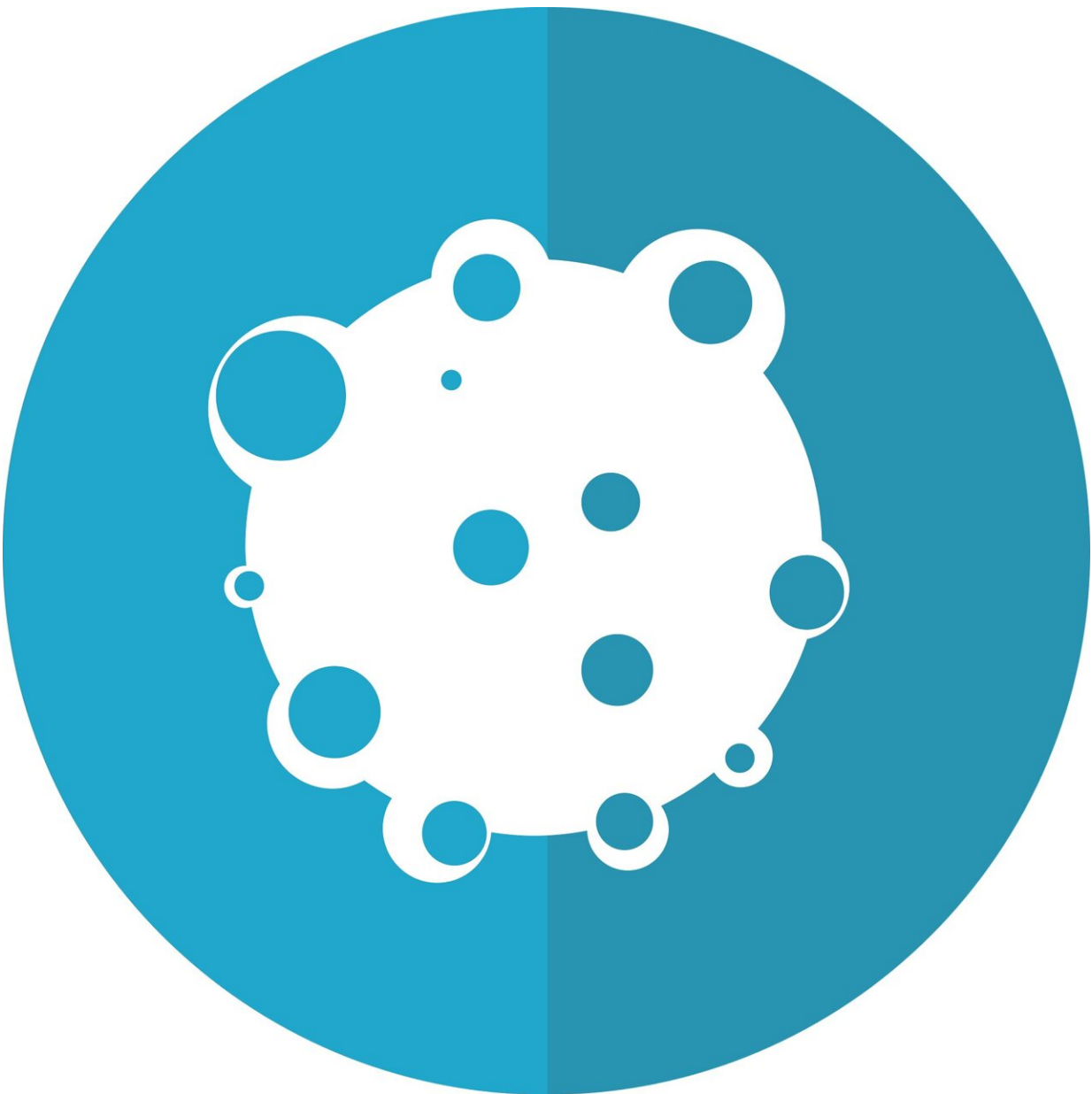


Harnessing machine learning for early cancer detection in primary care

July 21 2023



Credit: Pixabay/CC0 Public Domain

A new editorial paper was published in *Oncoscience*, titled "Transforming early cancer detection in primary care: harnessing the power of machine learning."

Cancer remains a significant global health burden, and early detection plays a crucial role in improving patient outcomes. Primary care settings serve as frontline gatekeepers, providing an opportunity for early detection through symptom assessment and targeted screening. However, detecting early-stage cancer and identifying individuals at high risk can be challenging due to the complexity and subtlety of symptoms.

The challenging nature of early detection is revealed by diagnostic errors in primary care, with cancer being one of the most frequently missed or delayed diagnoses. In recent years, the emergence of [machine learning](#) (ML) techniques has shown promise in revolutionizing early detection efforts. In this new editorial, researchers Elinor Nemlander, Marcela Ewing, Axel C. Carlsson, and Andreas Rosenblad from Karolinska Institutet and the Academic Primary Health Care Centre at Region Stockholm explore the potential of ML in enhancing early cancer detection in primary care.

"ML has the potential to transform early [cancer](#) detection in [primary care](#) by leveraging extensive patient data and improving risk stratification and pre-diagnostic accuracy, hopefully saving lives. However, responsible and equitable implementation of ML models requires [careful attention](#) to ethical considerations, collaboration, and validation across diverse populations," say the authors.

More information: Elinor Nemlander et al, Transforming early cancer

detection in primary care: harnessing the power of machine learning,
Oncoscience (2023). [DOI: 10.18632/oncoscience.578](https://doi.org/10.18632/oncoscience.578)

Provided by Impact Journals LLC

Citation: Harnessing machine learning for early cancer detection in primary care (2023, July 21)
retrieved 3 May 2024 from
<https://medicalxpress.com/news/2023-07-harnessing-machine-early-cancer-primary.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.