/pediatric/elderly people/veterinary)*

Holistic health approach
Root cause analysis
Personalized wellness plans

Specialized Clinics Framework

Improved mental performance
Personalized brain training

Improved well-being
Stress reduction techniques

Neurohacking Clinic

Subtypes: Biofeedback training, nootropic supplementation, transcranial magnetic stimulation (TMS), BCI, neurofeedback therapy

Cognitive enhancement

Longevity Rehabilitation Clinic

Subtypes: Coastal wellness retreats, mountain longevity resorts, thermal Spa centers, forest healing Camps

Wellness

Neurohacking
(cognitive enhancement)

Longevity rehabilitation
(at an expert level)

**End-to-End Ultimate
Universal Clinic**

Clinics anti-ranking
(applying bad, unproven
or harmful practices)

Pets Longevity
(lifespan and healthspan
extension for pets)

Clinics anti-ranking

Subtypes: Mismanagement issues, patient dissatisfaction, inadequate facilities, staff incompetency, unethical practices

Pets Longevity Clinic

Subtypes: nutritional counseling, physical rehabilitation, anti-aging supplements, regenerative therapies

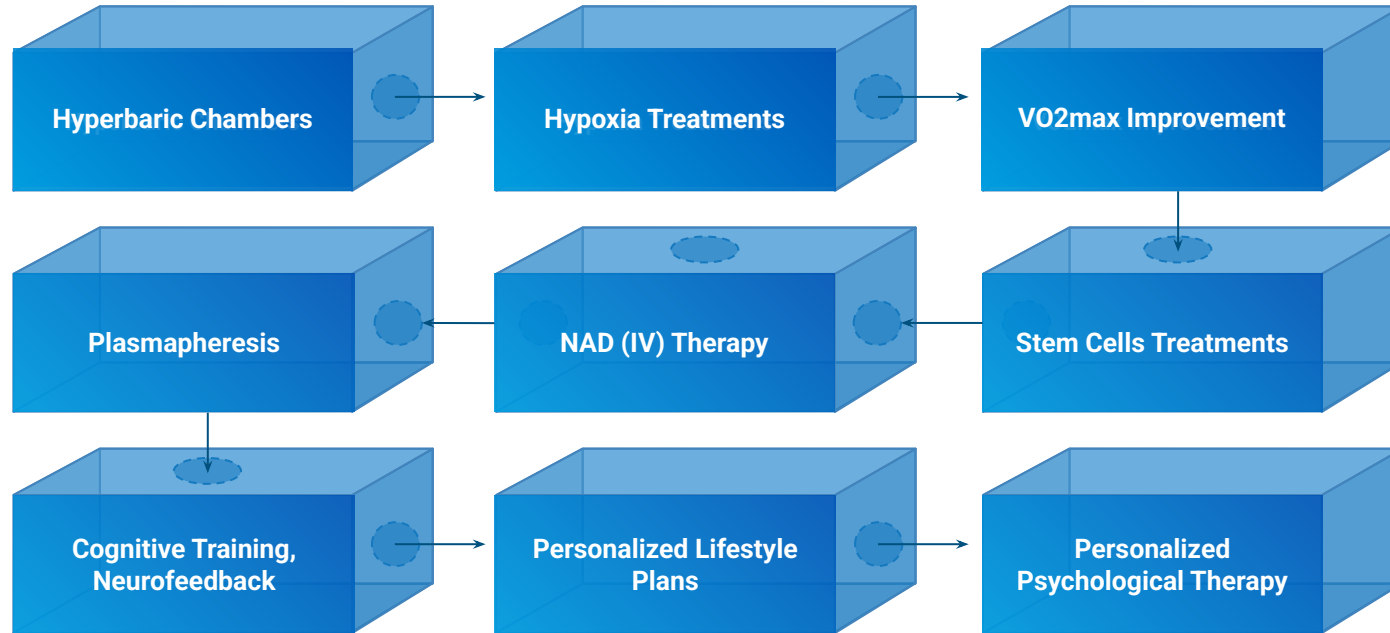
Clinics much more focused on marketing
instead of Longevity Medicine

*All clinics can have additional labeling for patient specificity
(women/men/pediatric/elderly people/veterinary)*

Extended pet lifespan
Improved animal health
Enhanced quality of life

Advanced Treatment

Explore evidence-based [Treatment Options](#) that extend beyond longevity, making them adaptable for various clinic types. From traditional to cutting-edge interventions, [Longevity Clinic Blueprint](#) caters to diverse health needs, including those addressed by Precision Medicine and related specialties.



MRI Scans

Whole-body MRI is an advanced imaging technique that provides a comprehensive examination of all organs and tissues simultaneously, enabling the detection of even small tumors and metastases. This non-invasive tool offers extensive data for early disease detection, making it invaluable in healthcare.

During the scan, various body parts are covered, including the brain, blood vessels supplying the brain (circle of Willis), heart muscle and valves, heart function, aortic distensibility, and central arteries and organs of the abdomen (such as the liver, spleen, pancreas, kidneys, and gallbladder). Additionally, the scan assesses the central arteries and organs of the pelvis, including the bladder, womb, and ovaries in females, and the prostate in males. The spine is also examined, including the cervical, thoracic, and lumbar regions.

An annual **full-body MRI is recommended for optimal health assessment**. However, targeted scans can be conducted as an alternative, focusing on specific areas of concern. Overall, whole-body MRI is a valuable tool for comprehensive health evaluation and early detection of potential health issues.

Brain

Aortic
distensibility

Blood vessels
supplying brain
(circle of Willis)

Central arteries
and organs of the
abdomen

Heart muscle
and valves

Central arteries
and organs of the
pelvis

Heart function

Spine

Inflammation: When the body encounters **foreign substances or injuries** the immune system initiates an inflammatory response, which can manifest as visible signs like **pain, swelling, bruising, or redness**. However, inflammation also affects internal body systems that may not be immediately observable.

Inflammation can be recognized clinically by 5 cardinal signs: rubor (redness), calor (warmth), tumor (swelling), dolor (pain), and functio laesa (loss of function). These clinical signs can be explained by the biochemical and cellular processes activated during the inflammatory response.

What's the difference between acute inflammation and chronic inflammation?

Acute inflammation occurs in response to sudden body damage, such as a cut or injury, where inflammatory cells are dispatched to initiate the healing process. This type of inflammation typically lasts for a short duration, ranging from hours to days.

On the other hand, **chronic inflammation** involves the continued activation of inflammatory cells in the absence of external threats. In conditions like rheumatoid arthritis, this persistent inflammation can lead to recurring joint inflammation and damage, causing prolonged pain and tissue destruction. Chronic inflammation is characterized by its long-term nature, persisting for months to years.

Inflammaging

1

Cell Senescence

2

Gut dysbiosis

3

Immuno-senescence

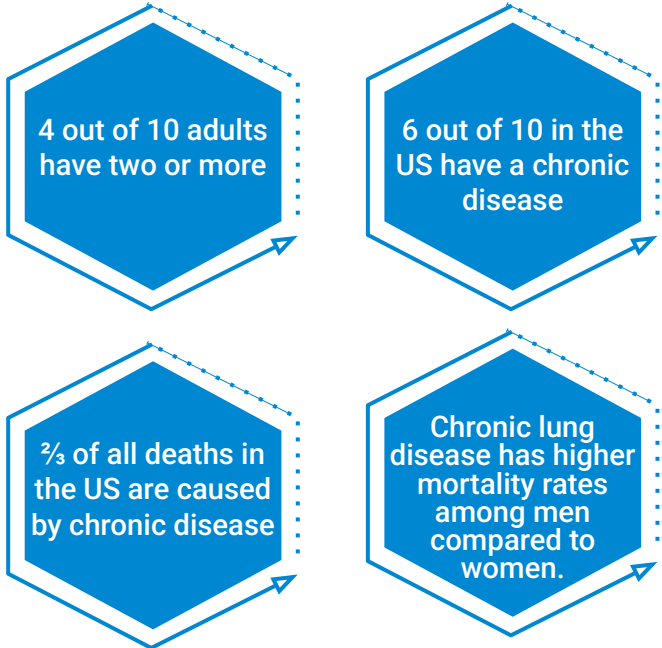
4

Cell debris

5

Pro-Coagulation factor

Timely Treatment of Chronic Diseases



4 out of 10 adults
have two or more

6 out of 10 in the
US have a chronic
disease

$\frac{2}{3}$ of all deaths in
the US are caused
by chronic disease

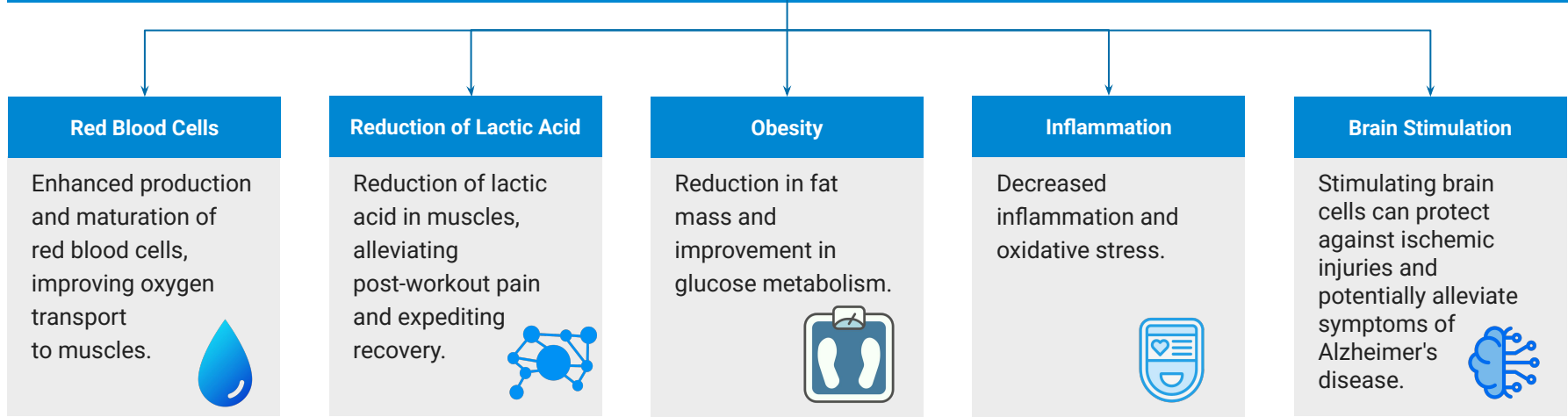
Chronic lung
disease has higher
mortality rates
among men
compared to
women.

Chronic diseases are defined broadly as conditions that last 1 year or more and require ongoing medical attention or limit activities of daily living or both. Chronic diseases such as **heart disease, cancer, and diabetes** are the leading causes of death and disability in the United States. They are also leading drivers of the nation's **\$4.1 trillion** in annual health care costs. The economic impact of chronic disease is significant. Preventing even a small percentage of chronic diseases would save the United States economy billions of dollars in lost productivity, disability, health care costs and premature death.

There is strong evidence that the development of age-related multi-factorial conditions such as **cancer, cardiovascular disease, Alzheimer's disease, type II diabetes, frailty, sarcopenia, and osteoporosis** is associated with low-grade elevations of circulating inflammatory mediators. Considering that **aging** is a complex process that results from a combination of environmental, genetic, and epigenetic factors, focusing future work on interventions addressing selectively destroying senescent cells, namely, "**senolytic therapies**" in the aging host rather than by treating symptoms of disease or attempting to block the effects of the multi-source of inflammaging, will offer improved therapeutic opportunities.

Timely Treatment of Chronic Diseases

Intermittent hypoxia hyperoxia therapy (IHHT) increases erythropoietin (EPO) levels to provide various physiological benefits, promote cardiovascular health and prevent chronic diseases.



IHHT is a potential treatment option for **Lyme disease**. The therapy aims to create an oxygen-rich environment to fight the bacteria that thrive in low-oxygen conditions. It can alleviate symptoms of chronic Lyme disease, but its effectiveness as a standalone treatment or in combination with antibiotics is still unclear.

Naturally, **hypoxia and hyperoxia** are accompanied by complications. However, modern science shows that hypoxia and hyperoxia possess benefits when supplied under controlled normobaric conditions, most commonly during **intermittent hypoxic-hyperoxic training**. Making informed decisions comes with a proper insight into SWOT (Strengths, weaknesses, opportunities, threats) and cost-benefit analysis of techniques and technologies for normobaric hypoxic-hyperoxic training.

The reduction or absence of oxygen leads to **hypoxia**, which is characterized by the insufficiency of oxygen in the tissues. On the other hand, oxygen could be present, but if found in alarmingly toxic levels, this would lead to a condition referred to as hyperoxia which is characterized by the excess supply of oxygen to the tissues.

Hyperoxic-hypoxic normobaric technologies and approaches can not be fully utilized by everyone without knowing the products that match your goals and budget.

As a result, there is always a need to analyze the cost-benefit and strengths, weaknesses, opportunities, and threats (SWOT) of these technologies and approaches.

Cardiovascular Health



- Blood Pressure Regulation
- Cardiac Performance
- Vascular Function Enhancement
- Reduction of Cardiovascular Risk Factors

Neurological System



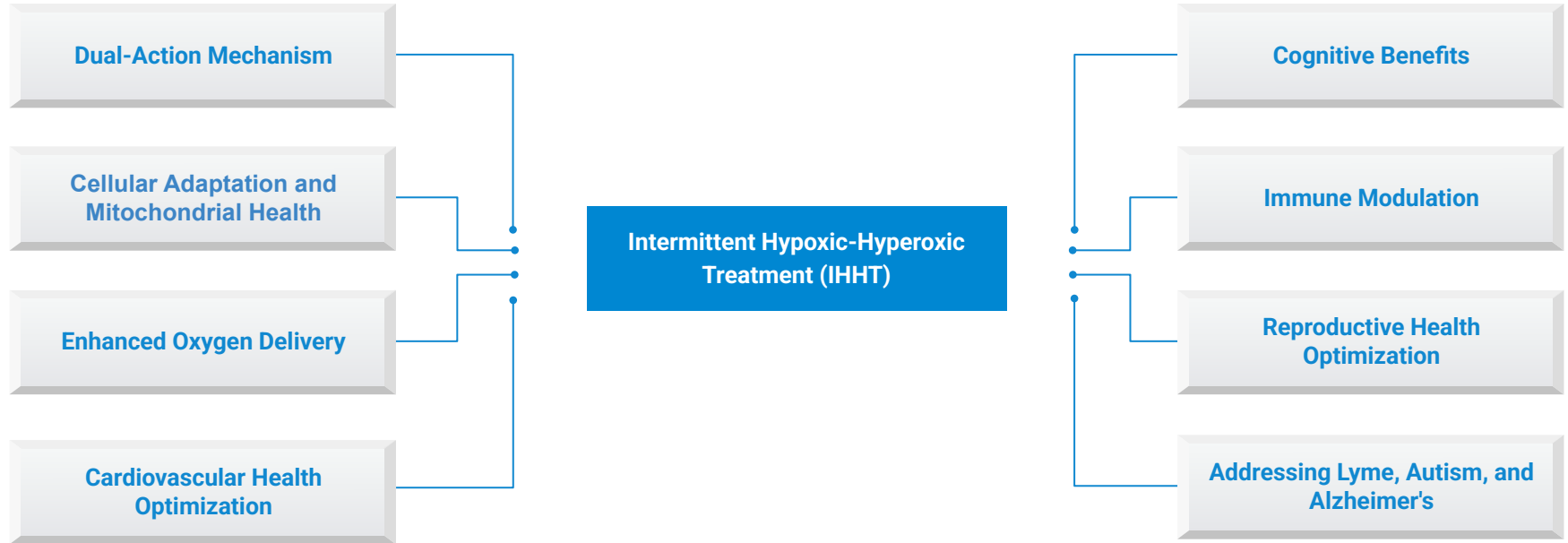
- Cognitive Function
- Neuroprotection
- Stress Response Regulation
- Neuroplasticity Promotion
- Neurotransmitter Modulation

Diabetes and Metabolic Health



- Insulin Sensitivity Improvement
- Glucose Metabolism Enhancement
- Reduced Metabolic Stress
- Inflammation Reduction
- Weight Management Support

IHHT Advantages



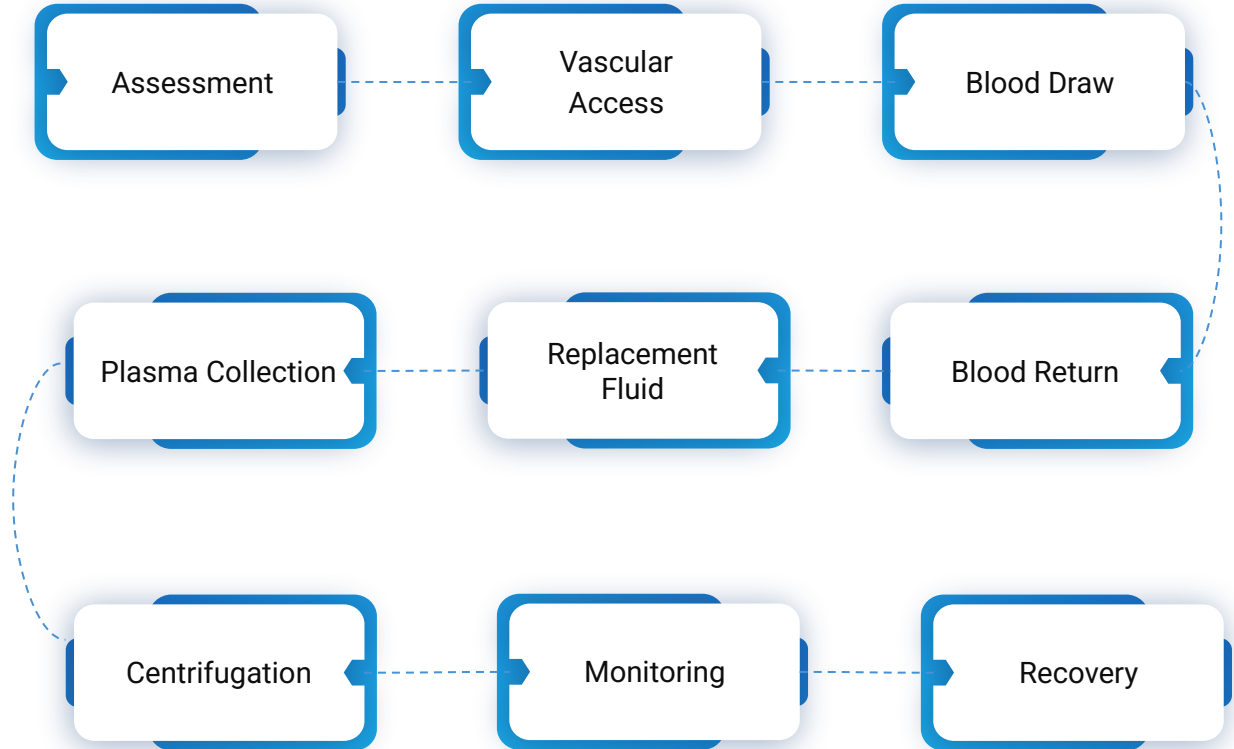
Intermittent Hypoxic-Hyperoxic Treatment (IHHT) marks a groundbreaking advancement in longevity medicine. It alternates exposure to reduced oxygen levels (hypoxia) and increased oxygen levels (hyperoxia), offering a novel approach to enhance overall health, promote longevity, and address various health challenges such as Lyme disease, reproductive issues, cardiac, and brain health.

Plasmapheresis

Plasmapheresis is a medical procedure that involves separating plasma from the blood, and the remaining components are then returned to the body. Here's a step-by-step breakdown of the process:

Plasmapheresis is used to treat **various medical conditions**, including:

- Guillain-Barré Syndrome (GBS)
- Myasthenia Gravis
- Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)
- Lupus (Systemic Lupus Erythematosus)
- Thrombotic Thrombocytopenic Purpura (TTP)
- Cryoglobulinemia
- Certain Forms of Neuropathy
- Certain Types of Glomerulonephritis
- Familial Hypercholesterolemia
- Certain Poisonings or Overdoses



GMC 1 (Longevity Clinic N4)

Gold Standard for Conventional Longevity Clinic

Representing the ideal product and service pipeline for the ideal Longevity, Functional Medicine and Neurocognitive Performance Enhancement Clinic.

This blueprint was created on the basis of benchmarking of Global Longevity and Functional Medicine Clinics and Medical Protocols (as part of Global Medical Clinics Project).

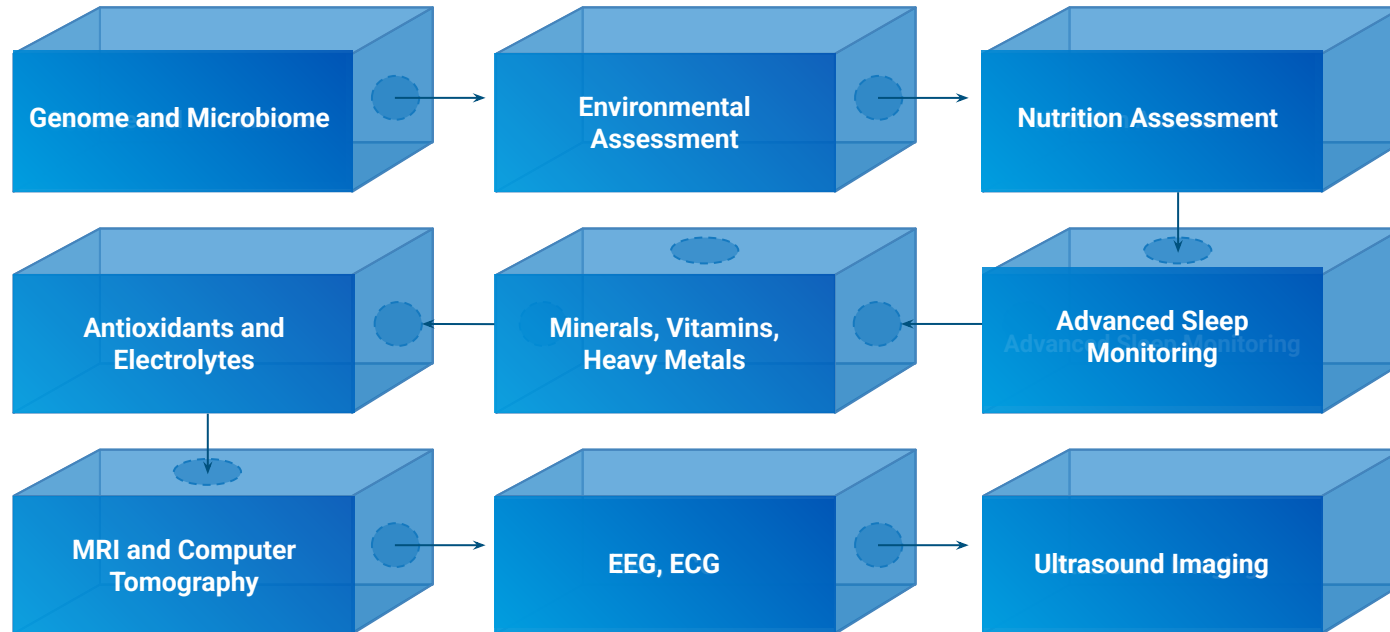
It also integrates elements from several stealth and semi-stealth DKG Life Sciences Division Projects (Global Health Challenge and Health Trillionaires, and with a substantial portion of the blueprint deriving in a top-down manner from protocols which DKG has already validated (e.g., H⁵¹²T), including Deep Knowledge Group General Partner Dmitry Kaminskiy's own Personal Blueprint.

The final blueprint encompasses both the full set of components constituting an ideal Longevity Clinical pipeline, as well as the blueprint for constructing/assembling an ideal Longevity Clinic.



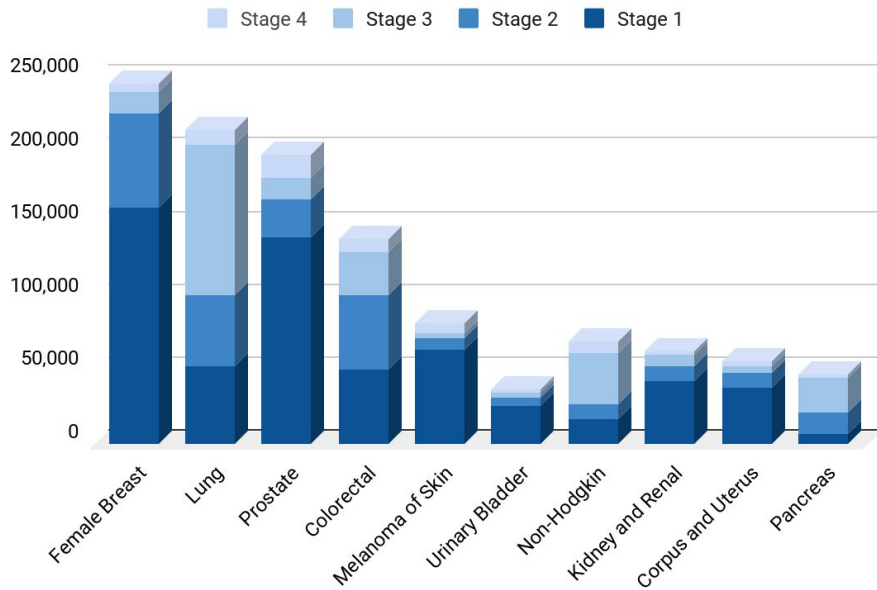
Advanced Diagnostics

Early detection of diseases is vital, and various **diagnostics** can help gather comprehensive health data. These diagnostics can range from home testing and wearable gadgets to **advanced lab assessments and medical screenings** using biomarker panels. Understanding the body's internal changes and susceptibility to illnesses is essential for prevention.



Longevity Checkups

Average Annual Number of New Cancer Cases
by Cancer Type and Stage



Stage 1: Cancer is localized, meaning it is present only in the organ or tissue where it started. Abnormal cells have begun to divide. Treatment at this stage is often highly effective, with a high chance of cure.

Stage 2: Cancer is still localized but has grown and may have started to spread into nearby tissues or lymph nodes. The size of the tumor and the extent of its spread are directly related. Treatment at this stage typically involves surgery, and possibly chemotherapy.

Stage 3: Cancer is considered to be locally advanced. It has spread further into nearby tissues, lymph nodes, or organs. Treatment is more aggressive and may include a combination of surgery, radiation, and chemotherapy.

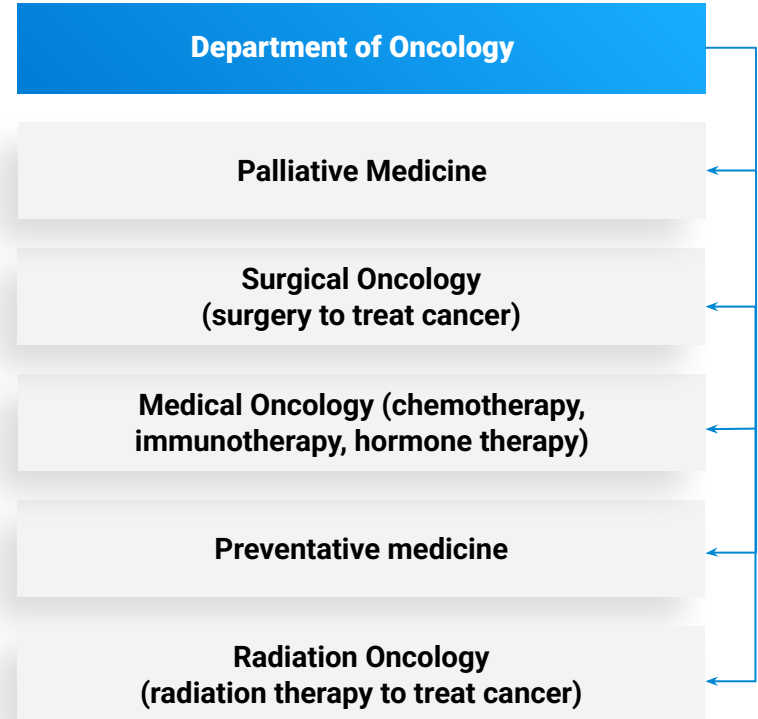
Stage 4: Cancer has spread to distant parts of the body, such as the lungs, liver, or bones. Treatment at this stage focuses on managing symptoms and improving quality of life. It may include chemotherapy, radiation, surgery, and other therapies to slow the progression of the disease.

Early diagnosis is crucial because **treatment is most effective** in the early stages when cancer is localized and has not spread. Regular screenings and awareness of symptoms are key to detecting cancer early and improving outcomes.

Advanced Diagnostics

Cancer is a complex disease with over 200 types, often caused by a combination of genetic factors, exposure to chemicals, and lifestyle choices. **Advances in genetic and biochemical testing have transformed cancer prognosis from dire to manageable.** Regular oncology panel screenings can help reduce the risk by identifying genetic abnormalities, some of which may be hereditary. Simple saliva tests can detect cancer early, while specialized oncopanels improve diagnosis and treatment outcomes. Knowing if you have a genetic mutation enables you to ensure appropriate regular screenings and investigations are undertaken. It's important to note that many mutations are hereditary, so **if you have a mutation, there is a 50% chance that your siblings and children may also have it.**

At the **Longevity Clinic** we offer a **wide range of diagnostic tools, including genomics, microbiomics, and various imaging techniques.** While **full-body MRI scans** may not always be affordable for everyone, we provide alternative options and personalized concierge services to ensure that our clients have access to comprehensive diagnostics tailored to their specific needs. Our goal is to provide **advanced diagnostic solutions that empower individuals to take control of their health and well-being.**



Longevity Treatments

Intermittent Hypoxic-Hyperoxic Treatment (IHHT)

Dual-Action Mechanism

IHHT operates on a dual-action mechanism, leveraging both hypoxic and hyperoxic states to induce physiological responses. The intermittent shifts in oxygen levels stimulate adaptive processes within the body, promoting resilience and contributing to longevity.

Cellular Adaptation and Mitochondrial Health

The intermittent exposure to hypoxia prompts cellular adaptation, enhancing mitochondrial function. This adaptation is crucial for optimising energy production within cells, supporting overall cellular health, and potentially slowing down the ageing process.

Enhanced Oxygen Delivery

The hyperoxic phases of IHHT enhance oxygen delivery to tissues and organs, promoting improved circulation, tissue repair, and overall well-being. This addresses health challenges linked to Lyme disease, certain forms of autism, and Alzheimer's.

Mitochondrial Medicine

Neuroprotective Benefits

The brain's high energy demand makes it particularly vulnerable to mitochondrial dysfunction. Mitochondrial Medicine incorporates neuroprotective measures to enhance mitochondrial health, potentially reducing the risk of neurodegenerative conditions and promoting cognitive longevity.

Personalized Mitochondrial Protocols

Recognizing the individual variations in mitochondrial function, Mitochondrial Medicine emphasizes the development of personalized protocols. Tailored to each patient's unique mitochondrial profile, these protocols ensure precise interventions for optimal results.

Integrating Nutritional Approaches

Nutrition plays a pivotal role in mitochondrial function. Mitochondrial Medicine integrates targeted nutritional approaches, emphasizing micronutrients and antioxidants crucial for supporting mitochondrial health and cellular vitality.

Longevity Treatments

Difference between IHHT and hyperbaric chamber

Methodology

IHHT alternates between reduced and increased oxygen levels, while hyperbaric chambers provide constant high-pressure oxygen.

Application

IHHT is non-invasive, whereas hyperbaric chambers require pressurization.

Duration

IHHT sessions are shorter and may require fewer treatments compared to hyperbaric chambers.

Benefits

IHHT is believed to stimulate adaptive responses in the body, offering broader health benefits.

Specificity

IHHT is believed to stimulate adaptive responses in the body, offering broader health benefits.

Intermittent Hypoxic - Hyperoxic Treatment



Hyperbaric Chamber



Longevity Real Estate Blueprints

LRE 1 - 4

LRE 1 (Longevity Home N1)

DKG Modular Home - The ideal Longevity-optimizing home, built small for price and efficiency.

This blueprint will be similar in scope, function and assembly to LRE 2, but slightly smaller in scope (due to smaller available square footage to fit components into), with a broader suite of equipment options (Pillar 2), and a slightly different scope of environmental and material hazards to be neutralized (Pillar 1), but an overall similar composition of Blueprints and Protocols (Pillar 3) and AI Co-Pilots (Pillar 4).

Importantly, this blueprint will reflect the construction of a Longevity-optimized modular home, similar (but slightly smaller) in dimensions to a standard sea shipping container (6m x 2.5m x 2.5m).

Analogous equipment assemblies corresponding to each individual room within LRE 2 will be modularly integrated with the home's walls, and provide similar functionalities.

The modular home will itself be modularly constructed such that individual modules or cubic panels (integrated assemblies serving a specific purpose and corresponding to LRE 2 rooms - Kitchen, Sleeping Room, Longevity Biohacking Room, etc) can be plug-and-play removed and added to the full modular home assembly via connection and disconnection from the modular home walls.



Longevity Biohacking Room



Longevity Sleeping Room



Longevity Suitcase (Mobile Blueprint



Longevity Home Blueprint

Longevity Kitchen



LRE 2 (Longevity Home N2 - Longevity Apartment)

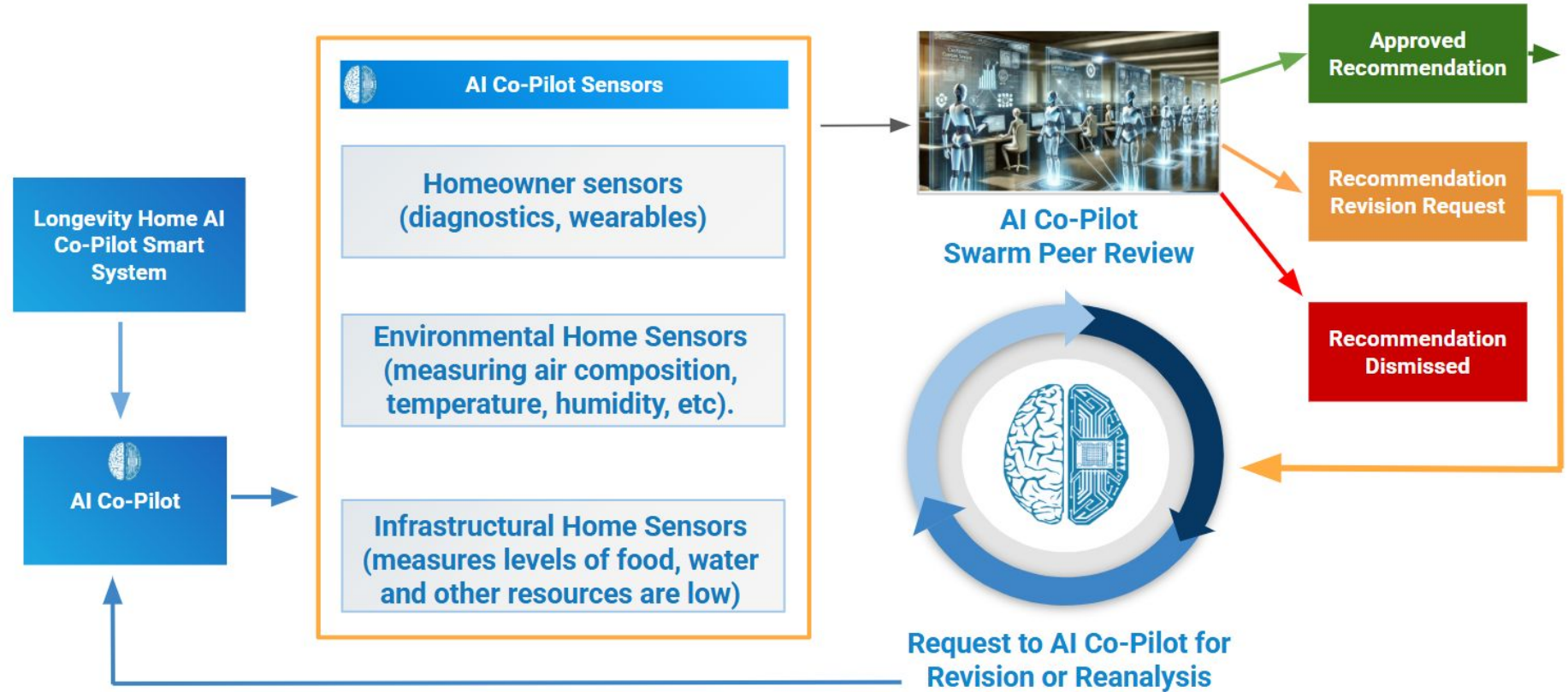
This blueprint corresponds to the ideal compositional pipeline of equipment, material and spatial/organizational construction (architecture), perishable materials/resources (food, water, air), techniques, and hybrid physical and virtual infrastructure constituting the ideal Longevity Apartment (an apartment optimized to service the needs of the owner's health, Longevity, wellness and neurocognitive performance).

This blueprint defines the full set of components constituting an ideal Longevity Apartment, as well as the blueprint for constructing an ideal Longevity Apartment. At a very minimum, it will correspond to the Longevity Home Blueprint Framework and include room-specific Blueprints for a Longevity Biohacking Room, Longevity Kitchen, Longevity Sleeping Room and Longevity Suitcase (Mobile Blueprint), and a specific configuration of AI Co-Pilots (as a fundamental component) coordinating the owner's interaction with the Apartment's equipment.

Importantly, there will be two major Product Variants of this blueprint: B2B (the product as it has been described above), and B2C (which will be a software system available on subscription basis where users can upload photos and blueprints / schematics of their apartment, and the system will provide costed options and structured recommendations on how they can transform their apartment into a Longevity apartment, complete with pricing and potential equipment and service suppliers).



Longevity Apartment AI Co-Pilot Integration



Longevity Home Pillars

1. Neutralizing Environmental and Material Hazards in the Home



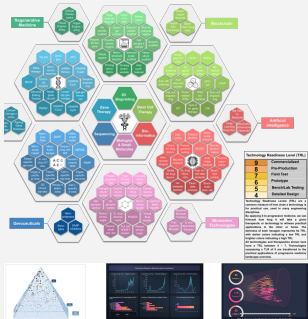
Pillar 1: Protecting home from internal and external hazards (electromagnetic, material and chemical), and optimizing air and water within the home

2. Equipping Home with Health and Longevity Equipment



Pillar 2: Installing Health, Longevity and Performance enhancing equipment and hardware in the home (diet, exercise, medical, diagnostic, wellness, sleep, lifestyle, cognitive, social, etc)

3. Blueprints and Protocols

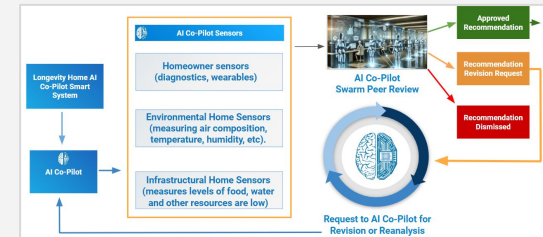


Pillar 3: Blueprints and Protocols that define how the home's hardware and software are integrally applied to Health, Longevity and Performance. Each room has its own Blueprint, applied and adjusted in real-time by AI Co-Pilots equipped with sensors

Longevity Home

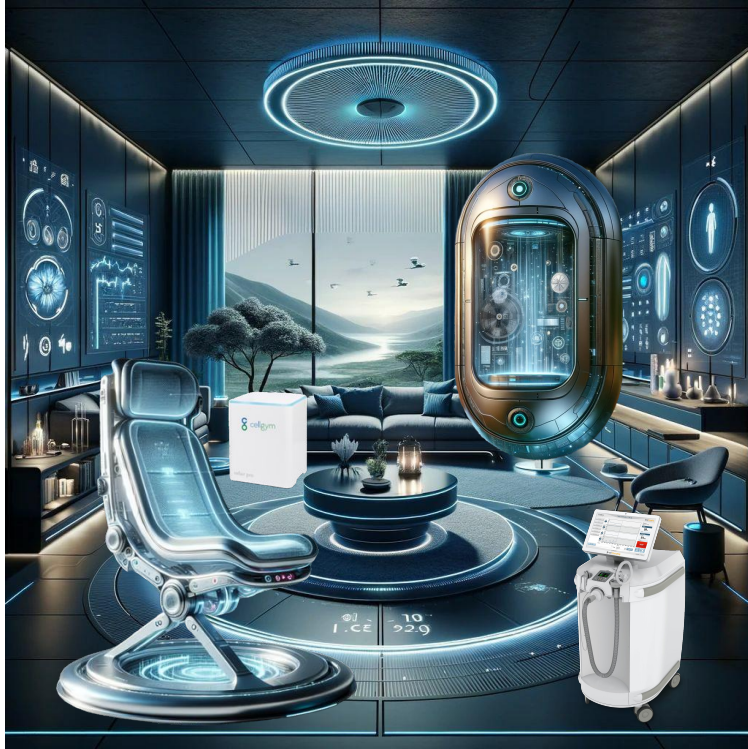
4. AI Copilots

Pillar 4: AI Co-Pilots that apply blueprints and protocols in real time.



Each blueprint has its own AI Co-Pilot for real-time adjustment according to IoT sensors (homeowner diagnostics and wearables and ambient home sensors)

LRE 1-2 Sub-Blueprint: Longevity Biohacking Room



The Longevity Biohacking Room Blueprint transforms the home's most commonly-occupied living spaces into an ergonomic system for Health, Longevity and Performance Enhancement through a combination of AI Co-Pilot-guided, executed and adjusted equipment.

Featuring diagnostic and prognostic tools and cabinets, non-intrusive and easily storable medical devices and at-home therapies, both light, medium and intensive stow-away home exercise modules, and 'lite' versions of other more intensive diet, exercise and rest equipment found in other rooms within the Longevity Home, the Longevity Room is the meeting-point of all other room-specific Longevity Home blueprints and protocols.

With equal focus on Health, Performance and Longevity, most of its equipment is easily stowable, its permanent fixtures also serve as stylish design elements, and the entire system is guided by IoT and sensor-connected AI Co-Pilots which adjust their real-time recommendations and specific protocol compositions according to homeowner sensors (e.g. wearables) and smart-home sensors.

Types of Longevity Room Practices

Diagnostic and Monitoring Practices

High-frequency Testing

Body Composition
Analysis

AI-Powered Monitoring
Devices

Biomarkers Assessment

Cardiovascular Monitoring

Sleep Tracking

Treatment and Therapy Procedures

IV Treatments

Hormone Replacement
Therapy

Intermittent Hypoxic -
Hyperoxic Treatments

Ozone Treatment

Nutritional Counseling

Light Therapy

Sports and Physical Well-being

Cardio Workouts

High-Intensity Interval
Training

Oxygen Therapy

Virtual Cycling or Running

Hyperbaric Breathing
Exercises

Smart Resistance Training

Cosmetology and Aesthetic Care

At-Home Facial
Treatments

Personalized Skincare
Routine

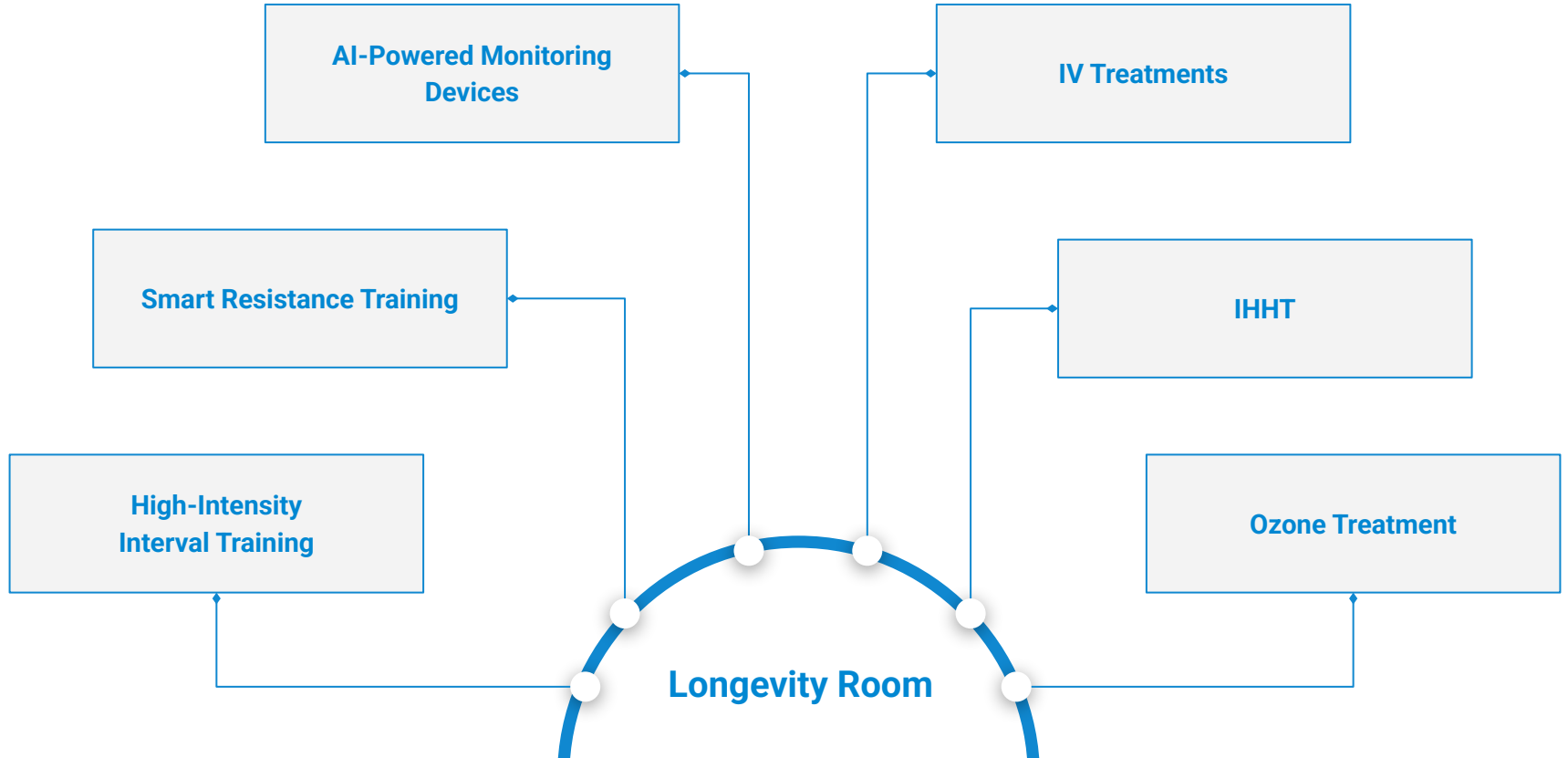
Electromagnetic
Stimulation

Dermoscopy for Skin
Analysis

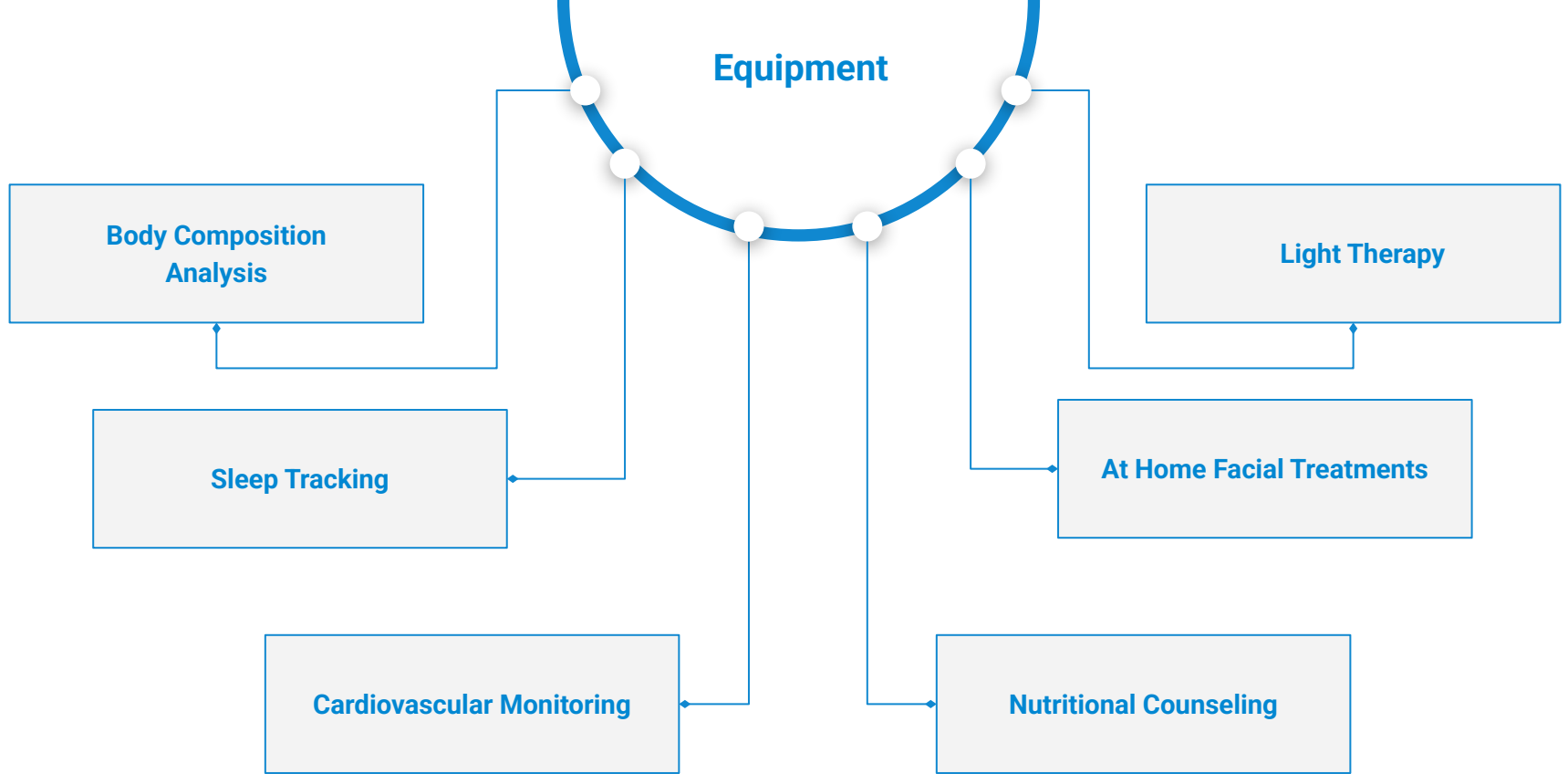
Microdermabrasion

Chemical Peels

Longevity Room Equipment



Equipment



Longevity Room Practices

Diagnostic and Monitoring Practices

Utilize advanced diagnostic tools, including genetic testing, body composition analysis, and AI-powered monitoring devices, to conduct comprehensive and accurate health assessments.

Treatment and Therapy Procedures

Explore a range of therapeutic procedures, encompassing IV treatments, hormone replacement therapy, and holistic interventions like acupuncture and meditation. This approach ensures a comprehensive focus on overall well-being.

Sports and Physical Well-being

Promote physical well-being by incorporating advanced equipment such as treadmills, oxygen therapy, and hyperbaric chambers. This supports optimal sports medicine practices and enhances overall physical fitness.

Cosmetology and Aesthetic Care

Indulge in personalized cosmetic and aesthetic care, featuring specialized equipment and expert services. This approach prioritizes relaxation, rejuvenation, and aesthetic well-being through a professional and tailored experience.

Longevity Room Blueprints



Types of Longevity Room Practices

Diagnostic and Monitoring Practices

Genetic Testing

Body Composition
Analysis

AI-Powered Monitoring
Devices

Biomarkers Assessment

Cardiovascular
Monitoring

Sleep Tracking

Treatment and Therapy Procedures

IV Treatments

Hormone Replacement
Therapy

Intermittent Hypoxic -
Hyperoxic Treatments

Ozone Treatment

Nutritional Counseling

Light Therapy

Sports and Physical Well-being

Cardio Workouts

High-Intensity Interval
Training

Oxygen Therapy

Virtual Cycling or
Running

Hyperbaric Breathing
Exercises

Smart Resistance
Training

Cosmetology and Aesthetic Care

At-Home Facial
Treatments

Personalized Skincare
Routine

Electromagnetic
Stimulation

Dermoscopy for Skin
Analysis

Microdermabrasion

Chemical Peels

Diagnostic and Monitoring

Genetic Testing - This practice involves analyzing an individual's DNA to identify genetic variations that may be associated with certain conditions or traits. It provides insights into one's genetic predispositions, helping assess the risk of specific health issues.

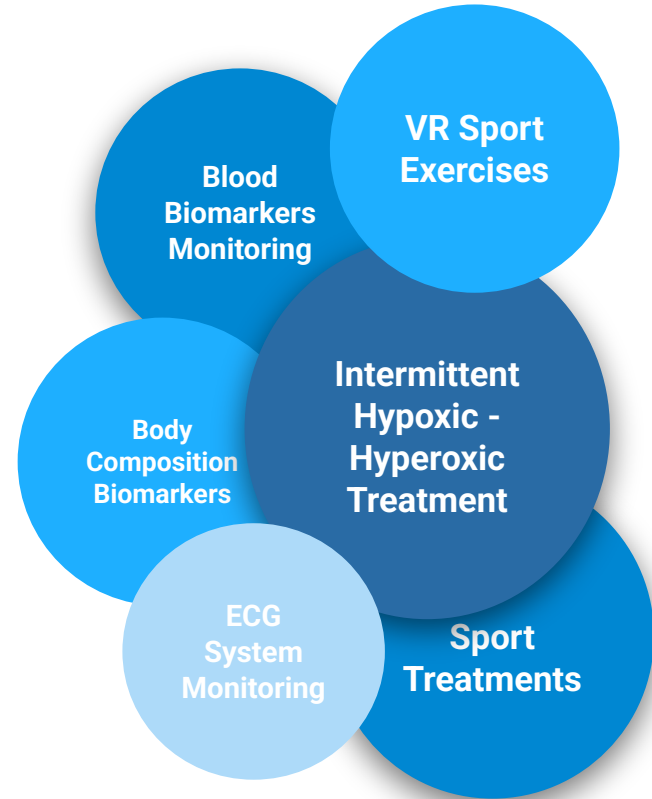
Body Composition Analysis - Using various methods like bioelectrical impedance or dual-energy X-ray absorptiometry (DEXA), body composition analysis measures the proportion of fat, muscle, and other tissues in the body. It aids in understanding overall health and fitness levels.

AI-Powered Monitoring Devices - Utilizing artificial intelligence, these devices continuously collect and analyze data related to health metrics such as heart rate, activity levels, and sleep patterns. They offer real-time insights and personalized recommendations to support overall well-being.

Blood-Based Biomarkers Assessment - This practice involves examining specific biomarkers present in the blood to assess various aspects of health. It can provide information on organ function, nutritional status, and potential risk factors for diseases.

Cardiovascular Monitoring - Focused on assessing heart health, cardiovascular monitoring involves tracking metrics like blood pressure, cholesterol levels, and electrocardiogram (ECG) readings. It aids in identifying and managing cardiovascular risks.

Sleep Tracking - Sleep tracking monitors and analyzes sleep patterns, including duration and sleep stages. It helps individuals understand their sleep quality, identify potential sleep disorders, and make adjustments to improve overall sleep health.



Treatment and Therapy

IV Treatments

IV treatments administer fluids, nutrients, and medications directly into the bloodstream for rapid absorption, addressing hydration, nutrient replenishment, and medical needs.

Hormone Replacement Therapy

Hormone Replacement Therapy supplements or replaces hormones to address imbalances related to aging or medical conditions, involving hormones like estrogen, progesterone, or testosterone.

Intermittent Hypoxia Treatments

Intermittent Hypoxia Treatments expose individuals to reduced oxygen levels, triggering adaptive responses for therapeutic purposes, promoting cardiovascular health or enhancing exercise performance.

Light Therapy

Light Therapy uses specific light wavelengths to treat conditions like mood disorders (e.g., SAD), skin issues, and sleep disorders.

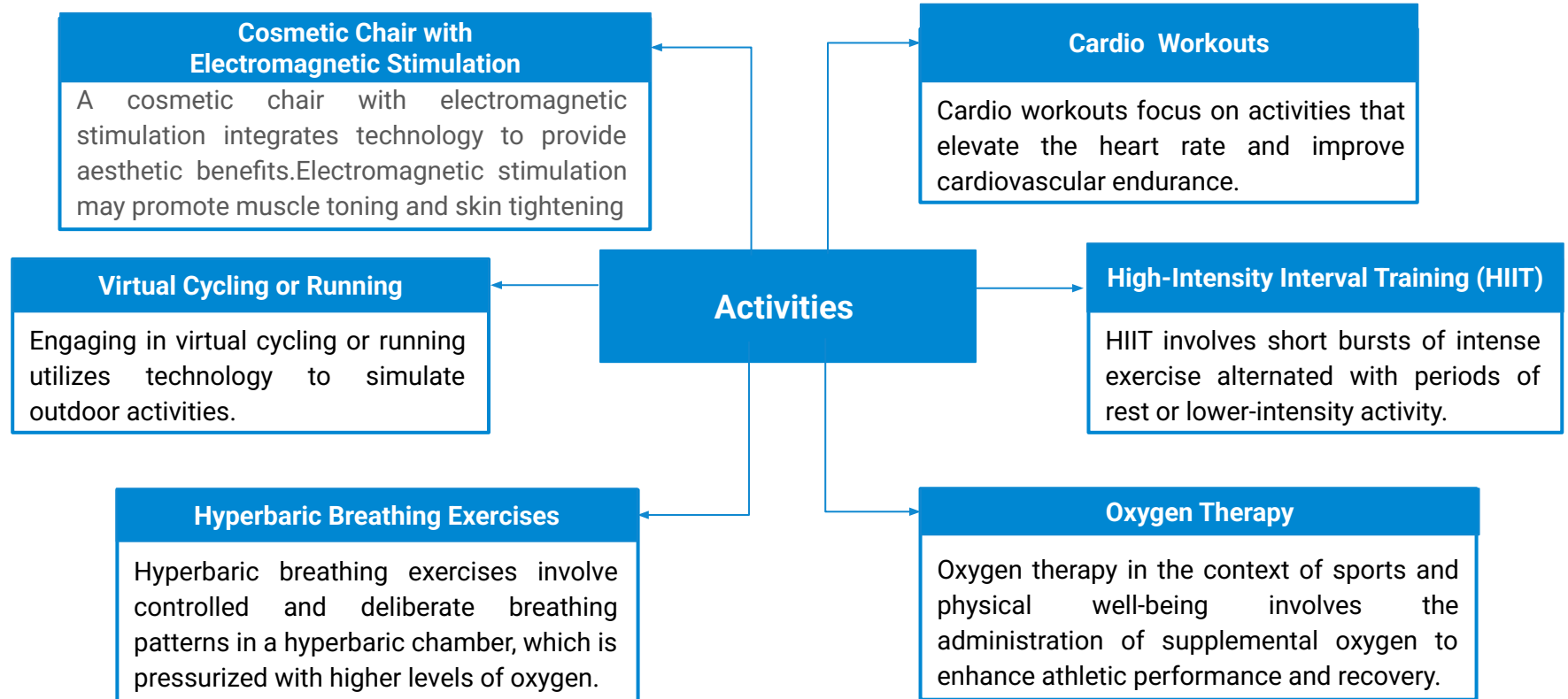
Oxygen Treatment

Oxygen Treatment provides higher oxygen levels to support respiratory function, commonly used for conditions like respiratory distress or COPD.

Nutritional Counseling (Telemedicine)

Nutritional Counseling (Telemedicine) offers remote dietary guidance and support through virtual communication, allowing personalized nutrition advice and addressing concerns.

Sports and Wellbeing



Cosmetology and Aesthetic

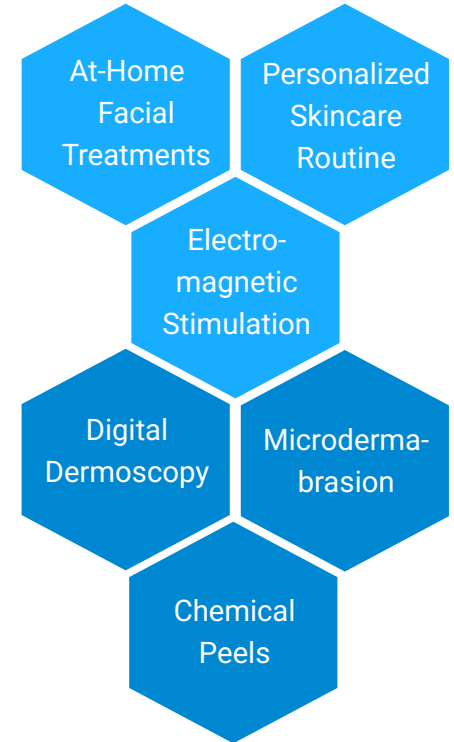
At-Home Facial Treatments - At-home facial treatments involve using skincare products and tools to cleanse, exfoliate, and nourish the skin in the comfort of one's own space. These routines typically include masks, serums, and other products aimed at promoting healthy skin.

Personalized Skincare Routine - A personalized skincare routine is tailored to an individual's specific skin type, concerns, and goals. It may include cleansers, moisturizers, serums, and treatments designed to address unique skin needs and enhance overall complexion.

Digital Dermoscopy for Skin Analysis - Digital dermatoscopy involves using specialized equipment to examine the skin at a magnified level. It aids in the analysis of skin conditions, identification of moles, and monitoring changes, enhancing dermatological assessments for preventive care.

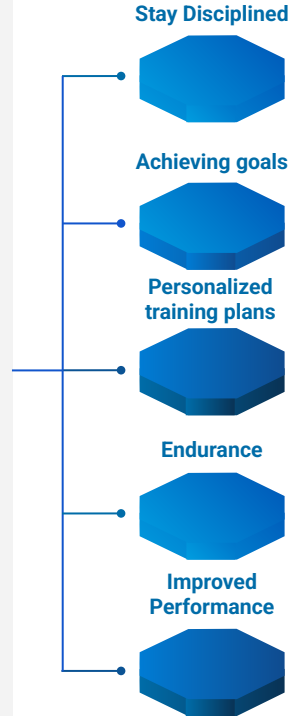
Microdermabrasion - Microdermabrasion is a non-invasive exfoliation technique that uses a machine to remove the outer layer of dead skin cells, promoting skin renewal and improving texture. It can be performed in professional settings or with at-home devices.

Chemical Peels - Chemical peels involve applying a chemical solution to the skin, causing exfoliation and the eventual peeling off of the top layer. This helps in treating issues such as acne scars, sun damage, and uneven skin tone. While some chemical peels are done in clinics, there are also at-home peel kits.



Longevity Guide for Daily Exercises

When it comes to exercising and fitness programs, most people think that they need a coach. However, **personalized training routines** have given individuals the chance to take control of their training and decide whether they want to work out alone or with a coach. With **personalized training schedules** individuals can become their own personal trainers and manage the different kinds of routines they would like to implement. This opportunity has exposed individuals to a lot of benefits and infinite possibilities when it comes to carrying out their training. Regular exercise **extends lifespan** enhances overall health and **benefits the heart, metabolism, muscles, and mind**



Only one in three children are physically active every day

Less than 5% of adults participate in 30 minutes of physical activity each day

1 in 3 adults receive the suggested amount of workout each week

Personal fitness training offers various exercises like aerobic, strength, Pilates, yoga, martial arts, etc. It caters to individual needs and goals like weight loss, muscle building, and endurance. This chapter highlights the advantages of personalized training and provides steps for creating a tailored schedule.

Some people make their **health worse** when they try to **exercise wrong way**. Jogging is bad for knees, spine, and even brain has micro concussions. People mostly don't have the right running technique. Heavy weights lifting is also often harmful, as people don't follow right technique and harm their spine, knees.

When you are in **Longevity Clinic**, our expert will choose right exercises scheme for you that you would perform later at home. At intervals, attend clinic to update on what kind of exercises are **best for you**.

LRE 1-2 Sub-Blueprint: Longevity Sleeping Room Blueprint



The Sleeping Room Blueprint aggregates the best technologies and protocols available for sleep optimization, from air, temperature and brightness control to sleep-focused NeuroTech, vibration dampening and sound isolation, and real-time monitoring of carbon dioxide and monoxide.

Besides deep sleep-optimization protocols and equipment, it also features a number of technologies and modalities designed to apply light health and Longevity-enhancing therapies that are safe to execute during sleep, such as salt walls.

A wealth of data have confirmed that **sleep is one of the very best Longevity Medicines**, and optimization of external and environmental factors affecting sleep pattern, depth, duration and quality can have the same tangible effects as changes to diet and exercise.

Sleep Room Equipment

Environmental Control Systems

Temperature Control System

Purification System

Allergen and Dust Particle Sensor

Humidity Control System

CO2 Monitoring System

Carbon Monoxide Detector

Oxygen Control System

Ventilation System

Ergonomic Sleep Furniture

Salt Lamps and Salt Walls

Ambient Enhancement

Red Light

Sound Isolation System

Sound System

Vibration Sensors

Video System

Safe Alert System

Heart Rate Monitoring

ECG Monitoring

Alerts System

Sleep Monitoring System

Respiratory Rate Monitoring

Safety Monitoring Systems

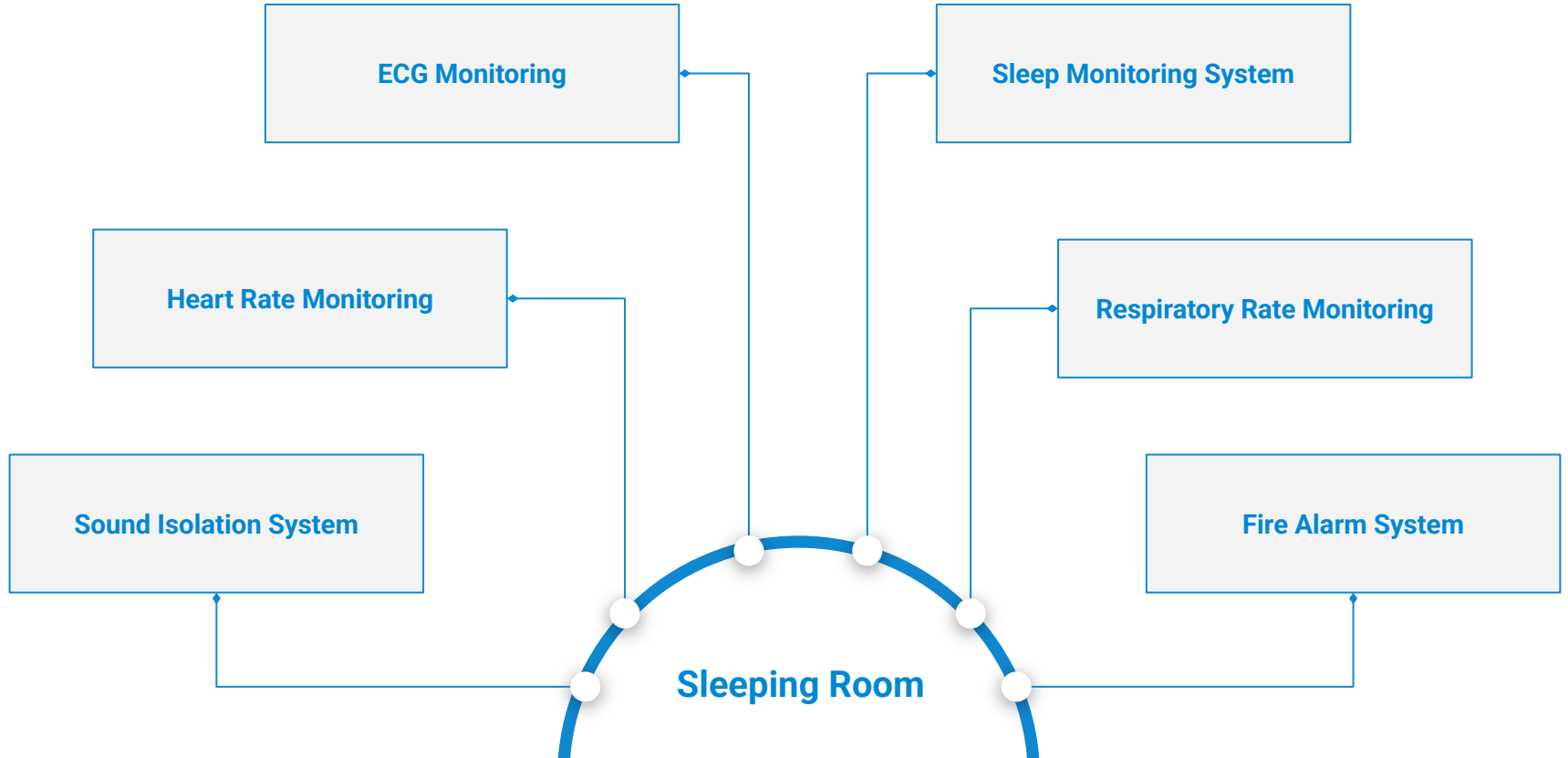
Electromagnetic Shielding

Fire Alarm System

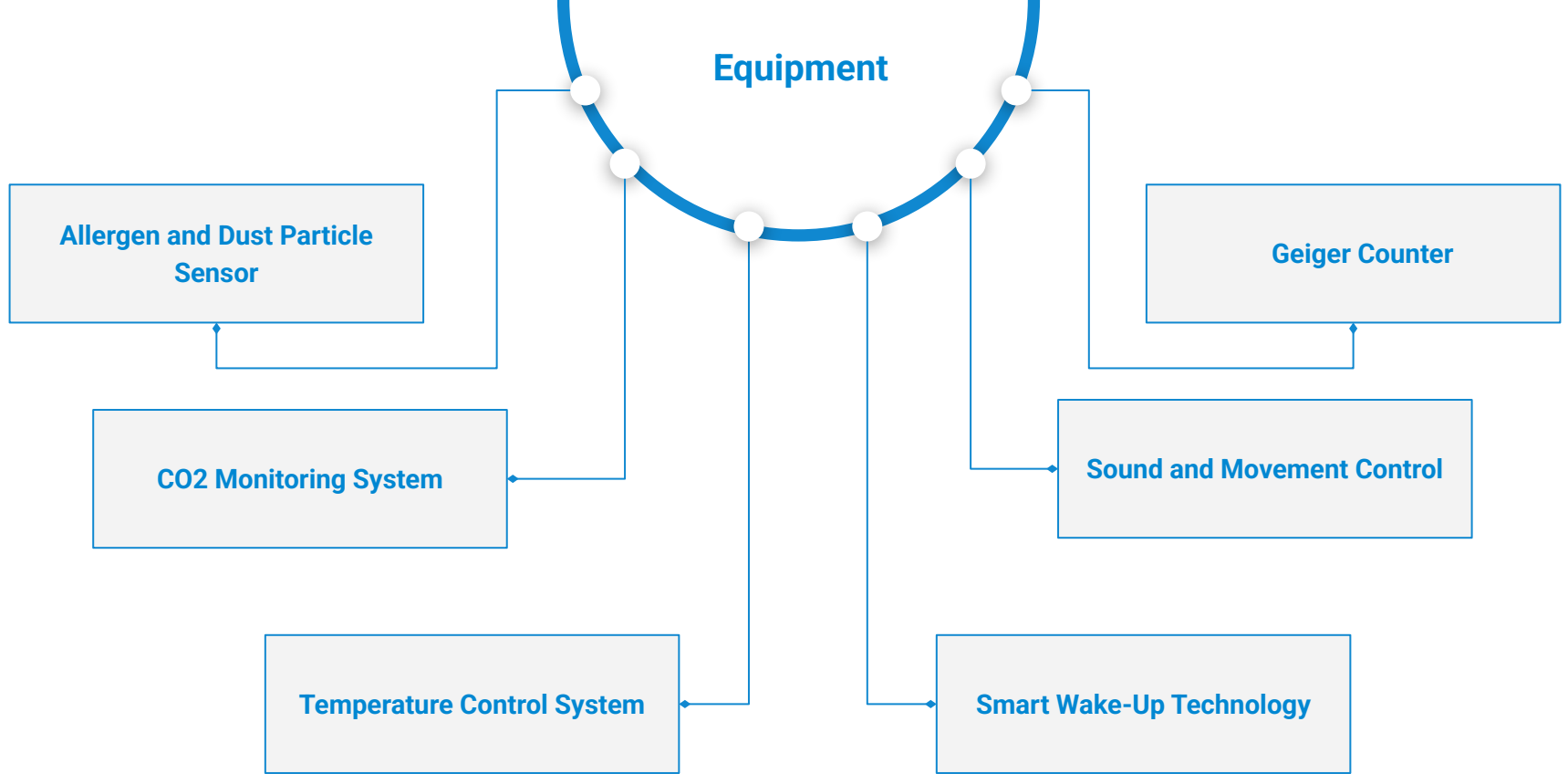
Geiger Counter Integration

Smart Wake-Up Technology

Sleep Room Equipment



Equipment



Sleeping Analytics



More than 30%
have symptoms
of insomnia



71,000 people
suffer injuries
every year due to
sleep-related
accidents



40%
of the population
diagnosed with sleep
deprivation also
had HHD



3.2 million
global diabetes cases,
because of poor sleep
air quality



> US\$ 92.5 B
the annual costs
of insomnia

Good sleep supports your brain performance and mood and can decrease your risk for many diseases and disorders, like type 2 diabetes, heart disease, stroke, obesity, and dementia.

Advanced Sleep Technologies

Quality sleep is essential for brain function and mood, and it can reduce the risk of diseases like type 2 diabetes, heart disease, stroke, obesity, and dementia. Prioritize your well-being with a good night's sleep.

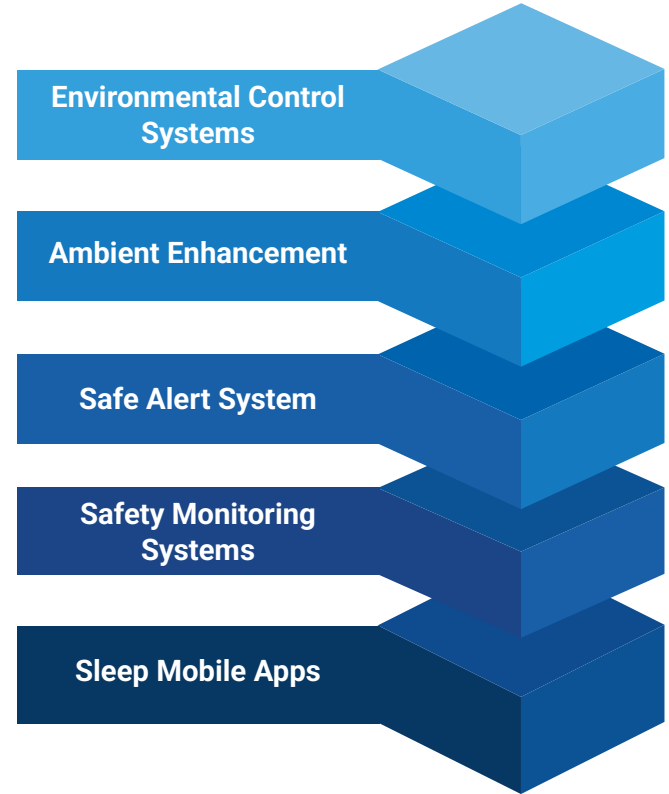
Clinic is developing an innovative sleep environment with a temperature-regulated ventilation system for optimal comfort. They integrate internal sound, ambient red lighting, and a sophisticated video system into the silent sleeping room or pod.

The Sound Isolation System analyzes internal sounds like snoring and offers customizable auditory experiences for personalized and uninterrupted sleep.

Vibration Sensors detect unusual vibrations or movements for early disturbance detection.

The Video System manages lighting, temperature, and security, offering features like sleep tracking and home monitoring for a restful night's sleep.

The Safe Alert System includes a Sleep Monitoring System for analyzing sleep patterns and quality, Heart Rate Monitoring, Respiratory Rate Monitoring, and ECG Monitoring for detailed insights into heart activity, all designed for safety and health tracking.



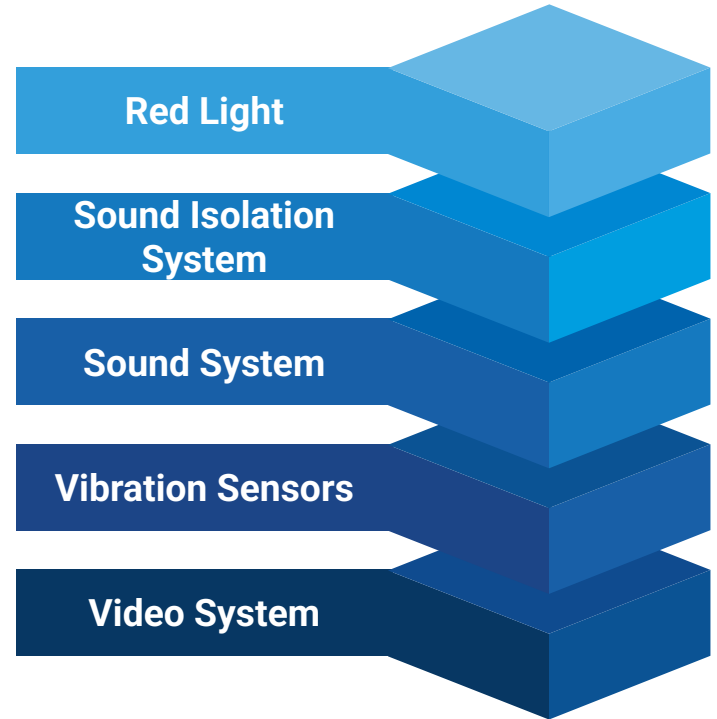
Ambient Enhancement

DKG is developing an innovative sleep environment featuring a temperature-regulated ventilation system that adjusts to weather conditions for optimal comfort. They integrate **internal sound, ambient red lighting, and a sophisticated video system** into the silent sleeping room or pod.

The Sound Isolation System analyzes internal sounds like snoring and offers a customizable auditory experience, allowing occupants to curate their auditory landscape for personalized and uninterrupted sleep.

Vibration Sensors add an extra layer of security by detecting unusual vibrations or movements, contributing to early disturbance detection for a peaceful sleep experience.

The Video System manages lighting, temperature, and security through a user-friendly interface, creating a personalized ambiance. It offers features like sleep tracking and home monitoring, enhancing well-being and ensuring a restful night's sleep.



Safe Alert System

The **Safe Alert System** is a comprehensive monitoring system designed for safety and health tracking. It includes a **Sleep Monitoring System** to analyze sleep patterns and quality. The system also features **Heart Rate Monitoring** to track heart health and detect irregularities, **Respiratory Rate Monitoring** to monitor breathing patterns, and **ECG Monitoring** to provide detailed insights into heart activity. Together, these components offer a comprehensive approach to health monitoring and alerting users to any potential issues for prompt action.



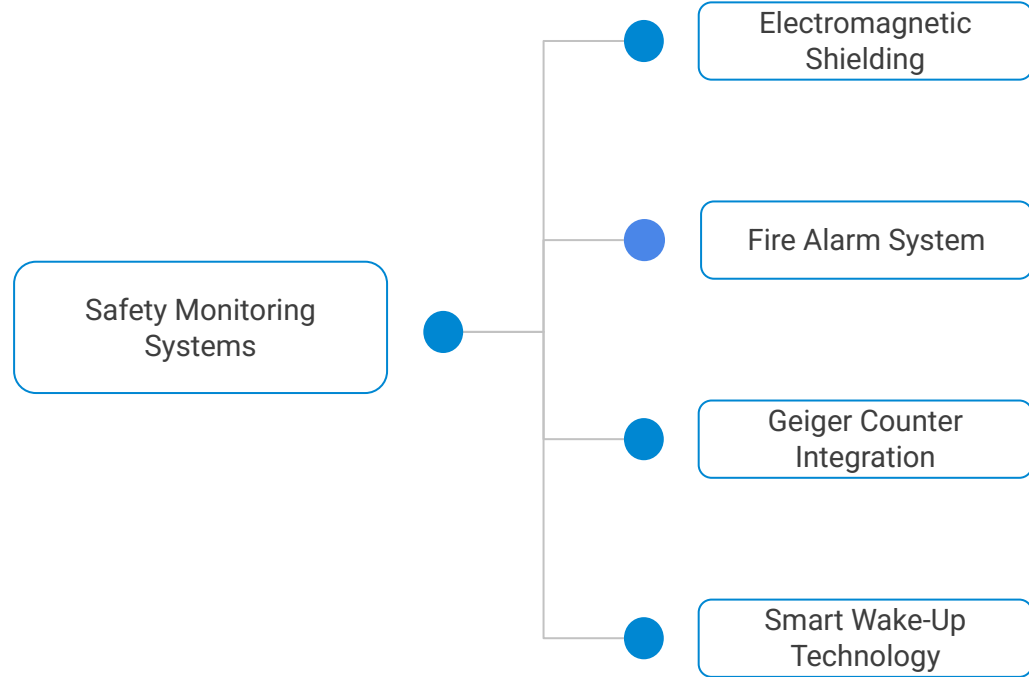
Safety Monitoring Systems

Electromagnetic Shielding: This technology protects occupants from electromagnetic radiation, which can be emitted by electronic devices and appliances, by creating a barrier that absorbs or reflects the radiation.

Fire Alarm System: A fire alarm system detects the presence of smoke or fire and alerts occupants through visual or auditory signals, allowing for quick evacuation and minimizing fire damage.

Geiger Counter Integration: Geiger counters are used to detect and measure ionizing radiation. Integration into the sleeping room allows for continuous monitoring of radiation levels, ensuring occupant safety.

Smart Wake-Up Technology: This technology uses data from sleep tracking sensors to wake occupants at an optimal time in their sleep cycle, promoting a more refreshed awakening and potentially improving overall sleep quality.



LRE 1-2 Sub-Blueprint: Longevity Kitchen Blueprint



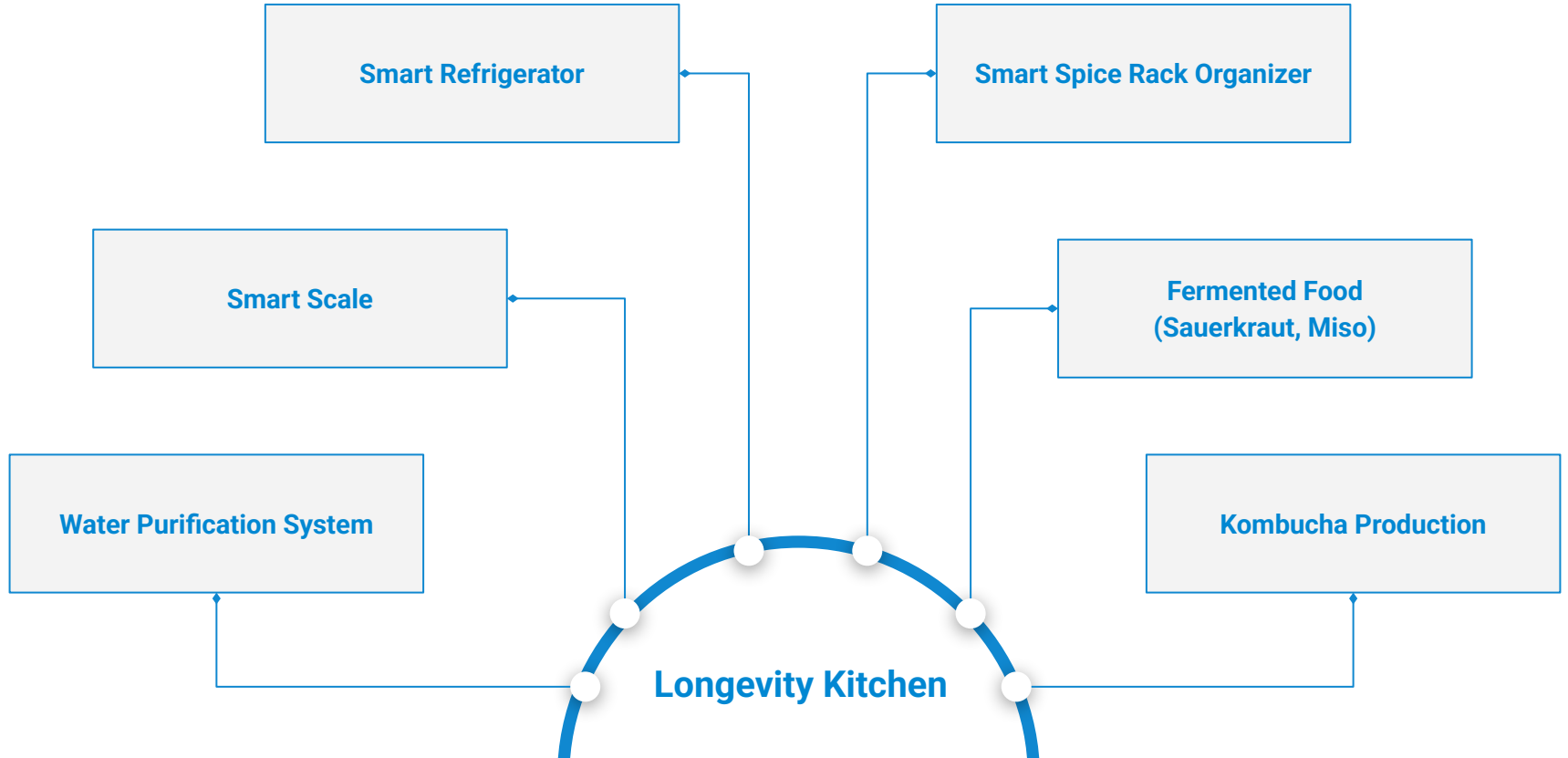
The Longevity Kitchen aggregates the best protocols and equipment for optimizing diet to meet homeowner Health, Longevity and Performance Goals.

It is equipped with a wide array of smart appliances and advanced technologies that are guided by sensor-equipped AI Co-Pilots which give automatic recommendations based on homeowner diet history and health sensors (e.g., wearables), serve as Co-Chefs via VR and AR Goggles to give home cooks a more data-enabled view for meal preparation, and automatically restock groceries according to meal plans and needs via fridge and freezer sensors.

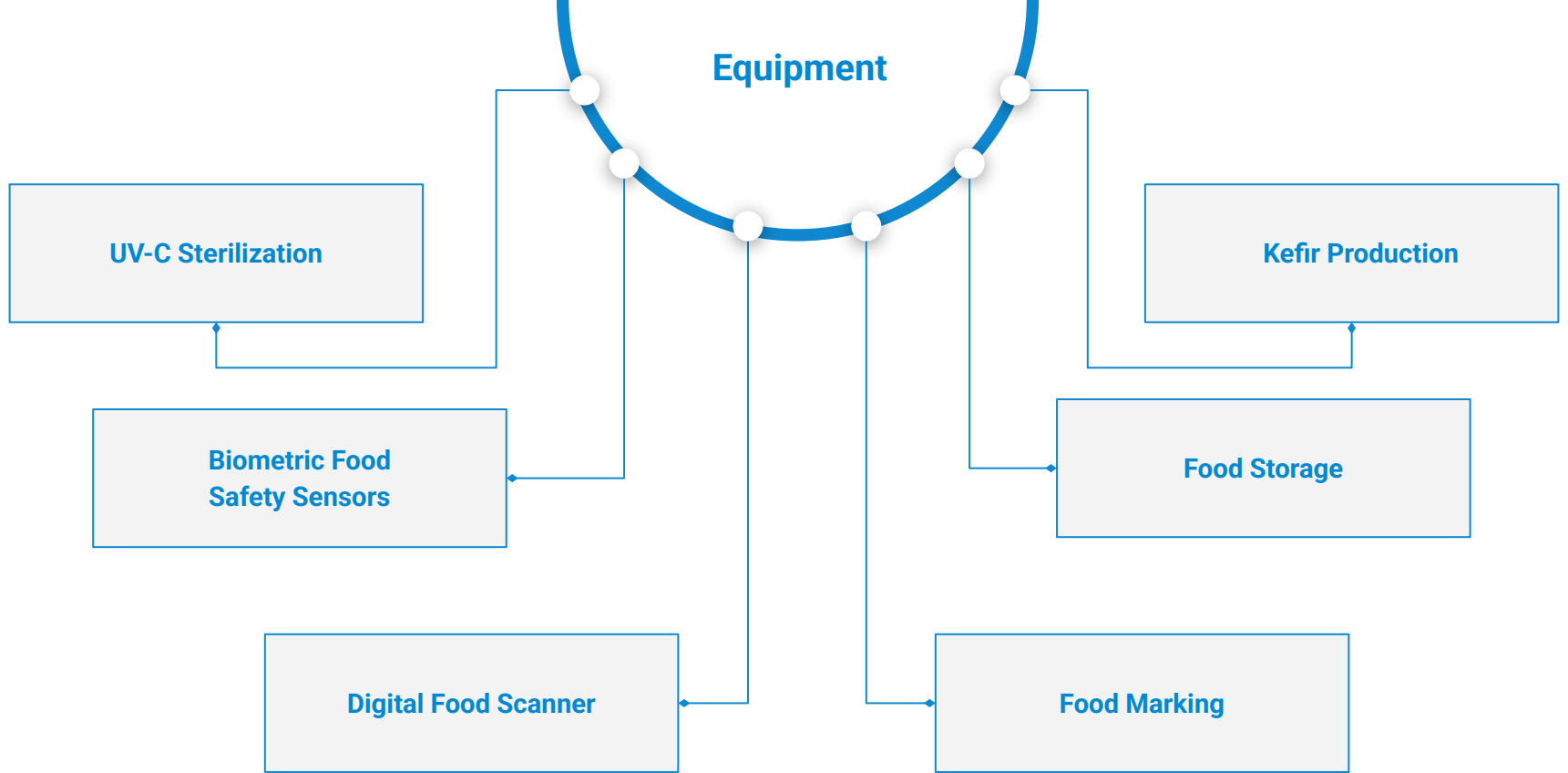
It features sophisticated water purifiers and filters, and IoT-enabled that infuse the home's water with negatively charged ions, ozone and hydrogen, and purify it via double distillation and the production of "dead water".

It also is equipped with specialized fixtures for therapeutic foods like fermented kombucha, kefir, and sauerkraut, and makes real-time meal-specific flavoring recommendations that incorporate Ayurvedic spices which offer tangible therapeutic benefits and closely match the meal's desired taste profile.

Longevity Kitchen Equipment



Equipment

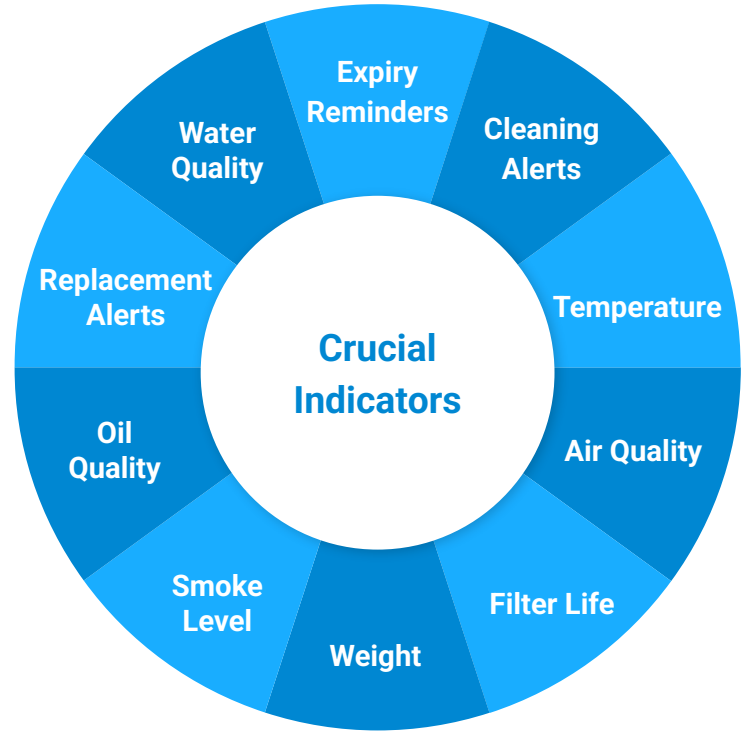


What Can be Measured?

The integration of smart devices in the kitchen, capable of capturing crucial health metrics, holds significant importance in modern living. These intelligent appliances contribute to a healthier lifestyle by offering real-time data and insights into various aspects of food preparation and consumption.

Smart kitchen devices, such as **scales**, **thermometers**, and **filtration systems**, empower users to make informed choices about the ingredients they use. Accurate measurements of **weight**, **temperature**, and **water quality** are vital for ensuring the nutritional value and safety of meals. For instance, **smart scales** provide precise ingredient quantities, aiding in portion control and the creation of balanced, health-conscious recipes.

The convenience and efficiency offered by these devices contribute to a more streamlined and health-focused culinary experience. Monitoring filter statuses, expiration dates, and receiving timely notifications for replacements assist users in maintaining optimal performance and hygiene.



Water Purification: What Can Water Contain?

Assessing water quality is crucial, especially when considering human consumption. By evaluating these factors, one can comprehend the water's condition and ascertain whether any treatment is necessary prior to use. **Regular water purification** is a crucial step in safeguarding public health and promoting overall well-being. The multidimensional nature of water quality management requires a combination of scientific knowledge, technological innovation, regulatory frameworks, and community engagement. A holistic and collaborative approach is essential to tackle the evolving challenges associated with water quality and ensure sustainable **water resources** for future generations.

Radionuclides

Heavy Metals

Sediments

Parasites

Herbicides

**Organic
pollutants**

Industrial Chemicals

Bacteria

Home Kits vs. Lab Analyses: Pros and Cons

Home testing kits provide a quick way for individuals to assess certain water parameters within the comfort of their homes. These kits typically include **test strips** or **color-changing** reagents that react to specific water characteristics such as pH, chlorine levels, hardness, and the presence of certain contaminants. While they offer immediate results and are user-friendly, home kits may have limitations in terms of accuracy and the range of parameters they can assess.

For a more comprehensive evaluation of water quality, **laboratory analysis** is indispensable. Professional laboratories employ advanced techniques and equipment to assess a broader spectrum of parameters at greater precision.

Although laboratory testing may take longer to **deliver results** compared to home kits, it provides a more thorough and accurate assessment of water quality.

The choice between home testing kits and laboratory analysis depends on the specific needs and concerns. Home kits are suitable for quick and routine checks. However, for more in-depth and reliable results, professional laboratory analysis is recommended.

Lab Analyses

Higher precision

Comprehensive
Assessment

More reliable and
trustworthy

In-depth
examinations

Home Kits

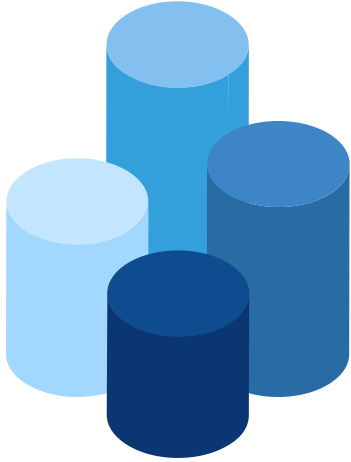
Quick results

User-friendly

More affordable

Can be used at
home

Home Kits vs. Lab Analyses: Pros and Cons



Hydrogen Water: Hydrogen water, believed to offer antioxidant benefits and enhanced hydration, should be considered a supplement rather than a substitute for regular water. Ongoing research is needed to establish optimal dosages due to emerging scientific evidence

Dead Water: "Dead water" undergoes intense disinfection, ensuring microbiological safety by eliminating all microorganisms. Yet, this process disrupts the natural balance seen in ecosystems. Exclusively consuming "dead water" may deprive individuals of beneficial microorganisms in regular water, potentially impacting gut health and immune function.

Filtered Water: Advanced filtration methods play a crucial role in providing safe and clean drinking water. Technologies like reverse osmosis, activated carbon filtration, and UV treatment effectively remove contaminants, ensuring high-quality water. These methods offer a balance by retaining essential minerals while eliminating harmful substances.

Distilled Water: Distilled water is produced through the process of distillation, where impurities and minerals are removed by heating water to create steam and then cooling it back into a liquid. This method ensures a high level of purity, making distilled water free from contaminants and minerals. However, it's important to note that while distilled water is excellent for certain uses, its lack of minerals makes it less suitable for long-term consumption, **as it may not provide essential nutrients.**

Filtered Water: Advanced Techniques

Reverse Osmosis (RO): This method utilizes a semi-permeable membrane to remove impurities, microorganisms, and dissolved minerals, ensuring water of high purity.

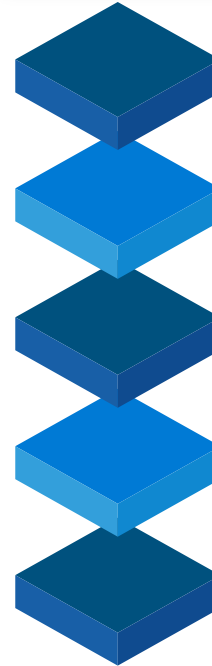
Activated Carbon Filtration Activated carbon, with its porous structure, effectively absorbs and traps pollutants, including chlorine, volatile organic compounds (VOCs), and unpleasant odors.

UV Treatment: Ultraviolet (UV) light is employed to disinfect water by inactivating bacteria, viruses, and other microorganisms, enhancing microbial safety.

Iron Filtrations system: An iron removal system can help improve the overall quality of your drinking water for years to come.

Chlorine Filtration system reduces chlorine, chloramines, and their harmful by-products. Reduces the presence of trihalomethanes (THMs) and etc.

Advanced Techniques of Filtering Water



Reverse Osmosis (RO)

Activated Carbon Filtration

UV Treatment

Iron Filtrations system

Chlorine Filtration system

Culinary Experience with Smart Devices

Smart food scales

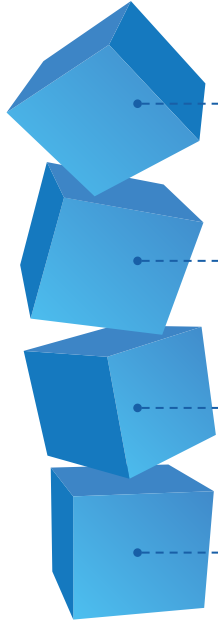
It represents innovative devices that not only accurately measure the weight of food but also provide valuable information about their nutritional characteristics. These intelligent scales typically feature Bluetooth or Wi-Fi technology, allowing data synchronization with mobile applications. They can measure calorie content, protein, carbohydrates, and fats, facilitating food consumption control and aiding in the establishment of healthy eating habits.

Choosing the Right Material for Food Containers

Navigate the world of sustainable and safe food storage with materials that prioritize your health and the environment. Opt for eco-friendly options like glass or stainless steel, which not only keep your food fresh but also contribute to reducing plastic waste. These materials are durable, non-toxic, and provide a healthier alternative to traditional plastic containers. Elevate your kitchen experience by making mindful choices for both your well-being and the planet.



Microgreens Solution



Compact Convenience

The station provides a space-efficient solution for cultivating microgreens at home.

Quick and Easy Setup

The kit station offers hassle-free assembly, making it accessible for all levels of gardening expertise.

Year-Round Harvests

Enjoy a continuous supply of fresh microgreens, regardless of the season.

Nutrient-Rich Harvests

Harvest your microgreens at their nutritional peak for a convenient source of vitamins and antioxidants.

Fermented Food: A Culinary Adventure

Kombucha A fizzy tea fermented with a symbiotic culture of bacteria and yeast (SCOBY), known for its tangy taste and probiotic richness.

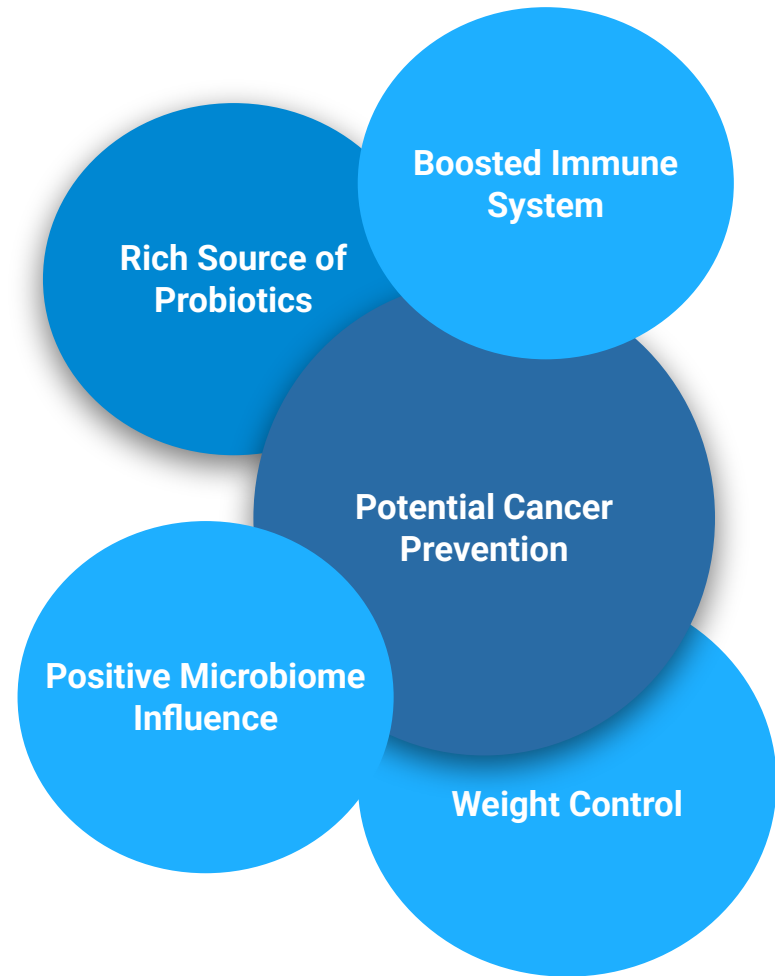
Kefir A creamy, tangy fermented milk beverage, abundant in probiotics to support digestive health and enhance nutrient absorption.

Kimchi: A spicy Korean delight, kimchi features fermented vegetables, notably cabbage and radishes, delivering a flavorful kick alongside vitamins and beneficial bacteria.

Sauerkraut: Fermented cabbage with a crisp texture, sauerkraut is rich in fiber and probiotics, supporting digestive health.

Miso: A traditional Japanese seasoning produced by fermenting soybeans with salt and koji, adding depth and umami to various dishes.

Natto: A Japanese dish of fermented soybeans, natto has a distinctive aroma and is prized for its probiotic content.



Spices for Longevity

Exploring the vibrant world of spices goes beyond enhancing the taste of your dishes; it may also contribute to **longevity** and overall well-being. Incorporating these spices into your culinary repertoire not only elevates the flavor of your meals but also adds a savory dimension to your journey towards a **longer, healthier life**

Briefly about Ayurvedic Spices: Ayurvedic spices, deeply rooted in the ancient Indian **healing** system of Ayurveda, are not just culinary delights but also bear profound significance for holistic health. These spices, meticulously selected for their therapeutic properties, aim to restore balance within the body, mind, and spirit.

Immune Support

Turmeric, Ginger, Cumin, Black cumin, Black Seed

Metabolic Health

Cinnamon, Cayenne Pepper, Mustard seeds, Cardamom

Antioxidant Defense

Peppermint, Thyme, Sage, Rosemary, Saffron

Anti-Inflammatory

Garlic, Black Pepper, Turmeric

Cardiovascular Health

Turmeric, Cinnamon, Chili

Spices for Longevity

Proper food storage is pivotal for preserving **freshness** maximizing nutritional value, and **minimizing waste** Regularly monitor your refrigerator's temperature to prevent the growth of harmful pathogens on your food. Keeping the fridge at 41°F (5°C) or below creates an environment that minimizes pathogen development.

While many refrigerators have built-in thermometers, it's crucial to use an **appliance thermometer** if your fridge lacks this feature. If, after a power outage, the refrigerator remains at 41°F or lower, the food is safe for consumption. However, if the temperature exceeds 41°F, consuming the food poses an increased risk of foodborne illness.

Symptoms of **Foodborne Illness**: Diarrhea, Vomiting, Nausea, Stomach cramps, Headache, Constipation, Persistent fever

How Long Food Can Be Kept			
Up to 2 Days	Up to 4 days	Up to 7 days	Up to 2 weeks
Ground beef	Egg dishes	Bacon	Apples
Pork	Broth	Smoked sausage	Carrots
Veal	Ham-slices	Corned beef	Butter
Fresh fish	Patties	Milk	Jams
Turkey	Nuggets	Leftovers	Soda

Cooking for Vitality

Eating **healthily** is essential for overall well-being. A balanced diet provides the necessary nutrients our bodies need to function properly. Incorporating a variety of fruits, vegetables, lean proteins, and whole grains into your meals ensures that you receive a diverse range of vitamins and minerals.

Opting for cooking methods like **grilling, steaming, or baking** instead of frying helps retain the nutritional value of the food. Limiting the intake of processed foods and added sugars is also crucial for maintaining a healthy lifestyle.

Remember, a **well-balanced diet** not only supports physical health but also contributes to mental well-being. So, make mindful choices in the kitchen, savoring nutritious and delicious meals for a healthier and happier life.

Have plenty of
vegetables and fruits

Eat protein foods

Make water
your drink
of choice



Choose
whole grain
foods

Advanced Technologies for Healthy Food

In our journey towards optimal health, the significance of a balanced and personalized diet cannot be overstated. Longevity Clinic stands at the forefront, recognizing the benefits of dietary approaches like the carnivore and accurate keto diets, with meticulous biomarker control.

Personalized Diet Plans: Recognizing individual uniqueness, Clinic crafts personalized diet plans tailored to your specific needs and health objectives.

Healthy Food Sets with Delivery: To make healthy eating convenient, Clinic offers **personalized**, nutritious food sets delivered to your doorstep. This ensures that your dietary choices align with your health goals.

Diverse Food Choices for Clinic Clients: For those residing in our clinic, a harmonious blend of health facility and hotel, a plethora of nutritious and delightful food options awaits. Choose from a variety of offerings that cater to your tastes and well-being.

"Practice for 14 days, and it becomes a habit.": Embrace a transformative experience at Longevity Clinic for two weeks to cultivate a healthy lifestyle. Our goal is to empower you with habits that can potentially add several meaningful years to your life expectancy.



Personalized Diet Plan



Healthy Sets with Delivery



Menu for Clinic Clients

LRE 1-2 Sub-Blueprint: Longevity Suitcase (Mobile BluePrint)

The **Mobile Blueprint** is a travel case weighing up to 10 kg, equipped with various devices for **Longevity Diagnostics** and **Treatments**. Tailored for portability, this blueprint combines essential tools for Health, Performance and Longevity Optimization at work, during trips and on-the-go.

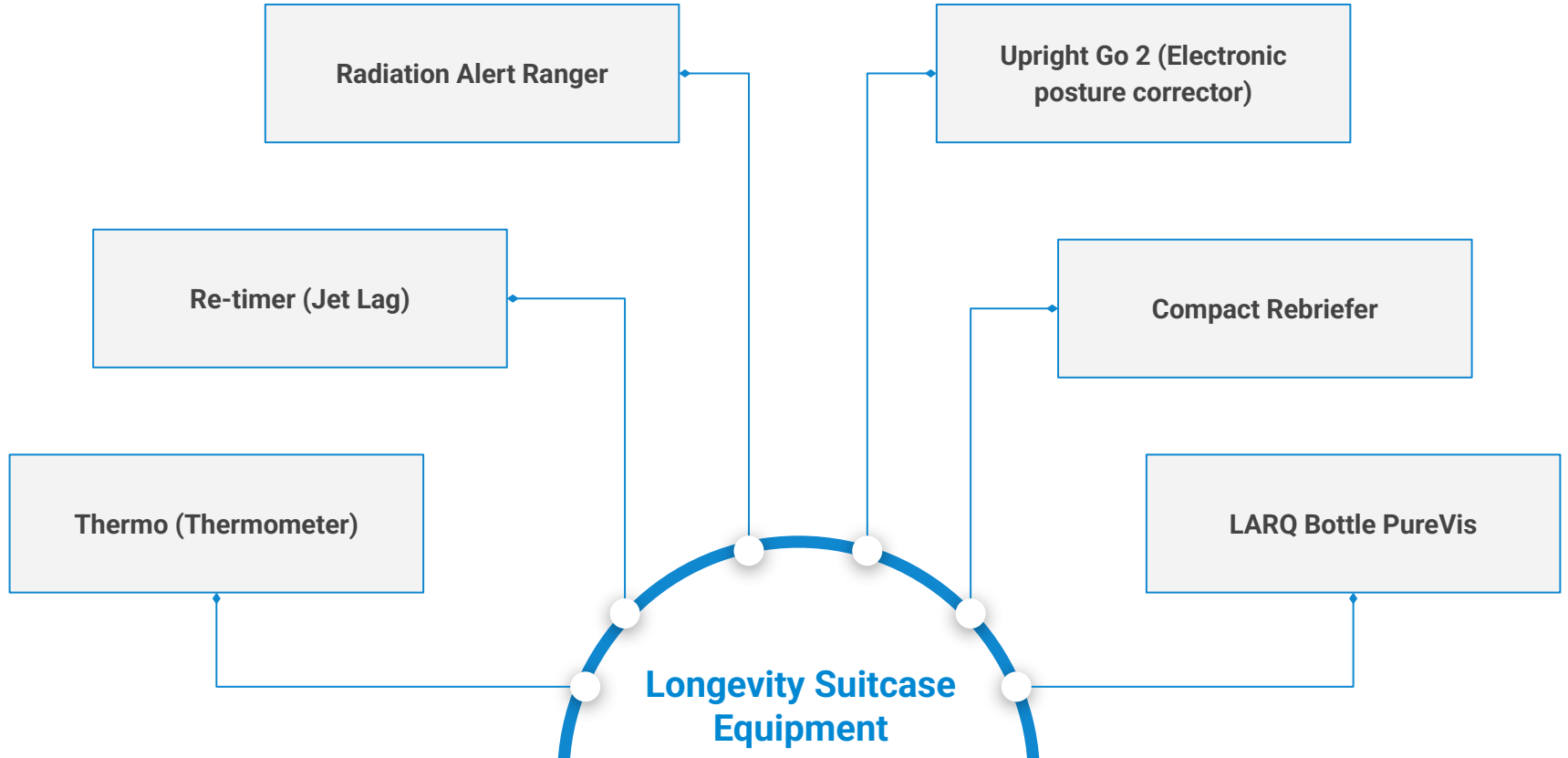
Smartphone-integrated and AI-Co-Pilot enabled, the Longevity Suitcase applies the same real-time AI-augmented blueprint execution and adjustment as the other Longevity Home blueprints.

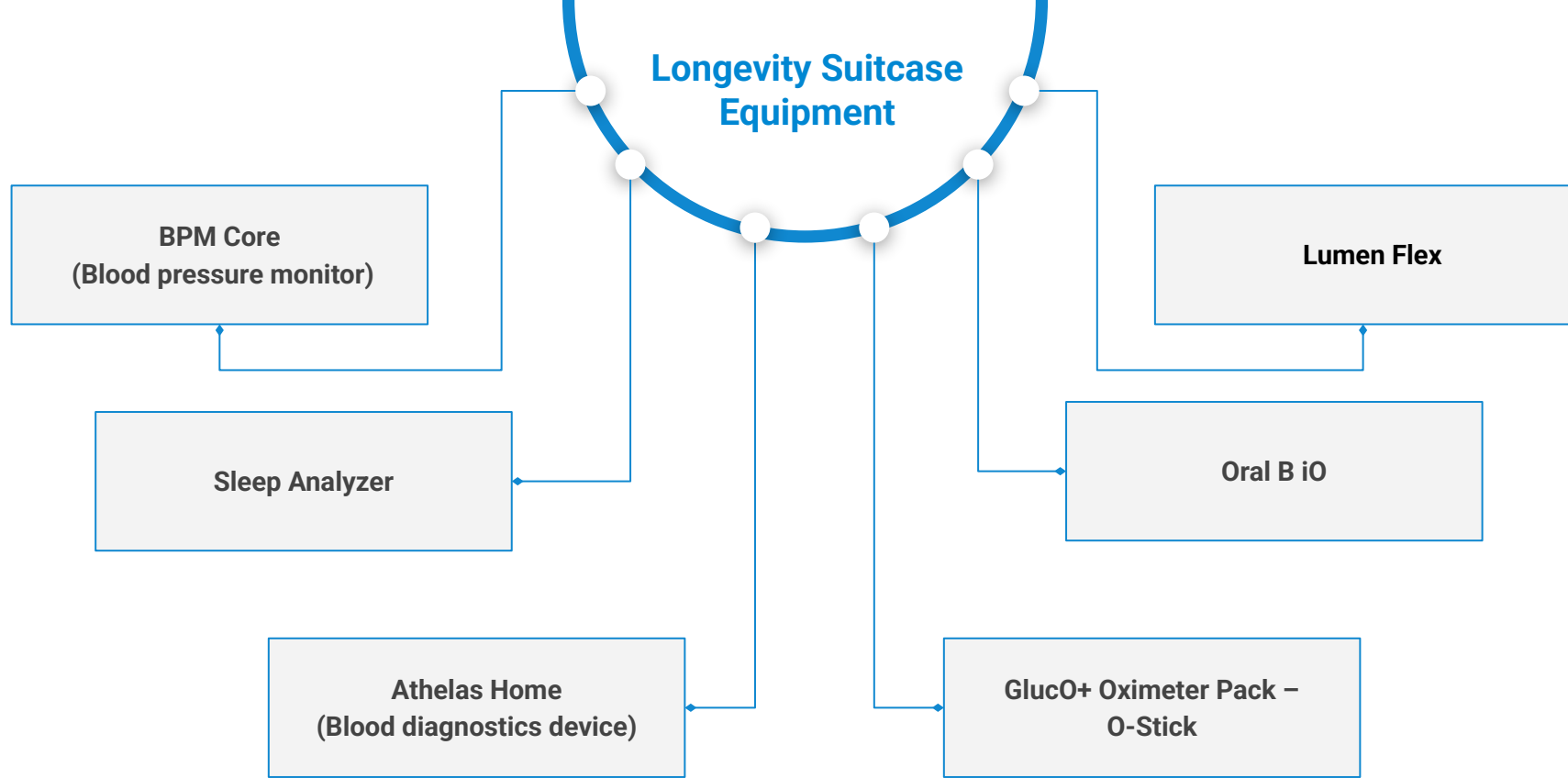
Through its AI Co-Pilots, the suitcase adjusts both levels and frequency of output, executed blueprint composition and the specific nature of its real-time personalized recommendations according to external sensors (e.g. measuring ambient environmental hazards) and user sensors (diagnostics, health wearables, etc).

It enables users to apply a similar standard of living while away from the home on business trips and vacations, or when at work. If 'home is where your health is', the Longevity Suitcase allows you to bring your home wherever you go.

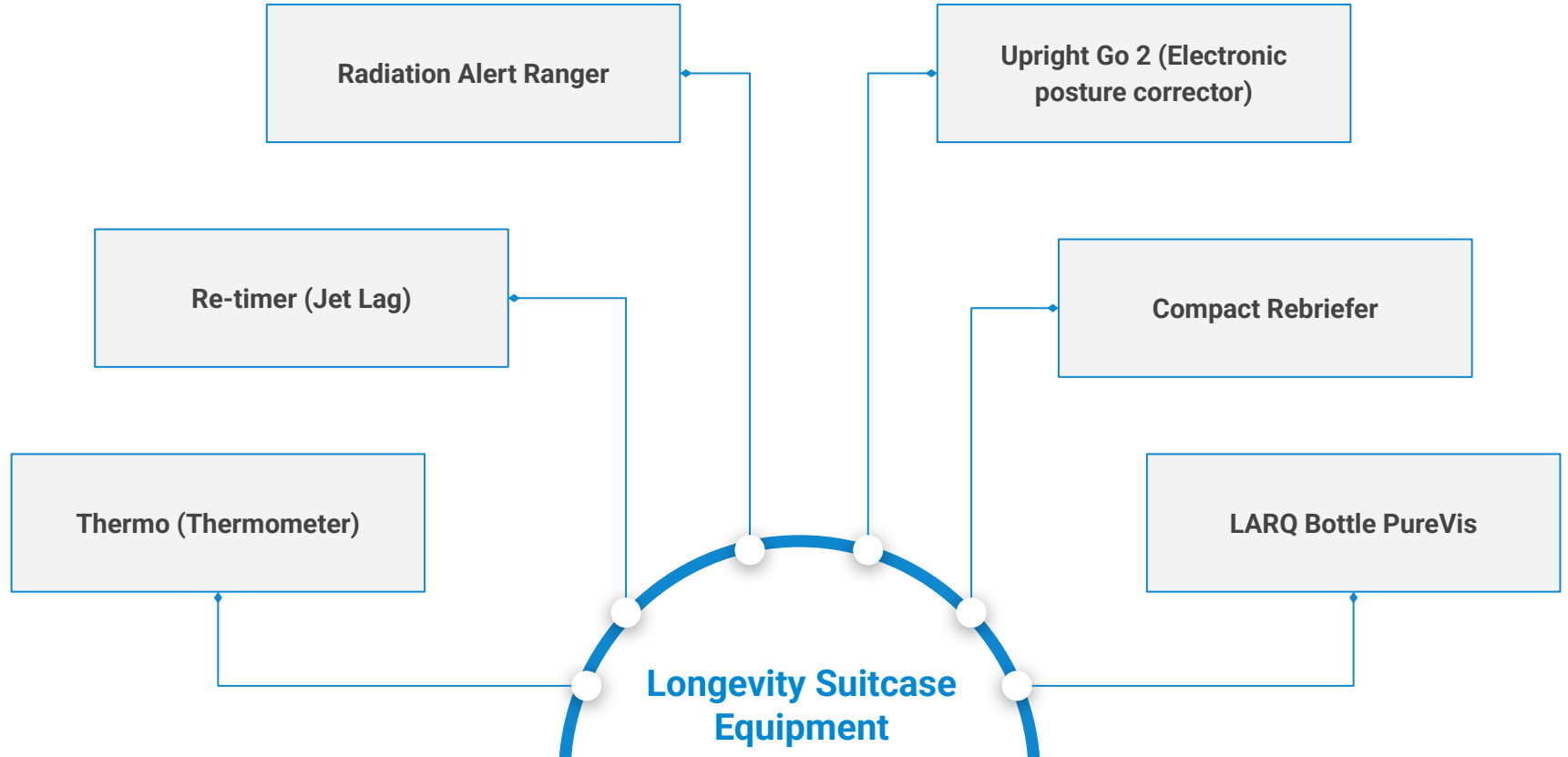


Longevity Mobile Equipment

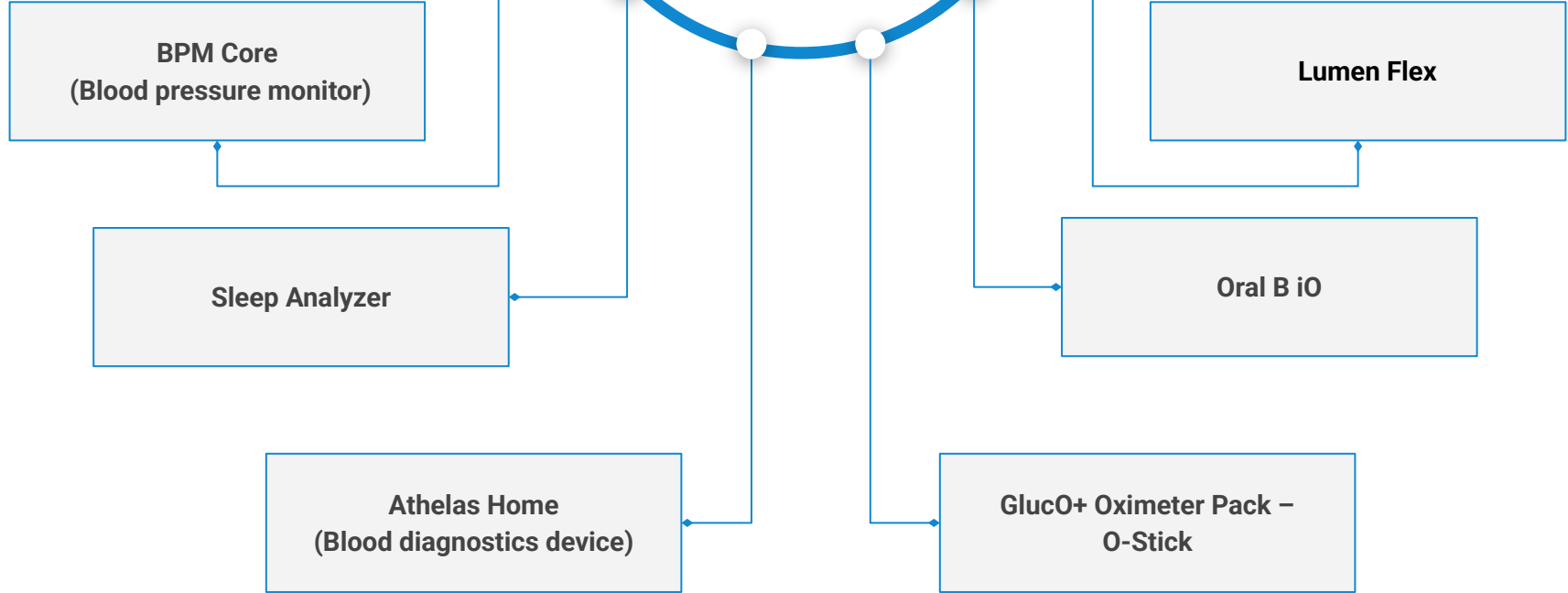




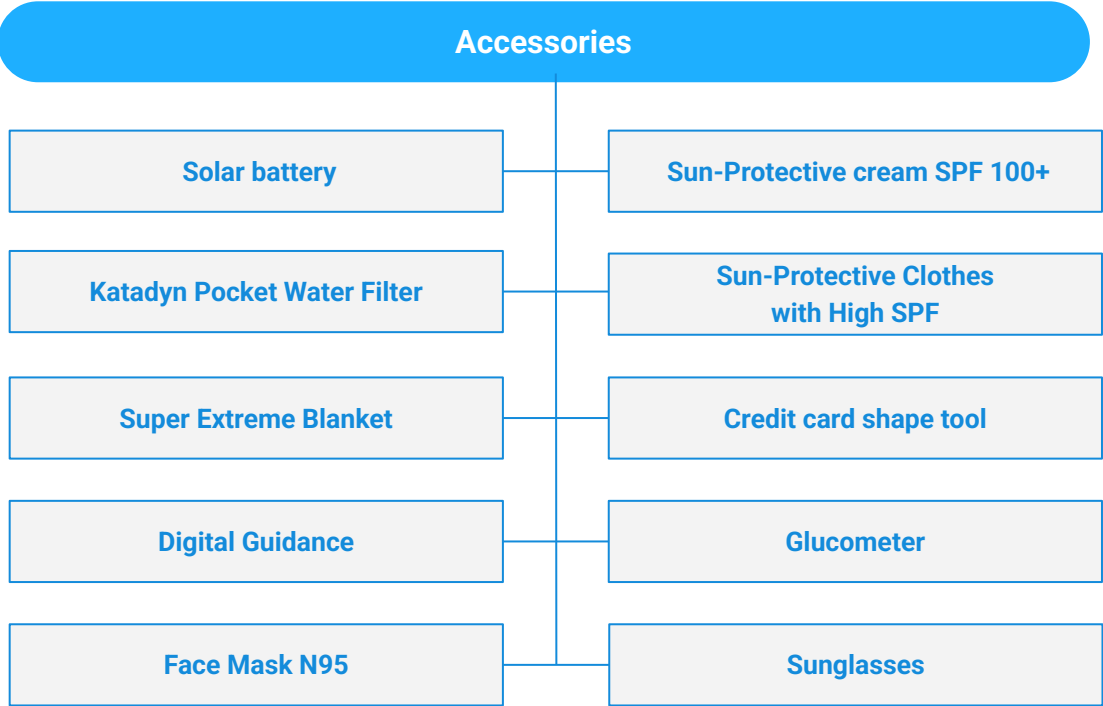
Longevity Suitcase



Longevity Suitcase Equipment



Longevity Mobile Equipment



Accessories for Longevity Mobile Equipment include essential items for health, safety, and convenience. These include a **Solar Battery** for powering devices on the go, **Sun-Protective Cream SPF 100+** for skin protection, and a **Katadyn Pocket Water Filter** for safe drinking water. **Sun-Protective Clothes with High SPF** offer additional protection from harmful UV rays.

The kit also includes a **Credit Card-shaped Tool** for various tasks, a **Super Extreme Blanket** for emergencies or outdoor use, and a **Stethoscope** for basic medical checks. A **Glucometer** is included for monitoring blood sugar levels, while a **Face Mask N95** offers respiratory protection. **Sunglasses** are provided for eye protection against UV rays and bright sunlight. Together, these accessories enhance safety and comfort during mobile activities, ensuring users are prepared for various situations.

Longevity Mobile Equipment

Supplements	
Vitamins	Minerals
Medicaments	Melatonin
Insulin	Healthy Snack
Use of Skin Health Tools	Adrenaline shot
Probiotics	Allergy shot

Travel **supplements** play a vital role in sustaining well-being during travel, offering support for **immunity, energy levels, digestion, and stress management**. It is imperative to carefully choose supplements tailored to individual needs, ensuring they are securely packed in carry-on luggage and compliant with importation regulations.

For an **energy boost**, CoQ10 facilitates the conversion of food energy into cellular energy, while melatonin aids in **regulating sleep** patterns, combating fatigue effectively. Strengthening the **immune system** with supplements helps fortify **against illness**, ensuring a seamless travel experience.

Digestive health is maintained through the supplementation of prebiotics, probiotics, and digestive enzymes, facilitating nutrient absorption and mitigating stomach upset caused by unfamiliar foods. Furthermore, the inclusion of adaptogens such as ashwagandha and rhodiola rosea assists in managing stress and cortisol levels, fostering a sense of tranquility amidst the rigors of travel.

The phenomenon of **jet lag**, induced by traversing time zones, disrupts sleep patterns and induces fatigue. **Melatonin** supplements offer a remedy by regulating sleep-wake cycles, aiding in the adjustment to new time zones, particularly advantageous for extended flights and international travel.

Company IHHT Device

Key Features

Hypoxia is tissue oxygen deficiency, leading to reduced bodily functions

Hyperoxia is oxygen excess known as oxygen toxicity

Intermittent Hypoxia therapy use has been shown to be beneficial for improving physical and mental operability

Hypoxic and hyperoxic treatments may help prevent strokes

Hyperoxic Training increases potential power output, increase endurance, increase overall training capacity, and reduce recovery times

IHT increases endothelial production of nitric oxide (NO) while also preventing NO overproduction in brain and other tissues. It also enhances storage of excessive NO in the form of S-nitrosothiols and dinitrosyl iron complexes

Hypoxic Training can protect the brain from the accumulation of amyloid β , a protein associated with Alzheimer's disease

Training under **Moderate Hypoxia** (9-16% oxygen) and low frequency (3-15 episodes/day) yields positive effects, contrasting with severe hypoxia adverse side effects

Compact Rebreather

Additional Services Provided in Longevity Cabinet



Usually involves a combination of an altitude training **exercise mask** and a simulated **hypoxicator altitude generator**



Intermittent breathing therapy is usually indicated in conjunction with the usage of these devices.



These two devices can be utilized during both **rest** and **training sessions**



Highland communities typically enjoy a 15–20 years longer lifespan. **Median lifetime** of the Karakorum mountains, at 2,500m asl, is 120 years.



Creating breathable hypoxic air with a known and adjustable O2 concentration and **monitoring** a patient's physiological reaction and have safety cut-off devices



Hypoxia Therapy utilizes the body's natural ability to rapidly adapt to decreases in oxygen intake, leading to improved resilience and "**super-recovery**" of disrupted functions.

Jet Lag Solution

How Jet Lag develops

Jet lag happens when you alter your natural circadian rhythm because of travel to a new time zone. Your circadian rhythm is your internal clock that your body uses to manage sleep and wake times.

Re-Timer

Another innovative solution for jet lag is wearable light therapy devices. Harnessing the power of light, which is a primary cue for our brain to synchronize with a new time zone, light therapy offers a natural approach to counter jet lag. Light therapy wearables like the **Re-Timer** simulate sunlight to regulate sleep and wake patterns, aiding in combating jet lag and adjusting to new time zones.

Jet Lag



Use Melatonin

Melatonin is remarkably effective in preventing or reducing jet lag, and occasional short-term use appears to be safe. It should be recommended to adult travellers flying across five or more time zones, particularly in an easterly direction, and especially if they have experienced jet lag on previous journeys.

Zaca chewables

Zaca chewable tablets help counter the effects of jet lag during long flights. They contain glutathione and glutamine, which aid with high altitudes and hydration. High altitudes can reduce glutathione levels by up to 45%, so supplementation is crucial for faster recovery and replenishment.

Protection From Radiation

A radiation detector or particle detector is a device that measures the ionization of many types of radiation, like beta radiation, gamma radiations, and alpha radiation with the matter.

This handheld digital survey meter offers high sensitivity to low levels of **alpha, beta, gamma, and x-rays**. It includes built-in efficiencies for common isotopes to calculate activity in **Bq and DPM**, along with a backlit digital display, red count light, and audible beep for each count detected.

Additional features include selectable alert levels, an adjustable timer, and an optional wipe test plate for swipes.

Radiation can interact with **DNA** directly and cause damage by breaking bonds in the **DNA** or indirectly by breaking water molecules surrounding the **DNA**. When these water molecules are broken, they produce free radicals—unstable oxygen molecules that can damage cells and organs.



Sun Protection



UV protection sunglasses are essential for safeguarding your eyes from harmful UV rays. Look for labels indicating "100% UV protection" or "UV400," ensuring they block both UV-A and UV-B rays. Various styles are available, from aviators to wayfarers, catering to personal preferences without sacrificing protection.

Investing in quality UV protection sunglasses not only shields your eyes but also reduces the risk of eye conditions like cataracts and macular degeneration. Prioritize eye health by wearing UV400 sunglasses whenever outdoors.

Chemical sunscreens contain organic compounds that catalyze a chemical reaction when exposed to the sun; this reaction transforms UV rays into heat, which is then released from the skin. While physical UV filters block both UVA and UVB rays, chemical UV filters often only protect against one or the other.

Wear Protective Clothing

Many UV-protective clothing items are made with fabrics that have a UPF (Ultraviolet Protection Factor) rating

Use Sunscreen

Apply broad-spectrum sunscreen with a high SPF (Sun Protection Factor) of 30 or higher to all exposed skin

Perform Regular Skin Checks

Examine your skin regularly for any changes in moles, freckles, or other skin lesions

Limit direct sun exposure

Limit direct sun exposure, especially during peak UV hours between 10 a.m. and 4 p.m.

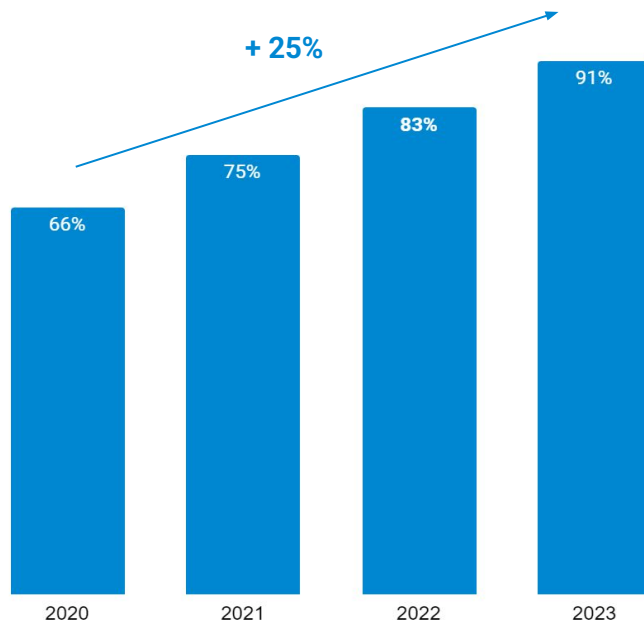
Water Filter

The tried and tested ceramic depth filter **Katadyn Pocket** removes bacteria, protozoa and other disease-causing agents. The microorganisms cannot pass through the pores of the filter ceramic (0.2 microns) because of their size (greater than 0.2 microns = 0.0002 mm). Unlike disposable filters, the ceramic can be cleaned several times - even in the field.

Quickness counts too with an output of **1 litre/minute** through our silver-impregnated ceramic filter. The capacity is up to **50'000 litres** depending on the water quality. Made from top-quality, durable materials and with a 20-year warranty. The Pocket is suitable for the toughest of conditions and is the first choice for extreme adventurers. Decades of military and emergency professionals around the world have put their trust in the Pocket's ability to deliver water free of bacteria and protozoa.

In 2023, the percentage of Americans who filter their drinking water is at an all-time high, with **91% of people indicating they use a filter**. This figure has also increased in each of the past four years and is up 25% since 2020. Using a water filter is much more **environmentally friendly** than buying cases or jugs of bottled water. Installing a filtration system gives you a long-term solution to clean water, rather than contributing to the 29 billion water bottles and counting that are filling landfills and the world's oceans.

Water Filtration in USA



Digital Guidance

Get the most out of **the Longevity Mobile Blueprint with a Digital manual**, designed to be a steadfast companion in easily using and managing the equipment inside. To achieve your desired outcomes, every device and item comes with its own set of usage guidelines. **Learn how to apply supplements strategically to diverse situations** beyond device manuals.

By mastering proper handling and optimal supplement consumption, seize the opportunity to savor your daily routines, travels, or professional engagements with confidence. Moreover, find clarity within the bag itself, as **discernible instructions demystify the selection of components suitable for specific flights or journeys**. Embrace Longevity Mobile Blueprint seamless integration into every facet of your life, every day, and for every occasion.



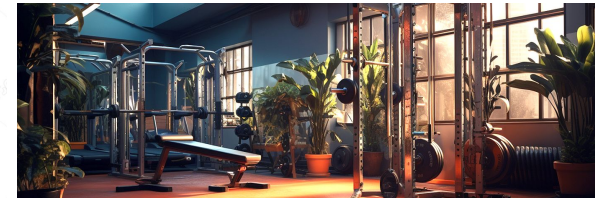
LRE 3 (Longevity Office)

(Corporate Workplace) Blueprint

This blueprint constitutes the ideal composition and pipeline of equipment and services that can be installed into a corporate workplace or office to optimize the health, wellness, Longevity and neurocognitive performance of members of the workplace.

The overall scope, comprehensiveness and intensity of its components will be lower than Longevity Apartments and Individual Longevity Blueprints, and will constitute only the range of equipment, services and hybrid stacks (AI Co-Pilots and physical-virtual infrastructure) that can be legally and reasonably placed within the workplace.

It will also place a relatively greater emphasis than other blueprints on neurocognitive performance (in terms of the proportion of components). This blueprint will define the full set of components constituting an ideal Longevity Office, as well as the blueprint for constructing an ideal Longevity Office.



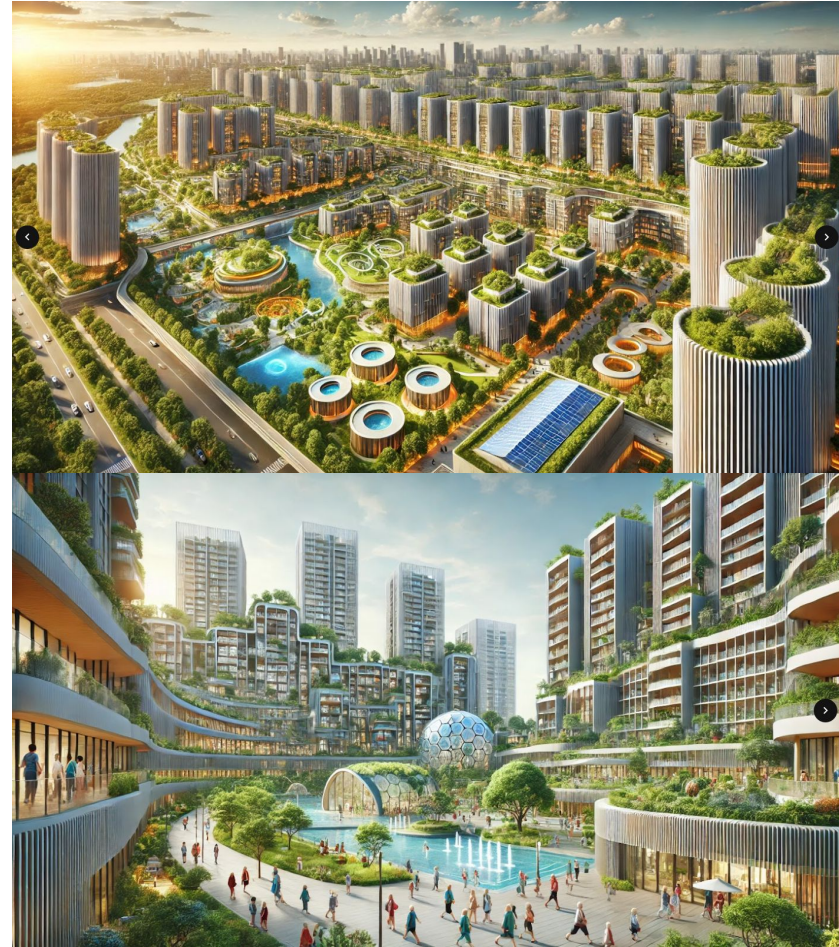
LRE 4 (Longevity Skyscraper)

This blueprint represents a massively scaled-up version of LRE 2 (Longevity Apartment), which encompasses the creation of many Longevity Apartments, and which also includes community-focused multi-user amenities.

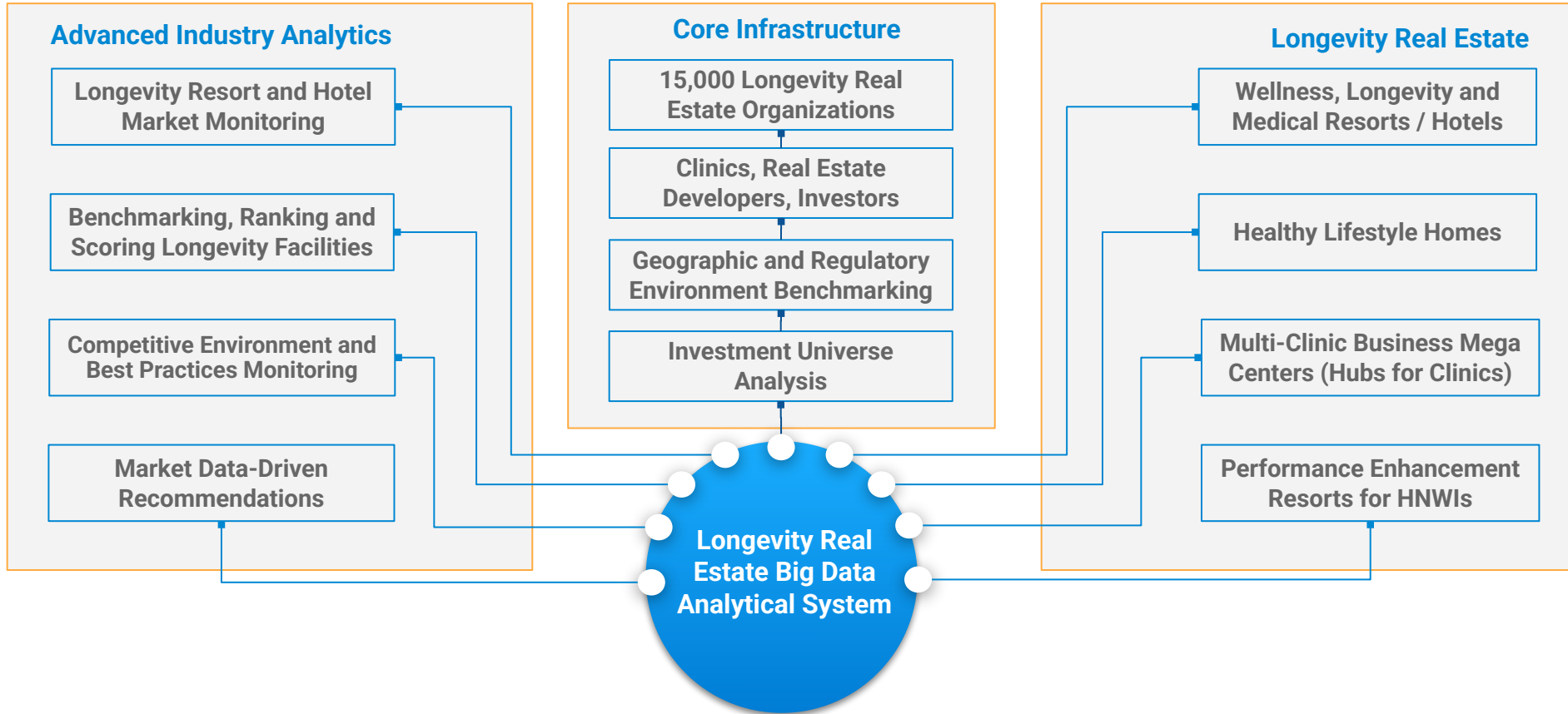
Besides fully-equipped individual Longevity Apartments, it also contains variety of whole-population service centers and Longevity-focused amenities, including a Multi-Clinic Business Mega-Center where residents can access more intensive Longevity, Functional Medicine and Neurocognitive Performance Enhancement services than would be available in their own Longevity Apartments, and a variety of multi-user treatment or wellness areas similar to those found in Wellness Resorts (sauna, cryosauna, ice-bath, saltwall medication rooms, etc).

It will serve as a prototype of a large Longevity Resort, but with the inclusion of many Longevity Apartments. It will also need to have a highly specific blueprint for material construction to protect against the unique environmental and material hazards of skyscrapers as opposed to individual homes or apartments.

LRE 4 contains both a Compositional Blueprint (components registry of ideal pipeline of equipment, protocols and AI Co-Pilots for protocol execution) and a Construction or Assembly Blueprint, specifying how to construct the ideal Longevity Skyscraper.



Longevity Real Estate Big Data Analytics System and Dashboard Components



LRE Dashboard Overview

AI-Driven Big Data Analytics System for Deep Market Intelligence on Longevity Real Estate (LRE) Companies and Investors

End-to-End Infrastructure for Market Monitoring, Competitive Intelligence, Company Benchmarking and Investment Relations

AI Co-Pilot to Automatically Translate Longevity Real Estate Dashboard Insights into Practical Strategic Recommendations

Options for Standard Dashboard Subscription, Custom White Label Solution, and SaaS-Based Access to Select Components

Sophisticated Engagement Relations Management System (ERM) to Enhance Business Marketing and Client Relations

LRE Corporate Blueprints: Ideal Pipeline of Components for Different Use-Cases (Longevity Resort, Hotel, Home, etc).

Joint Product

SaaS Product

**Cooperation
Options**

White Label Solution

Strategic Partnership

Documents

Status Snapshot

Database

Companies

Investors

UK Companies

UK Investors

Database Status

Database Snapshot

Classifications

Databases Classificati...

Dashboards Registry

Snapshot

Mind Maps Registry

Registry Table

Databases Reviews

Review of Companies

Review of Investors

Dashboards

Longevity Internationa...



17580

Total Organizations



15400

Companies



2180

Investors



2850

Leaders

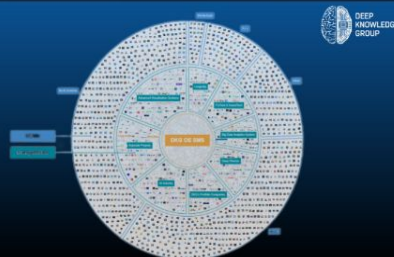
Macro Parametr



Longevity International Project - Internal Dashboard



Longevity Real Estate Universe



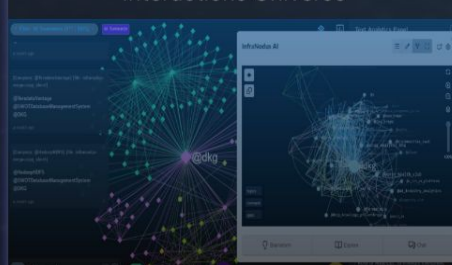
Cluster Analysis



Longevity Real Estate Analytics Report



Longevity Real Estate Companies Interactions Universe



3477

Age Friendly Real Estate



5112

Longevity Friendly Real Estate



2710

Age and Longevity Friendly Tourism



4101

Older Adults Integration

← Previous

1

2

3

4

Next →

CCQQ Assesment Tool

Automated SWOT Ana...

Operational Environme...

Comperative Analysis ...

Industry Heatmap Con...

Automated Benchmar...

Automated Chart Buil...

Cluster Analysis Tool

Competitor Analysis T...

Topic Oriented Sub Da...

Automared Industry R...

DataRoom Navigation ...

Interactive Entities Dat...

Interactive Leads Data...

Individual Leads Profiles

Individual Entities Prof...

Evolution Tree Constr...

Events Monitroing Tool

Industry Universe Anal...

Interactive Frameworks

Investor Relations Ana...

Macroparameters mon...



10647
Total Organizations

8523
Companies

2145
Investors

2850
Leaders

Documents

Status Snapshot

Database

Companies

Investors

UK Companies

UK Investors

Database Status

Database Snapshot

Classifications

Databases Classification

Dashboards Registry

Snapshot

Mind Maps Registry

Registry Table

Databases Reviews

Review of Companies

Review of Investors

Engineering Tools

Funding Rounds

Ranking Analysis

Indices Builder and Trac...

Portfolio Constructor

Indices Builder and Trac...

Automatic Benchmark C...

SWOT Comparative Ana...

Framework

Longevity Tourism

Age Friendly

Longevity Friendly

Longevity Real Estate in UK

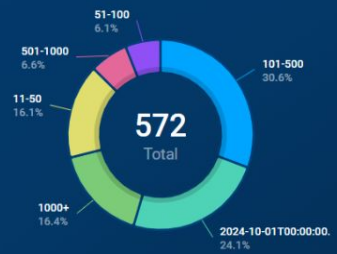
All Time (Oct 6, 2014 - Jan 2, 2027)

Number of Companies by Cities

Metric	Value
London	145
Manchester	11
Glasgow	11
Leeds	7
Edinburgh	6
Birmingham	6
Norwich	6
Liverpool	5
Belfast	5

All Time (Oct 6, 2014 - Jan 11, 2027)

Number of Companies by Number of Employees



All Time (Oct 6, 2014 - Dec 30, 2026)

Number of Companies by Industry



All Time (Oct 6, 2014 - Jan 2, 2027)

Number of Investors by Type



Longevity Real Estate in the UK

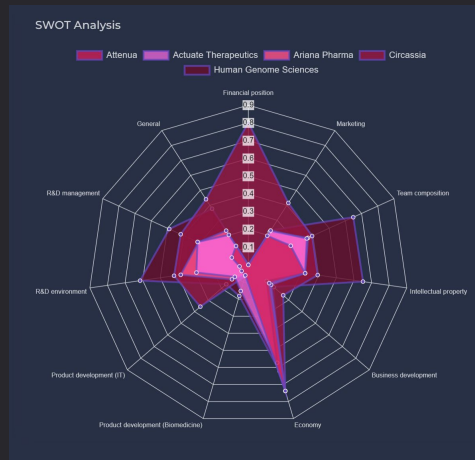
3406
Age Friendly Real Estate

5117
Longevity Friendly Real Estate

164
Countries

What are Dashboards?

We provide deep data science insights on the private and public markets via customized IT platforms we call Dashboards. In essence, Dashboards is a Big Data Analytical System that consists of separate Components or Dashboards:



Specialized data for critical decisions

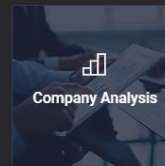
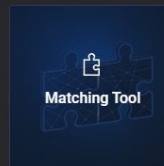
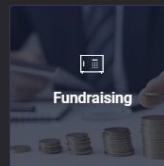
Dashboards by Deep Knowledge Group uncover actionable insights and trends for all companies and investors of DeepTech, HealthTech and Longevity Industries. Our visually pleasing platform provides unparalleled access to the public and private markets, and we are committed to providing unbiased data - information you can use to drive success at your firm.

Discover what you can do with our Dashboards

FOR INVESTORS



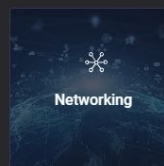
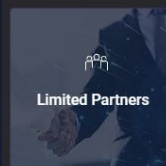
FOR COMPANIES



FOR ANALYSTS



FOR BUSINESS DEVELOPMENT MANAGERS



Dashboard Tools and Products

Analytical and Assessment Tools

Analytical and Assessment Tools



Evaluation and Comparison Tools

Evaluation and Comparison tools



Visualisation and Mapping Tools

Visualization and Mapping Tools



Dashboard and Reporting Tools

Dashboard and Reporting Tools



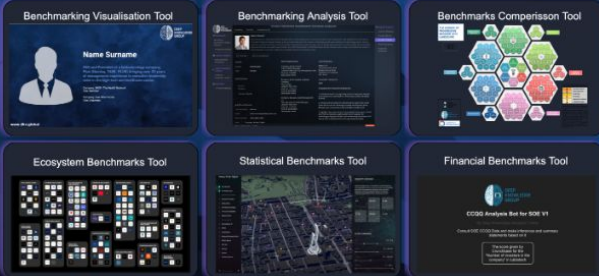
Database and Management Tools

Database and Management Tools



Research and Parsing Tools

Research and Parsing Tools



Enchanted Analytical Material

[illegible]

Corporate Blueprint

THE SCIENCE OF PROGRESSIVE MEDICINE 2019 LANDSCAPE

10/10/2019

Regenerative Medicine

Blockchain

Artificial Intelligence

Biomedical Technologies

Immunology

Environmental

The Science of Progressive Medicine 2019 Landscape

Artificial Intelligence

1. Artificial Intelligence
2. Data Analytics
3. Predictive Modeling
4. Machine Learning
5. Deep Learning

Tailored Market Research

127,561 Companies

11,075 Investors

22,863 Funding Rounds

204 Investments

4,352,300 Total Value

Investments by Year

Line chart showing the number of investments (Y-axis, 0 to 100,000) over time (X-axis, 2017 to 2020). The data shows a significant increase in investments starting in 2019, peaking in 2020.

Investments from Regions

Donut chart showing the distribution of investments across different regions (X-axis, North, South, East, West, Midlands, London). The chart indicates that a large portion of investments are concentrated in London and the South.

Number of Deals by Year

Bar chart showing the number of deals (Y-axis, 0 to 2,000) over time (X-axis, 2017 to 2020). The data shows a steady increase in the number of deals over the years, with a notable spike in 2020.

Investment Rounds

Bar chart showing the number of investment rounds (Y-axis, 0 to 10,000) for different round types (X-axis, Seed, Series A, Series B, Series C, Series D, Series E, Series F, Series G, Series H, Series I, Series J, Series K, Series L, Series M, Series N, Series O, Series P, Series Q, Series R, Series S, Series T, Series U, Series V, Series W, Series X, Series Y, Series Z). The chart shows that Series A and Series B rounds are the most common.

UK Digital Map

Map of the United Kingdom showing the distribution of investments across different regions, color-coded by region.

Custom Benchmarks

AI in Drug Discovery
Companies Focus on
Oncology: Leadership by
Funding Level

AI in Drug
Discovery
Companies One

Total Funding: >500

Total Funding: >200

Total Funding: >100

Personal Health Platform

The diagram illustrates the architecture and data flow of a personal health platform, organized into three main functional areas: **Data Collection & Management**, **Analysis & Insights**, and **Recommendations & Treatment**.

Data Collection & Management: A central **User** interacts with **Wearable & IoT**, **Smartphone**, and **Smart Devices**. Data is collected and processed through a series of steps: **Collecting Data**, **Processing & Storing Data**, and **Storing Data**. This data is then managed through **Data Management**, **Data Integration**, and **Data Analysis**, leading to **Local Data**, **Cloud Data**, and **Data Storage**.

Analysis & Insights: Data is processed through a series of steps: **Data Collection**, **Data Processing**, **Data Analysis**, **Data Interpretation**, and **Data Visualization**. This leads to **Measured Estimated Risks** (including **Interrelated Aging**, **Cancer Risks**, and **Other Age-related Diseases Risks**) and **Referral to Suitable Local Healthcare Providers** (including **List of Recommended Clinical Tests to Perform**, **Performing Telemedicine**, **Performing Digital Biomarker Evaluation**, and **Assessing to Preparation for Diagnosis**).

Recommendations & Treatment: The platform provides **Recommendations** (including **Dietary Recommendations**, **Lifestyle Recommendations**, and **Referral to Suitable Local Clinics**) and **Treatment Results Tracking** (including **Clinicians Consultation** and **Health Tracking**). The **Measured Real Risks** section includes **AI Algorithm Analysis** (including **Biological Age Evaluation**, **Cancer Risks**, **Other Age-related Diseases Risks**, **Early-stage Cancer Detection**, and **Dysfunctions Detection**).

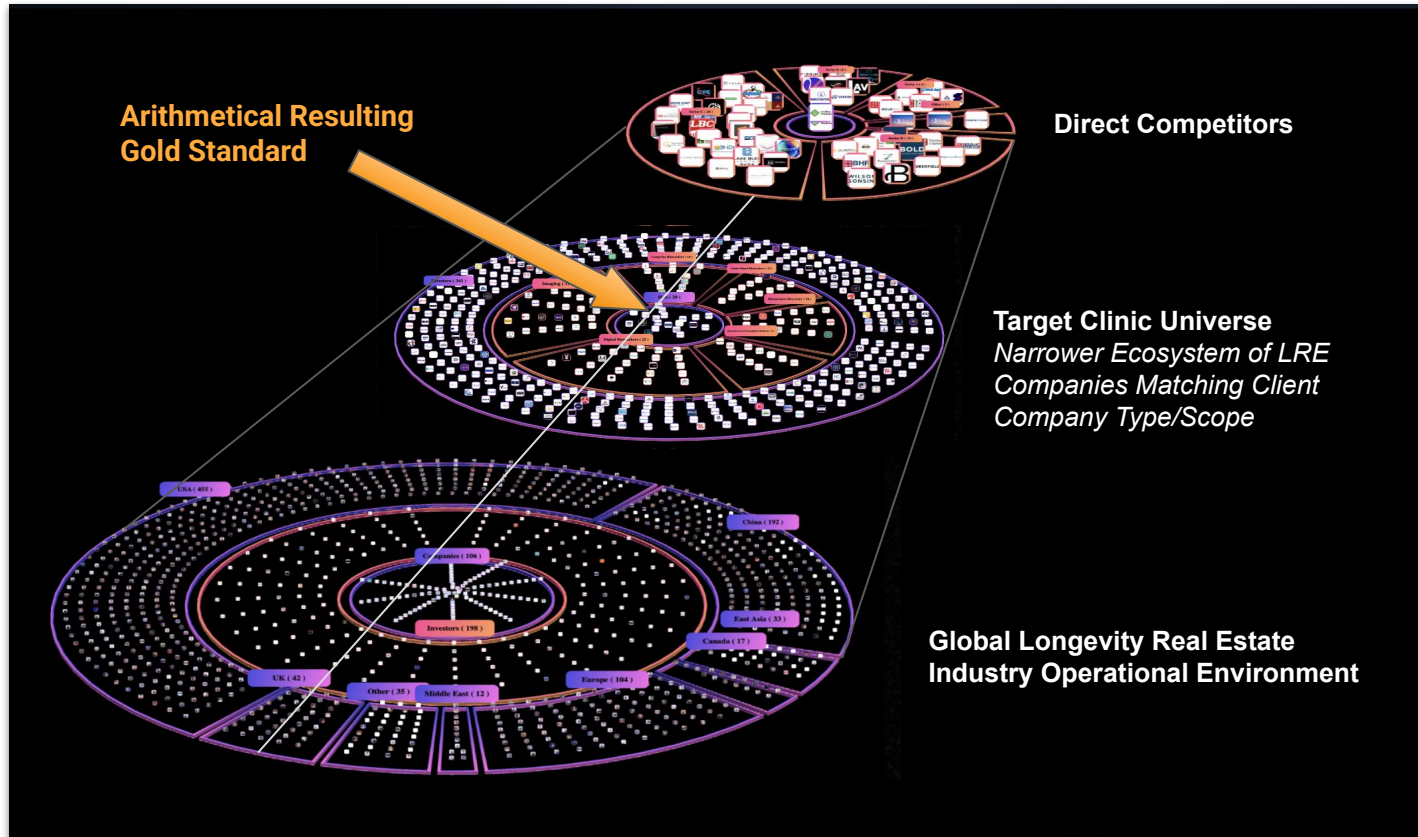
Reference Analysis: The platform uses **Reference Analysis** to provide **Personalized Health Status Evaluation** (including **Lifestyle Pulse & Functions Extraction**, **Medication Use**, **Biological Factors**, **Tobacco Use**, and **Diet**).

Measured Real Risks: The platform provides **Measured Real Risks** (including **Interrelated Aging**, **Cancer Risks**, and **Other Age-related Diseases Risks**) and **Referral to Suitable Local Healthcare Providers** (including **List of Recommended Clinical Tests to Perform**, **Performing Telemedicine**, **Performing Digital Biomarker Evaluation**, and **Assessing to Preparation for Diagnosis**).

Recommendations: The platform provides **Recommendations** (including **Dietary Recommendations**, **Lifestyle Recommendations**, and **Referral to Suitable Local Clinics**) and **Treatment Results Tracking** (including **Clinicians Consultation** and **Health Tracking**).

Treatment Results Tracking: The platform provides **Treatment Results Tracking** (including **Clinicians Consultation** and **Health Tracking**).

Mapping Longevity Real Estate (LRE) Synthetic Operational Environment



A targeted, qualified shortlist of direct Longevity Real Estate competitors is obtained by mapping the full operation environment of the Global Longevity Real Estate Industry, and filtering the subset of companies that match the client according to LRE project type (e.g., Longevity hotel vs. resort vs. home; new construction vs. refurbishment, etc.)

Narrow targeting then enables identification of the direct competitors of the client; however, parallel analysis of the full Global LRE Industry also enables identification of gold standards and best practices both from similar and dissimilar projects.

Longevity Real Estate Corporate Blueprints

Longevity Real Estate Corporate Blueprints (Ideal Pipeline for Project Execution)

Hotel Refurbished into Longevity Clinic	New Longevity Clinic in a Resort	Healthy Lifestyle Homes and Apartments
<p>Description: Transform an existing hotel or resort into a longevity clinic, blending hospitality with advanced wellness and medical services.</p> <p>Features</p> <ol style="list-style-type: none">1. Remodelling: Convert hotel rooms into medical suites and wellness areas.2. Wellness and Health Services: Health assessments, anti-aging treatments, and personalised wellness programs.3. Specialist Staff: Medical professionals, wellness coaches, and therapists.4. Target Clients: Health-focused travellers seeking a combination of vacation and medical care. <p>Key Benefits: Provides health-conscious tourists with high-quality wellness services in a comfortable, familiar hotel setting.</p>	<p>Description: A from-scratch longevity clinic built within a resort, designed for high-end clients seeking wellness services alongside their luxury vacation.</p> <p>Features:</p> <ol style="list-style-type: none">1. Eco-Friendly Design: Incorporates sustainable building materials and wellness-oriented architecture.2. Comprehensive Medical Services: Diagnostics, anti-aging programs, and biohacking treatments.3. Advanced HealthTech Equipment: State-of-the-art health tech, including body scanners and labs.4. Target Clients: Elite guests wanting comprehensive health care integrated into their vacation. <p>Key Benefits: A luxury resort that offers not only relaxation but personalised longevity services for long-term health improvement.</p>	<p>Description: Residential spaces focused on supporting wellness, from clean air to fitness facilities, providing residents with an environment that promotes overall health.</p> <p>Features:</p> <ol style="list-style-type: none">1. Clean Air Systems: Air and water purification for optimal health.2. In-Home Fitness & Wellness: Yoga rooms, meditation spaces, and personal fitness facilities.3. Smart Health Monitoring: Sensors to track air quality, sleep patterns, and physical health metrics.4. Target Clients: Families or individuals focused on optimising their health in daily life. <p>Key Benefits: Residents enjoy continuous health improvements thanks to built-in features that promote mental and physical well-being.</p>

Longevity Real Estate Corporate Blueprints

Longevity Real Estate Corporate Blueprints (Ideal Pipeline for Project Execution)

Longevity City Zones

Description: Urban areas or neighbourhoods designed with wellness in mind, featuring green spaces, eco-friendly infrastructure, and community health resources.

Features

- 1. Urban Design: Parks, walkable areas, and bike paths integrated into the city layout.
- 2. Wellness Centers: Clinics and wellness centres offering preventive health services, diagnostics, and treatments.
- 3. Sustainable Living: Eco-friendly buildings with low energy consumption and renewable energy sources.
- 4. Target Clients: Urban professionals and families seeking a health-focused lifestyle.

Key Benefits: Residents benefit from living in a clean, health-conscious environment that encourages physical activity and community connection.

Longevity Business Mega-Centers

Description: Large-scale facilities housing multiple health and wellness clinics under one roof, providing diverse services in one centralised location.

Features:

- 1. Multi-Clinic Setup: Offers a range of services, from regenerative medicine to wellness and mental health.
- 2. Shared Resources: Centralised labs, diagnostic tools, and data-sharing between clinics.
- 3. AI-Driven: AI-powered systems to manage patient data, diagnostics, and personalised treatment plans.
- 4. Target Clients: Healthcare professionals, companies, and high-net-worth individuals.

Key Benefits: A convenient, centralised location for advanced health services, offering cutting-edge treatments with streamlined processes.

Existing Longevity Clinic Upgrade

Description: Enhancing an existing clinic with new technologies, modern infrastructure, and expanded services to offer the latest in longevity and wellness.

Features:

- 1. Technology Upgrades: Implementing AI diagnostics, robotic treatments, and telemedicine platforms.
- 2. Expanded Services: Adding new wellness programs, such as biohacking, regenerative medicine, or mental health therapies.
- 3. Renovations: Upgrading patient spaces to create a more comfortable, modern healing environment.
- 4. Target Clients: Current patients and new clients seeking cutting-edge treatments.

Key Benefits: Offers more advanced services and a more comfortable patient experience, improving overall clinic performance.

Longevity Real Estate Corporate Blueprints

Longevity Real Estate Corporate Blueprints (Ideal Pipeline for Project Execution)

Loneliness-Combating Community Spaces

Description: Real estate focused on fostering social connections and reducing loneliness, integrating community wellness activities into residential living.

Features

- 1. Shared Social Spaces: Lounges, community kitchens, and co-working spaces that encourage interaction.
- 2. Organised Events: Group fitness, meditation sessions, and social events to promote bonding and reduce isolation.
- 3. On-Site Mental Health Services: Access to therapists and counsellors, group therapy sessions, and mental wellness workshops.
- 4. Target Clients: Seniors, singles, and those seeking stronger community ties.

Key Benefits: Encourages social engagement and emotional well-being, helping residents combat loneliness and mental health challenges.

Clean Air and Environmental Wellness Living

Description: Homes equipped with advanced air filtration systems and eco-friendly designs to provide an optimal living environment focused on respiratory and environmental health.

Features:

- 1. Air Filtration Systems: High-tech purification systems that continuously remove pollutants and allergens.
- 2. Green Design: Indoor plants and natural elements incorporated to improve air quality and mental wellness.
- 3. Real-Time Monitoring: Sensors that monitor indoor air quality and adjust systems automatically for optimal health.
- 4. Target Clients: Health conscious individuals with eco-friendly living goals.

Key Benefits: Cleaner air for better respiratory health, improved mental clarity, and reduced environmental stress.

Mindfulness and Meditation Residences

Description: Homes designed with mindfulness and meditation at their core, offering spaces and services focused on mental relaxation and stress relief.

Features:

- 1. Meditation Rooms: Calm, quiet spaces designed for meditation and relaxation, equipped with sound therapy and natural light.
- 2. Mindfulness Coaches: On-site or virtual meditation guides to help residents practise mindfulness.
- 3. Nature-Inspired Design: Open spaces with natural elements like water features and plants, promoting calmness and mental clarity.
- 4. Target Clients: Individuals seeking mental peace, emotional balance, and stress management.

Key Benefits: Promotes mental clarity, reduces anxiety, and fosters emotional well-being in everyday life.

Longevity Real Estate Corporate Blueprints

Longevity Real Estate Corporate Blueprints (Ideal Pipeline for Project Execution)

Wellness-Focused Family Homes

Description: Family homes designed to enhance overall wellness, with features that promote physical health, mental well-being, and family bonding.

Features

- 1. Family Wellness Programs: On-site or virtual coaching for parents and children focused on health, nutrition, and mental wellness.
- 2. Outdoor Play Areas: Safe, stimulating play spaces for children and fitness trails for the entire family.
- 3. Healthy Kitchens: Equipped with smart cooking appliances and water filtration systems for easy, nutritious meal preparation.
- 4. Target Clients: Families seeking a healthier, more connected lifestyle.

Key Benefits: Supports family health and wellness in a cohesive, nurturing environment.

Nature-Integrated Living Spaces

Description: Homes that blend indoor and outdoor living to enhance wellness through direct access to nature, promoting physical and mental health.

Features:

- 1. Indoor-Outdoor Living: Large windows, open-air patios, and garden spaces integrated into daily living areas.
- 2. Nature Therapy Programs: Access to activities like forest bathing, gardening, and nature walks.
- 3. Sustainable Materials: Homes built using eco-friendly, natural materials like wood and stone.
- 4. Target Clients: Nature lovers and those looking to reconnect with the environment for better mental health.

Key Benefits: environment for better mental health.

Key Benefits: Enhances mental well-being, reduces stress, and fosters a deeper connection with nature.

Multi-Generational Wellness Communities

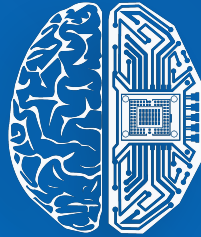
Description: Communities designed for multi-generational living, offering wellness services tailored for different age groups to encourage family bonding and well-being.

Features:

- 1. Intergenerational Living: Homes designed to accommodate extended families, with shared spaces for interaction and separate areas for privacy.
- 2. Health Monitoring: Wearable tech and smart home systems that track the health of each generation, from children's activity levels to seniors' well-being.
- 3. Group Wellness Programs: Wellness activities for the whole family, such as yoga for all ages, fitness classes, and family-centred wellness coaching.

Key Benefits: Promotes mental clarity, reduces anxiety, and fosters emotional well-being in everyday life.

To make impact on the positive
trajectory of humankind development



Deep Knowledge Group

www.dkv.global
info@dkv.global