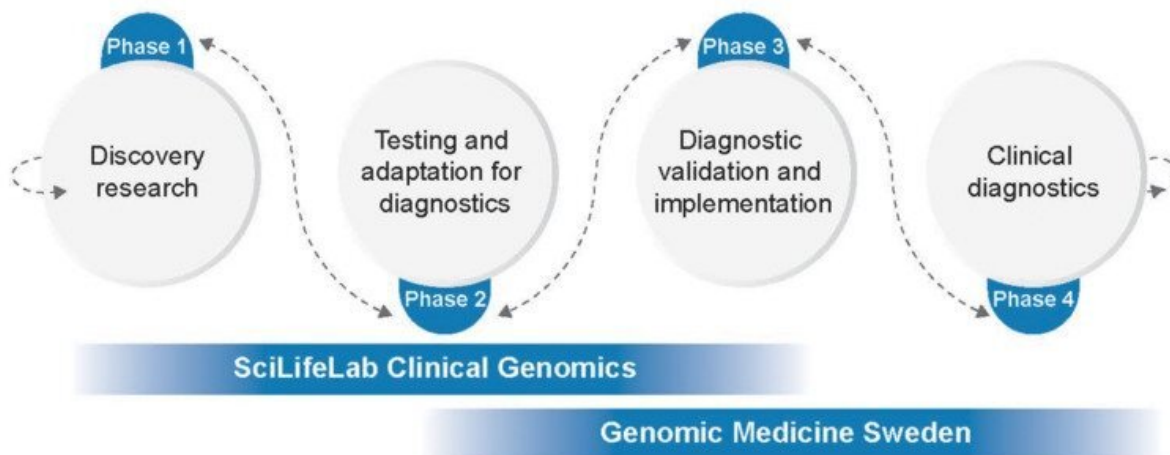


Successful implementation of precision medicine at a national level in Sweden

September 22 2022



Credit: Lucia Cavelier

In Sweden, the key to the successful implementation of precision medicine in health care has been the bottom-up approach where academia and health care have joined forces to build a national infrastructure. Forty-two authors from the Clinical Genomics platform at SciLifeLab and Genomic Medicine Sweden, GMS, summarizes the work in *Nature Medicine*.

Together, Clinical Genomics and GMS have established an innovative framework for continuously developing, adapting and implementing precision medicine in [health care](#)—for all patients. At the seven locations in Sweden with a faculty of medicine and regional health care provider with university hospital care both Clinical Genomics and GMS have established nodes to facilitate the development and optimization of new technologies and methods and their introduction into health care throughout the country.

"It is thanks to the great commitment of all enthusiasts around Sweden that we have been able to establish a national infrastructure for precision medicine. We are now observing how whole-genome sequencing and other broad genetic analyses are used more and more in health care, with increased opportunities for targeted treatment and follow-up," says Richard Rosenquist Brandell, director of GMS, Professor at the Department of Molecular Medicine and Surgery, Karolinska Institutet, and senior consultant at Karolinska University Hospital.

Clinical Genomics and GMS have together with the health care system implemented [whole-genome sequencing](#) in the clinic for [rare diseases](#). Similar projects are also underway in [childhood cancer](#) and leukemias. The infrastructures have jointly developed a number of national broad gene panels for cancer diagnostics that also contain pharmacogenes for dose adjustment. Other focus areas are whole-genome analyses for various infectious diseases and pandemic preparedness.

More information: Thoas Fioretos et al, Implementing precision medicine in a regionally organized healthcare system in Sweden, *Nature Medicine* (2022). [DOI: 10.1038/s41591-022-01963-4](https://doi.org/10.1038/s41591-022-01963-4)

Provided by Karolinska Institutet

Citation: Successful implementation of precision medicine at a national level in Sweden (2022, September 22) retrieved 26 April 2024 from <https://medicalxpress.com/news/2022-09-successful-precision-medicine-national-sweden.html>

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