

CO-CREATING THE FUTURE OF PERSONALISED MEDICINE IN IRELAND

The right treatment for the right person at the right time. This is the promise of personalised medicine, a paradigm shift in healthcare with transformative potential for patients, practitioners and the public. Stakeholders from across the health ecosystem explored the implications for Ireland at the Health Research Board's National Conference in Dublin.

"Personalised medicine opens new horizons for better, more targeted approaches to healthcare," remarked HRB Chief Executive Dr Mairéad O'Driscoll in her opening address to the HRB's National Conference in Dublin on 30 November 2022.

The conference programme explored the opportunities and challenges ahead, while speakers across research, clinical practice and public and patient representatives summarised the key elements during the workshops and a panel discussion.

FROM RESEARCH TO PRACTICE
Contributions from pioneers of personalised medicine demonstrated that it is far from blue-sky thinking, as research in genomics is already informing tailored treatment paths that are improving patients' lives. The shift is from a 'one-size-fits-all' approach to healthcare to one that combines molecular profiling, medical imaging and lifestyle data, for example, to enable precise diagnosis, select personalised therapies, and target prevention strategies.

Keynote speaker Dame Prof Anna Dominiczak, Regius Professor of Medicine at the University of Glasgow and Chief Scientist for Health for the Scottish Government, brought conference delegates behind the scenes of her team's 'Living Laboratory' for precision medicine.



Personalised Medicine (PM) – a paradigm shift in advancing research, supporting the transformation of the health system and benefiting patients.

She said that clinicians, scientists and industry are working together to pave the way for the adoption of PM across the Scottish health system.

A series of case studies showcased leading-edge PM research taking place in Ireland:

- Prof. Norman Delanty from Beaumont Hospital and the Royal College of Surgeons Ireland (RCSI) explained how tailored treatments are making a real difference to the lives of patients with epilepsy.
- Prof. Maeve Lowery from Trinity

College Dublin and St James's Hospital presented her work on precision cancer medicine: how targeting the molecular mechanism behind cancer development can have clinical benefits.

- Dr Shane McKee from the Belfast Health and Social Care Trust shared his experience of creating a diagnostic genomics architecture that can help clinicians ask the right questions to find the right answers for their patients.

“Personalised medicine opens new horizons for better and more targeted approaches to healthcare,” – HRB Chief Executive Dr Mairéad O’Driscoll (pictured in her opening address to the HRB’s National Conference in Dublin on 30 November 2022).



POLICY AND RESEARCH PRIORITIES

Already a prominent fixture in European research, personalised medicine is also climbing the policy agenda here in Ireland. On opening the conference via a video link, Minister for Health Stephen Donnelly TD told delegates that “the theme of personalised medicine is both timely and topical, as we have made very important advances in this area recently,”

The Minister pointed to several recent developments, including Ireland’s first National Strategy for Genetics and Genomics, Ireland’s participation in the European ‘One Million Genomes’ initiative and European Genomic Data Infrastructure, and he also pinpointed a recent meeting of The Citizens’ Jury on the future use of genomics.

Ejner Moltzen, Chair of the International Consortium for Personalised Medicine (ICPerMed), gave an overview of global developments in PM research. He described the pace of change as indicative of a broader sea change in healthcare.

“Ten years down the road, someone might remember we talked about ‘personalised medicine’; but by then, we will just be referring to it as ‘health’ – health for patients and health for citizens,” he noted.



Pictured during the speaker panel discussion (l-r): Prof Dame Anna Dominiczak, Regius Professor of Medicine at the University of Glasgow and Chief Scientist for Health for the Scottish Government; Ejner Moltzen, Chair of the International Consortium for Personalised Medicine (ICPerMed); Orla Tinsley (on-screen who shared the perspective as a patient advocate), HSE Chief Clinical Officer Dr Colm Henry, and the Health Research Board’s Dr Teresa Maguire.

COLLABORATION IS VITAL

As with any major transformation, there will be challenges, and Prof Michael Barry, Director of the National Centre of Pharmacoeconomics, opened his talk with a provocative question: “Who is going to pay?”

Looking at PM through the lens of drug expenditure across the various healthcare systems, he probed the relationship between health benefits and the cost of new therapies. Meanwhile, Prof. Katherine Payne, Professor of Health Economics at the University of Manchester, examined the broader economic considerations and the need for inclusivity to extend the benefits of PM to all.

One conclusion emerged loud and clear from the discussions during the conference – to truly deliver on the promise of personalised medicine, collaboration will be vital both within the health system and across society.

Delegates heard that unlocking the benefits will require systemic change, which can only happen if every stakeholder has a seat at the table – government departments and agencies, health system professionals, industry and academic research, and crucially the patients and the general public.

These diverse views, presented in a session on the path forward for PM, included:

- Orla Tinsley, sharing the perspective as a patient advocate, emphasising the importance of access to enable patients to benefit from medical innovations.
- Dr Ciara Staunton of Eurac Research, giving an overview of ethico-legal aspects such as data protection and equity.
- Roche’s Deirdre Poretti highlighting how innovation is emerging through collaboration between industry, academia and clinical practice.
- HSE Chief Clinical Officer Dr Colm Henry presenting the health system view on genetics and genomics.
- The HRB’s Dr Teresa Maguire noting co-operation, co-ordination, an integrated policy framework and a strategic research agenda, when summing up research funding priorities.

The public voice was strong throughout the conference, via a series of video messages from across Ireland. The HRB had reached out to over 50 community groups inviting people from all walks of life to share their views on personalised medicine.

While attitudes were generally positive, concerns were raised around topics like data protection, access and equity. One contributor used the term ‘co-creation’ of healthcare to describe the benefits of moving to a personalised approach.

Summing up the day’s discussions, HRB CEO Dr Mairéad O’Driscoll concluded that this perfectly encapsulated the way forward for PM in Ireland: “We need to work together to try to co-create our future in this space,” she concluded.



For further information and videos of all conference presentations visit www.hrb.ie/news/events/archives/personalised-medicine/watch-back/