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Transforming Healthcare Through Integration, Innovation and Training: The Medicina ULisboa-Torres Vedras Campus Concept

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ABSTRACT: The Medicina ULisboa-Torres Vedras Campus is an innovative, multidisciplinary academic healthcare model that integrates clinical care, academic training, research, and innovation. Committed to shaping the future of healthcare, the Campus focuses on developing new approaches supported by interdisciplinary care and advanced technologies to tackle both current and emerging challenges. Situated in Torres Vedras—a region characterized by an aging population and environmental health vulnerabilities—the Campus operates on key foundational pillars, each with a distinct mission, yet working synergistically to achieve a shared vision. These pillars include the Academic Family Health Unit, Public Health Unit, Interdisciplinary Unit, Clinical Research Center, Health Technology Research Center, Academic Center, and the University Center for Disaster Resilience and Emergency Management.

The Campus employs a three-pronged strategy to address healthcare needs: leveraging clinical expertise in chronic disease management to refine training methodologies and develop innovative care models; driving groundbreaking research to conceptualize and validate transformative care frameworks; embedding academic education within real-world clinical environments, providing students with practical, hands-on learning opportunities.

Through its initiatives, the Medicina ULisboa-Torres Vedras Campus—a partnership between Faculdade de Medicina da Universidade de Lisboa and Municipality of Torres Vedras—aims to establish itself as a global leader in community-centered care. By seamlessly integrating innovation, academic excellence, and community engagement, the Campus provides a scalable and replicable model for addressing complex health challenges, transforming healthcare systems, and thriving in an ever-evolving global landscape.

KEY WORDS: Interdisciplinary Care, Primary Health Care, One Health, Health Technology, Academic Center

INTRODUCTION

Healthcare systems worldwide are confronting transformative challenges, including the rising burden of chronic diseases—such as cardiovascular, musculoskeletal, and neurodegenerative disorders—a growing shortage of healthcare professionals, and the imperative to align education and practice within integrated systems (1). These complex issues necessitate innovative care models that emphasize prevention, comprehensive health, and sustainability.

While countries like the United Kingdom, Denmark, and Germany excel in specific aspects of healthcare (2), they often lack integrated frameworks that seamlessly combine academic innovation with holistic, patient-centered care. Torres Vedras, in alignment with the 2030 Agenda for Sustainable Development (3–5), exemplifies a regional commitment to addressing these challenges. Initiatives such as the "Health and Quality of Life Development Plan" (6) focus on reducing health inequities, enhancing preventive care, and addressing the social determinants of health. The region's aging population underscores the urgent need for solutions that tackle chronic diseases and mitigate their societal and economic impacts (6). The Medicina ULisboa-Torres Vedras Campus—a partnership between the Faculdade de Medicina da Universidade de Lisboa (FMUL) and the Municipality of Torres Vedras—responds to these challenges by integrating high-quality healthcare, research, and education. At its core, the Campus addresses three critical priorities through a targeted strategy: managing the rising burden of chronic diseases by leveraging real-world insights to inform innovative care models; fostering integrated, patient-centered solutions by advancing research in interdisciplinary care frameworks; and preparing a skilled healthcare workforce by merging education, research, and practical training within real-world clinical environments. A cornerstone of this approach is the One Health framework, which recognizes the interdependence of human, animal, and environmental health. In parallel, the University Center for Disaster Resilience and Emergency Management will focus on equipping healthcare professionals with advanced skills to respond to emergencies and disasters through comprehensive training in risk assessment, crisis management, and coordinated interventions. Together, these entities create synergies that enable the Campus to address emerging health threats (7,8) while driving proactive healthcare innovation.

Furthermore, the Campus will actively foster synergies with the existing Units and Institutes of FMUL in Lisbon to enhance interdisciplinarity in research, education, and population care. This integrated approach will ensure a cohesive institutional strategy and drive impactful scientific and social innovations across both campuses.

By addressing both local and global health challenges, the Medicina ULisboa-Torres Vedras Campus establishes a new benchmark for integrated, equitable, and sustainable healthcare systems. Its visionary approach offers a replicable model for regions worldwide, demonstrating how academia, healthcare, and community engagement can transform the future of global health.

Historical Summary

Since its establishment in the 16th century, the history of the former "Convento do Barro", later known as "Hospital Dr. José Maria Antunes Júnior", has been closely tied to the adoption of cutting-edge approaches to patient care and the integration of multidisciplinary methods into the rehabilitation process—a revolutionary concept at the time. In 1956, the site was transformed into one of the last sanatoriums constructed in Portugal. The facility was designed to deliver advanced care for tuberculosis patients and introduced innovative multidisciplinary approaches to treatment. However, within just a few years, a shift in public health strategy prioritized outpatient care for tuberculosis, leading to the decline of sanatoriums as the preferred treatment model.

More recently, after being incorporated into the Centro Hospitalar do Oeste as part of hospital service restructuring, a decision was made to permanently close the facility, which was finalized in May 2015. Recognizing the historical and strategic importance of this site to the Torres Vedras region, the Municipality took decisive steps to preserve its heritage. This culminated in the signing of an agreement in April 2021, between the Portuguese State and the Municipality of Torres Vedras, granting the municipality management authority over the property for 50 years (9).

This transfer was based on a memorandum of understanding, signed in 2019, between the Municipality of Torres Vedras and the Faculty of Medicine of the University of Lisbon (FMUL). The aim was to transform the former Dr. José Maria Antunes Júnior Hospital into a state-of-the-art healthcare and academic center, dedicated to providing high-quality care, training health

professionals, and advancing teaching and research in Medicine and other Biomedical Sciences. FMUL's commitment to this project is rooted in its mission to transcend traditional boundaries, bringing healthcare, teaching and research into the community. The center will not only serve as a hub for education and research but also as a bridge between the historical heritage of "Convento do Barro" and the future of integrated healthcare, honoring its past while embracing a modern, inclusive, and interdisciplinary approach.

CHALLENGES

Global healthcare systems, while effective in certain areas, continue to face significant challenges in managing chronic diseases, addressing workforce shortages, integrating advanced technologies, and providing community-centered care. By integrating care, education, research, and technology, the Campus creates a transformative ecosystem aimed at overcoming these critical healthcare challenges (10,11).

THREE KEY CHALLENGES

Emerging Health Problems – A critical challenge facing healthcare systems is the rising prevalence of chronic diseases, especially among aging populations. For instance, dementia is projected to affect 78 million people globally by 2030 and 139 million by 2050 (12). Environmental factors, such as exposure to pesticides in regions like Torres Vedras, further exacerbate these risks, underscoring the urgent need for preventive strategies and innovative care models that address both societal and individual impacts (6,13). Additionally, in an era marked by the increasing frequency and intensity of natural and anthropogenic disasters, and aligned with the principles of interdisciplinary education and One Health, the Medicina ULisboa-Torres Vedras Campus will host the University Center for Disaster Resilience and Emergency Management —a multidisciplinary hub dedicated to training professionals to respond effectively to crises, that will equip healthcare and emergency professionals with advanced skills in prevention, intervention, and recovery across diverse scenarios.

Redefining Models of Care – Fragmented care models often fall short in addressing the complex interplay between clinical, social, and environmental determinants of health. The Medicina ULisboa-Torres Vedras Campus champions integrated care by combining advanced technologies, community-based interventions, and interdisciplinary collaboration. Key functional units, such as the Academic Family Health Unit and the Interdisciplinary Unit, serve as platforms for developing, refining, and testing innovative care strategies (5,10,11).

Training the Healthcare Workforce – Addressing global workforce shortages requires transformative education strategies. The Medicina ULisboa-Torres Vedras Campus places a strong emphasis on training healthcare professionals, including allied health professionals such as psychologists, nutritionists, physiotherapists, and speech therapists. By embedding training within real-world clinical settings, the Campus equips these professionals with the skills necessary to navigate modern healthcare challenges, while fostering interdisciplinary expertise and driving innovation.

ADDRESSING THE CHALLENGES

Vision for the Future

The Medicina ULisboa-Torres Vedras Campus exemplifies the practical implementation of One Health principles, addressing regional health challenges while providing a replicable model for global healthcare innovation. By fostering interdisciplinary collaboration, the Campus promotes resilient and sustainable healthcare systems capable of tackling complex and evolving health needs.

Core Pillars of the Concept

1. **Integrated Philosophy of Care**: The Campus bridges the traditional gap between primary and secondary care. Units such as the Academic Family Health Unit and the Interdisciplinary Unit provide personalized, continuous management of complex conditions, such as dementia and cardiovascular disorders, specifically tailored to the needs of the "Oeste" region.
2. **Leadership in Chronic Disease Management**: Inspired by landmark studies like the Framingham Heart Study (14), the Campus employs advanced tools such as predictive analytics and community-based interventions to develop targeted strategies for managing chronic diseases. This approach extends beyond isolated care initiatives to address the broader social and environmental determinants of health.
3. **Workforce Development and Innovation**: To address global healthcare workforce shortages, the Campus integrates training with practice, equipping professionals with cutting-edge methodologies, including

AI-assisted diagnostics and patient-centered care models. This comprehensive educational framework not only builds local capacity but also fosters innovation.

4. **Technology-Driven Care**: Leveraging advanced technologies, the Campus enhances clinical decision-making, optimizes workflows, and enables seamless communication among care teams, ensuring more efficient, precise, and personalized healthcare delivery

5. **Community-Centric Health**: Rooted in the socioeconomic and environmental context of Torres Vedras, the Campus aligns its services with local needs. This approach addresses broader health determinants while promoting equity and sustainability, exemplifying the principles of the One Health framework.

OPERATIONALIZING ONE HEALTH AT THE CAMPUS

Bridging Disciplines: A Holistic Framework

Functional units such as the Academic Family Health Unit, Interdisciplinary Unit, Public Health Unit, and Clinical Research Unit collaborate closely to implement the One Health approach. By fostering interdisciplinary teamwork, the Campus ensures that complex health challenges are addressed from multiple perspectives, creating innovative solutions that benefit both communities and ecosystems.

Addressing Future Challenges Through One Health

1. **Environmental and Climate Impacts on Health:** Environmental factors, including pesticide exposure and climate-related health risks, are closely monitored and analyzed within the Campus's integrated data framework. Research teams work to develop adaptive strategies to mitigate these risks, ensuring both human health and ecosystem resilience.

2. **Innovation, Research, and Education in One Health**: The Health Technology Research Center plays a pivotal role in advancing One Health initiatives by developing cutting-edge tools for data collection, analysis, and cross-sector integration. Digital platforms enable seamless collaboration between researchers, clinicians, and policymakers, facilitating evidence-based decision-making. Educational programs at the Campus integrate One Health principles into their curricula, offering students hands-on opportunities to engage with interdisciplinary projects. Through these real-world challenges, students and trainees gain the skills necessary to navigate the complexities of global health systems.

ORGANIZATIONAL MODEL: HEALTH/ RESEARCH UNITS

The Medicina ULisboa-Torres Vedras Campus addresses unmet needs in healthcare by combining innovative academic, clinical, and research approaches. The Campus is designed to respond to contemporary challenges, including the growing burden of chronic diseases, the necessity of integrating public health with healthcare delivery, and the need for preparedness in the face of emergencies and disasters. These challenges emphasize the importance of fostering interdisciplinary collaboration, innovative care models, and the integration of cutting-edge research into clinical practice.

Central to this vision is the alignment with the national strategy for healthcare, with a strong emphasis on primary healthcare innovation, public health initiatives, and emergency preparedness. This includes:

– **Primary Healthcare**: Implemented with an innovative academic concept, under the coordination of the Faculty of Medicine of the University of Lisbon, and staffed by health professionals dedicated to integrating clinical activity with research and teaching. It will also serve as a pilot unit for the implementation and evaluation of new models for primary healthcare provision and organization.

– **Interdisciplinary Care:** Focused on individuals with chronic illnesses that significantly impact and burden the population's health, providing comprehensive care across disciplines.

– **Health Professional Training**: Offering training for medical students, doctors, and other health professionals in a real clinical practice environment, ensuring practical, hands-on experience.

– **Clinical Research**: Involving individuals enrolled at the Campus in a prospective cohort study, which will monitor their health over time.

– **Health Technology Research:** Incorporating research groups in areas such as Digital Health, computer science, machine learning, and the design and evaluation of medical devices.

– **Public Health**: A clinical component that integrates health care delivery to the population with research in the area of One Health.

– **Center for Disaster Resilience and Emergency Management:** Integrated into a national framework for training and activating responses in disaster situations.

The organizational model emphasizes core functional units, collectively known as Health/Research Units, each contributing to the overarching vision of transforming healthcare. With an innovative and interdisciplinary approach, the Medicina ULisboa-Torres Vedras Campus integrates a Healthcare hub, an Academic and Research hub, and a hub for Humanitarian Medicine, Emergency and Disaster Management into a single location. These interconnected units include the Academic Family Health Unit, Public Health Unit, Interdisciplinary Unit, Clinical Research Center, Health Technology Research Center, Academic Center, and University Center for Disaster Resilience and Emergency Management (Figure 1).

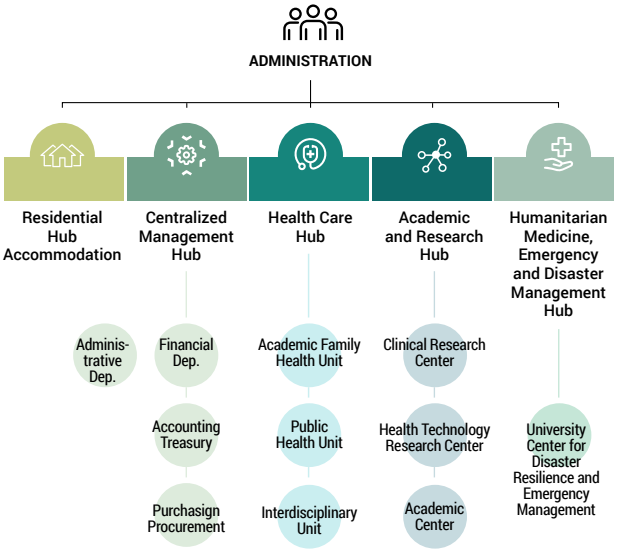

FIGURE 1. Organizational chart of Medicina ULisboa | Torres Vedras Campus

HEALTH/RESEARCH UNITS

We will start with an overview of the Academic Family Health Unit, followed by a comprehensive exploration of the additional health and research units that form the foundation of the Medicina ULisboa-Torres Vedras Campus (Figure 2).

ACADEMIC FAMILY HEALTH UNIT (AFHU): REDEFINING PRIMARY HEALTHCARE

The **Alma-Ata Declaration** of 1978, adopted by the World Health Organization (WHO), established primary healthcare as the cornerstone of effective health systems worldwide (15). In Portugal, **Family Health Units (USFs)** were introduced in 2006 as a transformative model for personalized healthcare, supported by multidisciplinary teams that emphasize autonomy, organizational maturity, and collaborative practices (16).
Building on these successes, the **Medicina ULisboa-Torres Vedras Campus** is pioneering the development of an **Academic Family Health Unit (AFHU)**. This initiative aims to integrate clinical care, education, and research, serving as a national and international model for primary healthcare. Coordinated by the Faculty of Medicine of the University of Lisbon (FMUL), the AFHU bridges gaps in family healthcare while fostering interdisciplinary collaboration and knowledge transfer.

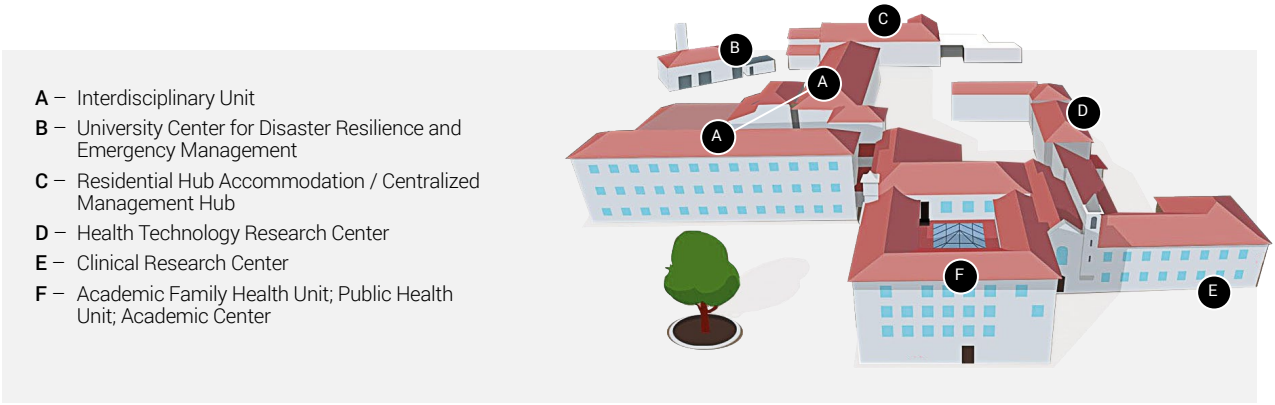

FIGURE 2. The Medicina ULisboa | Torres Vedras Campus facilities [Campus Location: Barro, Torres Vedras; GPS: 39.06456, -9.26102]

KEY FEATURES OF THE AFHU

Academic Excellence:

- The AFHU hosts students, interns, and researchers, making it a hub for training healthcare professionals and integrating research into daily clinical practice.
- Strong partnerships with FMUL enhance its capacity for scientific advancement, ensuring that the unit remains at the forefront of healthcare innovation.

Integration with the Campus Ecosystem:

- Aligned with the Medicina ULisboa-Torres Vedras Campus's vision of interdisciplinary collaboration, the AFHU works closely with units such as the Interdisciplinary Care Unit and the Health Technology Research Center.
- This synergy drives healthcare innovation, ensuring high-quality care while advancing groundbreaking research and education.

Addressing Healthcare Gaps:

- The AFHU addresses the local shortage of family doctors in Torres Vedras, delivering timely, comprehensive care to underserved populations.
- By applying risk stratification models, care can be tailored to the complexity and specific needs of different patient groups, ensuring efficient and equitable resource allocation.

Research and Training Initiatives:

Clinical Research:

- The AFHU will conduct clinical trials in primary healthcare, supported by the on-campus Clinical Research Center.
- These activities generate financial resources to support further clinical and research projects while providing compensation for human resources.

Health Technology Integration:

- Collaboration with the Health Technology Research Center leverages expertise in computer science, electronics, robotics, and other fields to attract external investment.

Prospective Cohort Study:

- All individuals receiving care on the Campus will be invited to join a prospective cohort study.
- A digital platform supporting this initiative is under development to optimize its implementation.

This integrated approach ensures the AFHU remains a cornerstone for advancing primary healthcare while addressing critical local and national challenges.

PUBLIC HEALTH UNIT

A **Public Health Unit** will be integrated into the Campus, enhancing its capacity for research and healthcare delivery in areas such as epidemiology and the One Health approach. This integration addresses the interconnectedness of human, animal, and environmental health, aligning seamlessly with the Campus's vision for sustainable and interdisciplinary healthcare solutions.

ACADEMIC CENTER

The **Academic Center (AC)**, coordinated by the Faculty of Medicine of the University of Lisbon, will oversee all pre- and post-graduate training activities. Focused on postgraduate medical training and the education of health professionals in primary healthcare and interdisciplinary chronic disease care, the Center will gradually expand to include medical student training in primary care. These educational activities will complement clinical and research efforts, ensuring a cohesive approach to healthcare education.

INTERDISCIPLINARY UNIT

The **Interdisciplinary Unit** focuses on managing chronic diseases with significant societal impacts. Its multidisciplinary team includes physicians, nurses, physiotherapists, speech therapists, occupational therapists, psychologists, nutritionists, and social workers. Collaborating with other units like the **Academic Family Health Unit**, the **Academic Center**, the **Clinical Research Center**, and the **Health Technology Research Center**, this unit ensures a holistic approach to care. Key intervention areas include cardiology and vascular risk factors, neurosciences, and musculoskeletal pathologies, aiming to enhance population health and well-being. The Campus will incorporate comprehensive rehabilitation strategies, particularly in cardiovascular care, as part of its core offerings. This focus on

rehabilitation will be essential in the management of chronic diseases and will address the national shortage of Prevention and Rehabilitation Centers, positioning Torres Vedras as a key reference in this area

CLINICAL RESEARCH CENTER

As a cornerstone of the Medicina ULisboa-Torres Vedras Campus, the **Clinical Research Center** seamlessly integrates research, education, and clinical practice to drive healthcare innovation. It conducts clinical studies and trials in close collaboration with other Campus units, including the **Academic Family Health Unit**, **Public Health Unit**, and **Interdisciplinary Unit**. By focusing on underrepresented areas such as primary healthcare, the Center generates critical data to improve health outcomes and bridges the gap between research and clinical care.

At the heart of the Clinical Research Center's mission is the development of a **prospective cohort study**, a unique initiative that integrates human, animal, and environmental health data through the **One Health** approach. This pioneering project aims to uncover the complex relationships between chronic diseases, environmental factors, and public health, supported by a dedicated digital platform for seamless data collection and analysis. Leveraging its collaboration with the **Health Technology Research Center**, the Clinical Research Center harnesses expertise in artificial intelligence, data science, and medical device development, fostering innovation and attracting external investment. By addressing pressing health challenges and advancing interdisciplinary research, the Center sets a new standard for clinical research and embodies the Campus's vision of transformative healthcare solutions.

HEALTH TECHNOLOGY RESEARCH CENTER

Health Technology Research Center, supported by a close multidisciplinary collaboration with the LASIGE Computer Science and Research Centre situated at ULisboa's Science School, bridges clinical needs with technological innovation, creating a unique space for the development and evaluation of cutting-edge solutions in fields such as biomedical engineering, computer science, artificial intelligence, and medical devices. Situated on a campus with active clinical and research activities, it provides a collaborative environment where research groups can address real clinical challenges. Partnerships with other academic institutions will strengthen the Center's ability to attract investment and accelerate technological advancements.

UNIVERSITY CENTER FOR DISASTER RESILIENCE AND EMERGENCY MANAGEMENT

The **University Center for Disaster Resilience and Emergency Management**, established through a collaboration between the Faculty of Medicine of the University of Lisbon and Harvard Medical School, is dedicated to training healthcare professionals to respond effectively to emergencies and disasters. Its mission is to address the increasing frequency and intensity of risk scenarios and natural disasters, ensuring a more efficient and coordinated response. It will offer also direct training in disaster scenarios to the community, as it is expected that in such extreme events most of the add needed in the first few hours will be dependent on citizens own initiative, as professional help may suffer unprecedent delays due to overwhelming demand. It will have autonomy in terms of electricity, sanitation, communications and internet, so that it can function as a national backup center for crisis and emergency management.

DISCUSSION

The **Medicina ULisboa-Torres Vedras Campus** represents a proactive response to the pressing global challenges in healthcare, addressing the interplay between emerging health problems, the evolution of care models, and the urgent need for skilled healthcare professionals. By integrating research, education, and clinical practice within a cohesive ecosystem, this innovative campus provides a framework for tackling these challenges while redefining healthcare delivery both locally and globally.

Addressing Emerging Health Problems

Chronic and neurodegenerative diseases, exacerbated

by aging populations and environmental factors, pose significant threats to global health. The Campus adopts a **One Health** approach, to address these challenges holistically. A central component of this vision is the inclusion of a **prospective cohort study**. By collecting and analyzing data from multiple health domains, the study creates a unique research platform to uncover the relationships between environmental exposures, lifestyle factors, and disease progression. This evidence-based approach facilitates the development of tailored prevention and treatment strategies, particularly for conditions like dementia and cardiovascular disease, which significantly impact the Torres Vedras region.

Redefining Models of Care

Current healthcare systems often operate in silos, leading to fragmented care that fails to meet the complexities of modern health challenges. The **Medicina ULisboa-Torres Vedras Campus** overcomes this limitation by fostering interdisciplinary collaboration across its Health/Research Units, including the **Academic Family Health Unit (AFHU)**, **Interdisciplinary Unit**, and **Clinical Research Unit**. These units serve as experimental hubs for testing and refining integrated care models that emphasize prediction, prevention, and patient-centered care. The use of advanced technologies such as **artificial intelligence, predictive analytics**, and **telemedicine** enhances precision in diagnostics and care delivery. This seamless integration of technology ensures efficient coordination across disciplines, enabling scalable solutions for managing chronic diseases and other health challenges. Furthermore, the Campus's focus on **community-based interventions** aligns healthcare delivery with local socioeconomic and environmental needs, setting a replicable standard for sustainable and equitable care. Through the integration of advanced prevention and rehabilitation programs, the Torres Vedras Campus will strengthen its ability to tackle challenges associated with chronic diseases, establishing itself as a strategic and innovative leader within the national healthcare system.

Training Healthcare Professionals for the Future

One of the most significant barriers to effective healthcare is the global shortage of skilled healthcare professionals. The Campus addresses this challenge through its comprehensive approach to training, integrating education, research, and clinical practice. By embedding training programs within real-world settings, the Campus ensures that students and professionals are equipped with the skills needed to navigate the complexities of modern healthcare. Innovative teaching methodologies, such as **simulation-based learning** and **interdisciplinary team training**, prepare future healthcare providers to work collaboratively and adapt to evolving health challenges. As an integral part of FMUL, the Campus embodies its commitment to academic excellence, ensuring that graduates are equipped to address emerging health needs with innovation and expertise.

Advancing Research and Innovation

Research is a cornerstone of the Campus's mission, with a focus on addressing gaps in primary healthcare and chronic disease management. The **Clinical Research Unit** plays a pivotal role in conducting clinical trials and generating data to inform evidence-based practices. By fostering collaborations between clinical researchers and technology experts at the **Health Technology Research Center**, the Campus accelerates the development of innovative solutions, such as **AI-driven diagnostics** and new **medical devices**. The **prospective cohort study** based on **One Health** data exemplifies the Campus's commitment to innovative research that transcends traditional disciplinary boundaries. This approach not only enhances scientific understanding but also positions the Campus as a leader in global healthcare innovation.

A Vision for the Future

The **Medicina ULisboa-Torres Vedras Campus** serves as a forward-thinking model for the future of healthcare, combining prediction, prevention, and community engagement to address complex health challenges. By integrating education, research, and care delivery, the Campus creates a transformative ecosystem that not only meets immediate health needs but also anticipates and mitigates future challenges. This approach ensures that the Campus remains at the forefront of healthcare innovation, establishing a global standard for sustainable, equitable, and innovative healthcare systems.

CONCLUSION

The **Medicina ULisboa-Torres Vedras Campus** drives healthcare innovation by integrating clinical care, education, and technology, establishing a benchmark for

community-centered and sustainable healthcare. Built on three key pillars:

1. **Addressing Emerging Health Challenges** with a **One Health** approach, the Campus recognizes the interconnectedness of human, animal, and environmental health, positioning itself at the forefront of tackling global health issues. Complementing this vision, the University Center for Disaster Resilience and Emergency Management combines theoretical knowledge with practical, scenario-based simulations to prepare professionals for effective crisis response. Focused on prevention, intervention, and recovery, it aims to strengthen national and regional resilience in managing complex and unpredictable events, ensuring a coordinated and efficient approach to disaster scenarios.

2. **Redefining Care Models** for integration and sustainability, the Campus fosters interdisciplinary collaboration and leverages advanced technologies to create innovative, scalable solutions that enhance the efficiency and effectiveness of healthcare delivery.

3. **Training Healthcare Professionals** for future needs, the Campus combines real-world clinical practice with academic rigor, preparing a new generation of healthcare providers equipped to navigate and address evolving health challenges.

The Campus's **prospective cohort study** highlights its commitment to interdisciplinary research, connecting human, animal, and environmental health data. By aligning healthcare delivery with both local and global priorities, the **Medicina ULisboa-Torres Vedras Campus** not only transforms care in the "Oeste" region but also serves as a scalable model for tackling complex health challenges. The focus on **prediction**, **prevention**, and **sustainability** ensures that the Campus contributes to a more **equitable** future in healthcare.

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