Exploring Cancer Care Pathways in Seven European Countries: Identifying Obstacles and Opportunities for the role of Artificial Intelligence

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Introduction

- Cancer is a global health challenge. 
- Europe faced 2.7 million new cancer cases and 1.3 million deaths in 2020. 
- Europe is responding to cancers with initiatives like Europe’s Beating Cancer Plan and Cancer Mission. 
- INCISIVE project aims to enhance cancer imaging using AI for breast, prostate, lung, and colorectal cancers. 
- The EU-funded INCISIVE project spans over nine European countries.

Objective

The study focuses on understanding diverse cancer care pathways across partner countries to facilitate the optimization of diagnostic methods through AI technology.

Discussion

- A first-of-its-kind comprehensive mapping of cancer care pathways.
- Significant gaps and bottlenecks impact the care continuum: need for targeted improvements.
- Cancer prevention and care initiatives are vital for early detection, timely treatment, and improved patient outcomes.
- AI in cancer care has the potential to revolutionize how cancer is diagnosed, treated, and managed.

Recommended Actions

- Implement standardized norms and protocols for timely diagnosis and treatment.
- Expand and improve cancer screening programs, including new screening technologies.
- Harness AI and technology advancements.
- Prioritize funding and resource allocation for cancer research.
- Enhance the roles of oncology nurses and pharmacists within the multidisciplinary context.
- Regular monitoring and policy evaluation against international standards.

Conclusion

- Widespread diagnostic delays underscore the need for systematic reporting and addressing bottlenecks in Europe’s cancer diagnosis landscape.
- Improved access to advanced imaging services, optimized screening programs, and AI technologies offer promise for enhancing cancer care aligned with patients’ needs and rights and corresponding European policies.

Results

Lack of widespread availability of advanced imaging modalities.

Limited screening for prostate, colorectal, and breast cancers.

Lack of national lung cancer screening programs despite proven benefits.

Gaps and bottlenecks impact diagnosis, treatment, and follow-up care.

Private healthcare is often quicker than public systems for diagnosis and treatment.

Three main bottlenecks: diagnostic delays, treatment delays, and resource shortages.

Cancer diagnosis and treatment delays worsen cancer outcomes and patient experiences.

References

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Disclaimer

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