NextGen

Genome-Centric Multimodal Data Integration in Personalised Cardiovascular Medicine.

Deliverable 8.2
Project website

Grant Agreement Number: 101136962

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UK Research and Innovation

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Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER
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DELIVERABLE 8.2 – Project website	
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Disclaimer

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The NEXTGEN consortium consists of the following partners:

No	PARTNER ORGANISATION NAME	ABBREVIATION	COUNTRY
1	UNIVERSITAIR MEDISCH CENTRUM UTRECHT	UMCU	PT
2	HIRO MICRODATACENTERS B.V.	HIRO	NL
3	EURECOM GIE	EURE	FR
4	JOHANN WOLFGANG GOETHE-UNIVERSITAET FRANKFURT AM MAIN	GUF	DE
5	KAROLINSKA INSTITUTET	KI	SE
6	HUS-YHTYMA	HUS	FI
7	UNIVERSITY OF VIRGINIA	UVA	USA
8	KLINIKUM RECHTS DER ISAR DER TECHNISCHEN UNIVERSITAT MUNCHEN	TUM-Med	DE
9	HL7 INTERNATIONAL FONDATION	HL7	BE
10	MYDTA GLOBAL RY	MYDTA	FI
11	DATAPOWER SRL	DPOW	IT
12	SOCIETE EUROPEENNE DE CARDIOLOGIE	ESC	FR
13	WELLSPAN HEALTH	WSPAN	USA

14	LIKE HEALTHCARE RESEARCH GMBH	LIKE	DE
15	NEBS SRL	NEBS	BE
16	THE HUMAN COLOSSUS FOUNDATION	HCF	CH
17	SCUOLA UNIVERSITARIA PROFESSIONALE DELLA SVIZZERA ITALIANA	SUPSI	CH
18	DRUG INFORMATION ASSOCIATION	DIA	CH
19	DPO ASSOCIATES SARL	DPOA	CH
20	QUEEN MARY UNIVERSITY OF LONDON	QMUL	UK
21	EARLHAM INSTITUTE	ERLH	UK

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List of terms and abbreviations

ABBREVIATION	DESCRIPTION
CMS	Content Management System
GA	Grant Agreement
GDPR	General Data Protection Regulations
KPI	Key Performance Indicator
SEO	Search Engine Optimization
WP	Work Package

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Executive Summary

The executive summary of Deliverable 8.2, titled "Project Website," describes how NextGen will establish and manage its online presence. This deliverable will detail the development and ongoing maintenance of the project's official website which will serve as the central hub for dissemination and public engagement.

Key Highlights of Deliverable 8.2:

- **Detailed Website Features:** This document outlines the structure of the website, including a homepage that introduces the project, detailed pages for each project component, a resources page, and a contact information page.
- **Strategic Online Presence:** The website enhances the project's digital footprint by effectively disseminating outcomes and engaging with a global audience.
- **Website as a Central Hub:** The website is an informative and user-friendly platform that provides comprehensive coverage of the project's aims, developments, and milestones.
- **Advanced Functionalities:** The website highlights the integration of interactive elements such as blogs and news tickers, multimedia resources, and a robust search function that enhances the user experience and aids in information dissemination.
- **Technical and Analytical Framework:** The implementation of WordPress and Divi Builder is discussed, ensuring the website's responsiveness and aesthetic appeal. Additionally, the use of the Matomo analytics platform is detailed, supporting the effective monitoring and evaluation of the website as a communication tool.
- **Privacy and Security Measures:** Given the sensitivity of the research data, the website enforces strict privacy and security protocols in place to protect visitor information and comply with GDPR regulations.

Future Directions and Enhancements:

- **Proactive Updates:** Anticipating the evolving needs of the project, the deliverable outlines planned updates and enhancements to the website, ensuring that it remains cutting-edge and continues to meet the expanding requirements of the community.
- **Community Engagement and Dissemination:** The deliverable reaffirms the role of the website in fostering community engagement and extending the reach and impact of NextGen's groundbreaking research.

Conclusion:

- **Impactful Online Strategy:** The strategic importance of a well-managed online presence is crucial to achieve the dissemination and communication objectives set forth in the Grant Agreement.

In summary, Deliverable 8.2 not only serves as a blueprint for establishing and managing an effective online presence but also as a dynamic tool for ongoing community engagement and the dissemination of breakthroughs in personalized cardiovascular medicine.

1 Introduction

Deliverable 8.2, "Project Website," is a pivotal component of NextGen, a large-scale initiative aimed at revolutionizing genome-centric multimodal data integration in personalized cardiovascular medicine. This document is structured to comprehensively address the development and maintenance of a robust online presence through an expertly crafted project website.

The Deliverable emphasizes the necessity of a strong digital footprint in disseminating project outcomes and engaging with the global community. The introduction also underscores the alignment of the online strategies with the overarching goals of NextGen, ensuring that all digital efforts are coherent with the scientific and ethical standards of the consortium.

This Deliverable presents an in-depth look at the NextGen website, which serves as the central hub for information dissemination and public engagement. The website is designed to be user-friendly and informative, providing comprehensive coverage of the project's aims, developments, and milestones.

Deliverable 8.2 also covers the technical underpinnings of the website, including its development using WordPress and the Divi Builder, ensuring responsiveness and aesthetic appeal. The section on analytics discusses the implementation of Matomo, an open-source web analytics platform that helps monitor and evaluate the effectiveness of the website as a communication tool. This includes tracking visitor behaviour, download metrics, and overall engagement, which are crucial for ongoing website optimization.

Given the sensitivity of the research data involved, the document details the stringent privacy and security measures in place on the website to protect visitor information and comply with GDPR regulations. This includes data anonymization techniques and clear user opt-out options, ensuring that all data handling processes are transparent and secure.

Anticipating future needs, Deliverable 8.2 outlines planned updates and enhancements to the website. This proactive approach ensures that the digital presence of NextGen remains cutting-edge, accommodating new scientific findings and expanding community engagement strategies.

The concluding section of Deliverable 8.2 reiterates the importance of a well-managed online presence in the success of NextGen. It reflects on how the strategic development and maintenance of the project website play a critical role in achieving the dissemination and communication objectives set forth in the Grant Agreement.

In summary, Deliverable 8.2 not only serves as a blueprint for establishing and managing an effective online presence but also as a dynamic tool for ongoing community engagement and dissemination of breakthroughs in personalized cardiovascular medicine.

2 NextGen website

The NextGen website establishes the project's foundational online presence, serving as the primary source for all information related to the project. Its design ensures easy access and comprehensive coverage of the project's aims and developments.

- **Homepage**: Introduces the project and provides quick links to all sections of the website, highlighting key updates.
- **Project Overview Page**: Details the objectives, scope, and goals of NextGen, offering an in-depth look at the project's significance.
- **Components/Phases Pages**: Each project component or phase has a dedicated page that describes its specific activities, progress, and results.
- **Resources Page**: Houses downloadable resources, research publications, and essential documents for deeper understanding and engagement with the project.
- **Contact Information Page**: Lists all necessary contact details for the project team, facilitating direct communication and inquiries.

Additional features of the website include interactive elements like blogs and news tickers, multimedia resources for enhanced engagement, and a robust search functionality to help visitors easily navigate the site. The website is also optimized for mobile devices to ensure a seamless viewing experience on all platforms.

Overall, the NextGen website is crafted not just to inform but also to engage a global audience, thereby supporting the project's mission to advance personalized cardiovascular medicine.

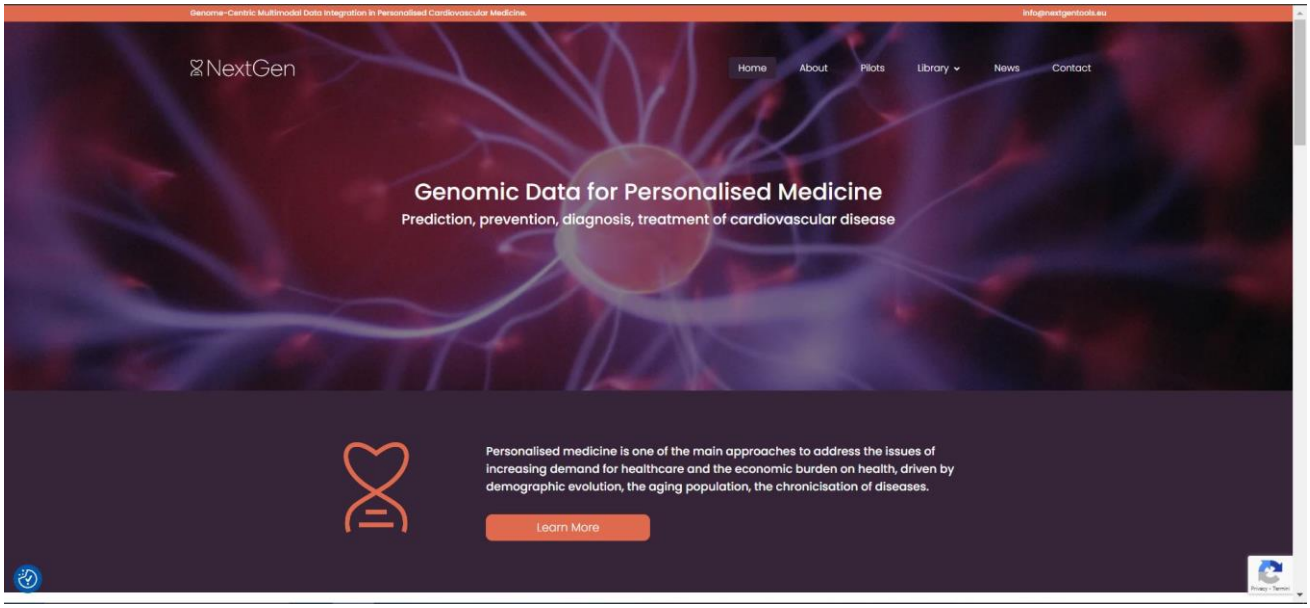


Figure 1: NextGen website landing page

In accordance with the Grant Agreement (GA), the monitoring of communication and dissemination activities is monitored through several key performance indicators (KPIs) depicted in D8.1. The website serves as a critical tool in this effort, facilitating the collection of relevant metrics. It allows for tracking the number of downloads of materials, which provides insight into user engagement and resource utilization. Additionally, overall website traffic, including visitor counts and page views, will be analysed to gauge the reach and impact of the information provided.

To ensure precise and compliant data handling, the website employs Matomo (see §2.4 for details), an open-source web analytics platform known for its robust privacy features. Matomo stands out primarily because it adheres to GDPR guidelines, ensuring data privacy through measures like data anonymization and providing

users with opt-out options. This platform can be tailored to meet specific needs of the website, offering flexibility in the setup of tracking and analysis.

Matomo also generates comprehensive reports that are straightforward and easy to interpret, aiding in the effective assessment of KPIs. These capabilities are crucial for understanding user interactions and improving communication strategies.

Furthermore, the privacy policy detailed on the website clearly outlines the methods of data collection and usage. This transparency is vital not only for compliance but also for maintaining user trust by clarifying how their data contributes to the website's functionality and supports the monitoring of project-related KPIs.

2.1 NextGen website structure

The first version of the website structure includes:

- Home
- Personalized medicine
- Tools
- Partners
- Documents
- News
- Contacts

The following chart presents the overview of the NextGen website, mapping the different pages and their content. The website is a dynamic object and while some of the structural elements remain stable, it will be updated dynamically as the project develops over time.

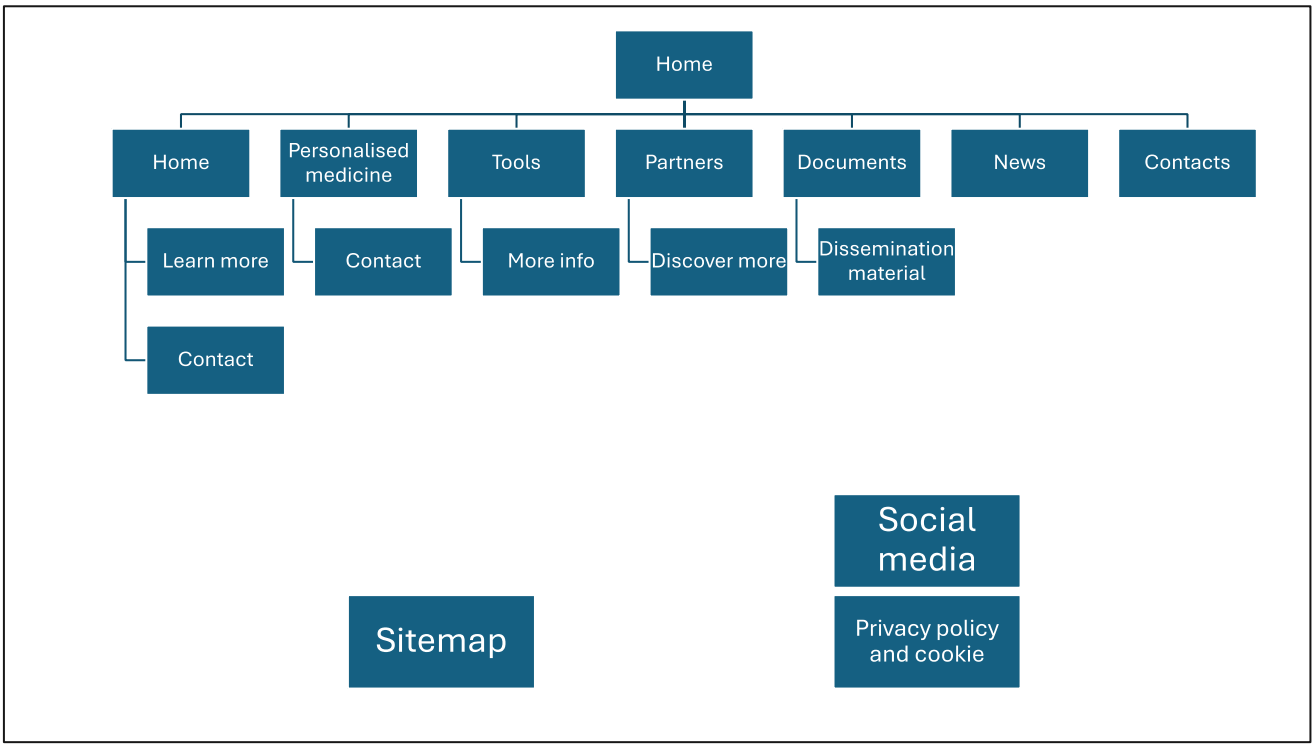


Figure 2: NextGen sitemap

The NextGen website is organized to offer visitors a comprehensive understanding of the project through a user-friendly interface. Each section is designed to cater to different informational needs and interests.

- **Home Page**: Serving as the portal to the NextGen universe, the Home Page provides an overview of the project. It functions as the central hub from which all other sections of the website are accessible, offering initial insights and directing visitors to more detailed content.

- **Personalised medicine**: This section details the challenges addressed by NextGen, the innovative solutions proposed, and the specific objectives of the project. This page sets the stage by explaining the relevance and the scope of NextGen's initiatives.
- **Tools**: Dedicated to the tools of NextGen, this section currently offers a high-level overview of each tool, discussing the ongoing efforts to demonstrate the advanced integration and workflow tools in data use cases displaying the removal of technical and operational barriers. Given the dynamic nature of the project's development, this section is anticipated to receive the first substantial updates to reflect progress and detailed findings as they become available.
- **Partners**: This section includes the **Partners** description. Visitors can find details and websites for each partner, therefore stakeholders and interested parties can reach out with inquiries or for collaboration.
- **Documents**: This section also include the **Dissemination material** links to facilitate an open access to the project deliverables and other contents. This section provides downloadable resources, documents, and tools developed by NextGen, enhancing the practical engagement with the project.
- **News**: Regularly updated with the latest news, announcements, and progress reports, keeping all interested parties informed about recent activities and milestones. This section also includes the **Blog** page of the Project.

Additional Resources:

- **Contacts**: Encourages involvement with detailed information on how individuals or organizations can contribute to or participate in the project.
- **FAQ and Glossary**: These auxiliary sections offer quick answers to common questions and definitions of key terms, respectively, improving the educational aspect of the site and assisting in demystifying complex topics.
- **Site Map**: Facilitates the website navigation.

The structured layout of the NextGen website ensures that each visitor, whether a potential partner, researcher, or individuals interested in cardiovascular innovations, can navigate and extract information tailored to their specific needs.

2.2 The Webpages

In this section the screenshots of the NextGen website are presented. They are related to:

- Landing page and the project objectives.
- About the project scope and contents.
- Project's Pilots.
- Project's Partners.
- Dissemination material.
- News.
- Contacts.

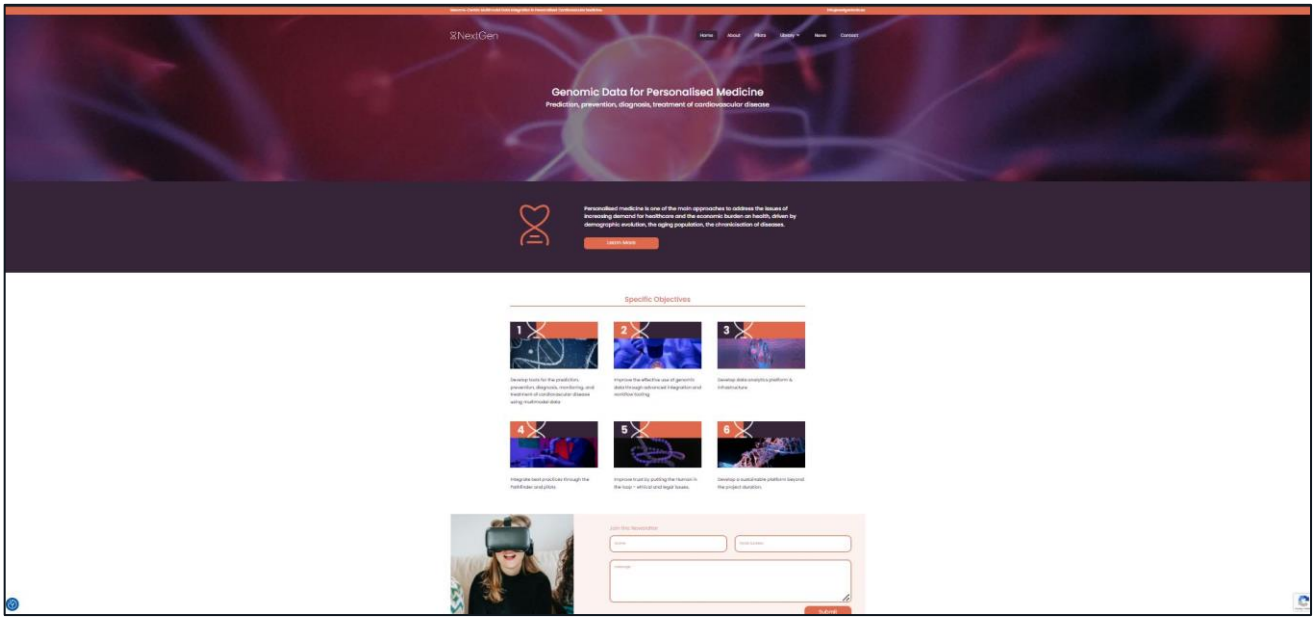


Figure 3: NextGen landing page with the project objectives

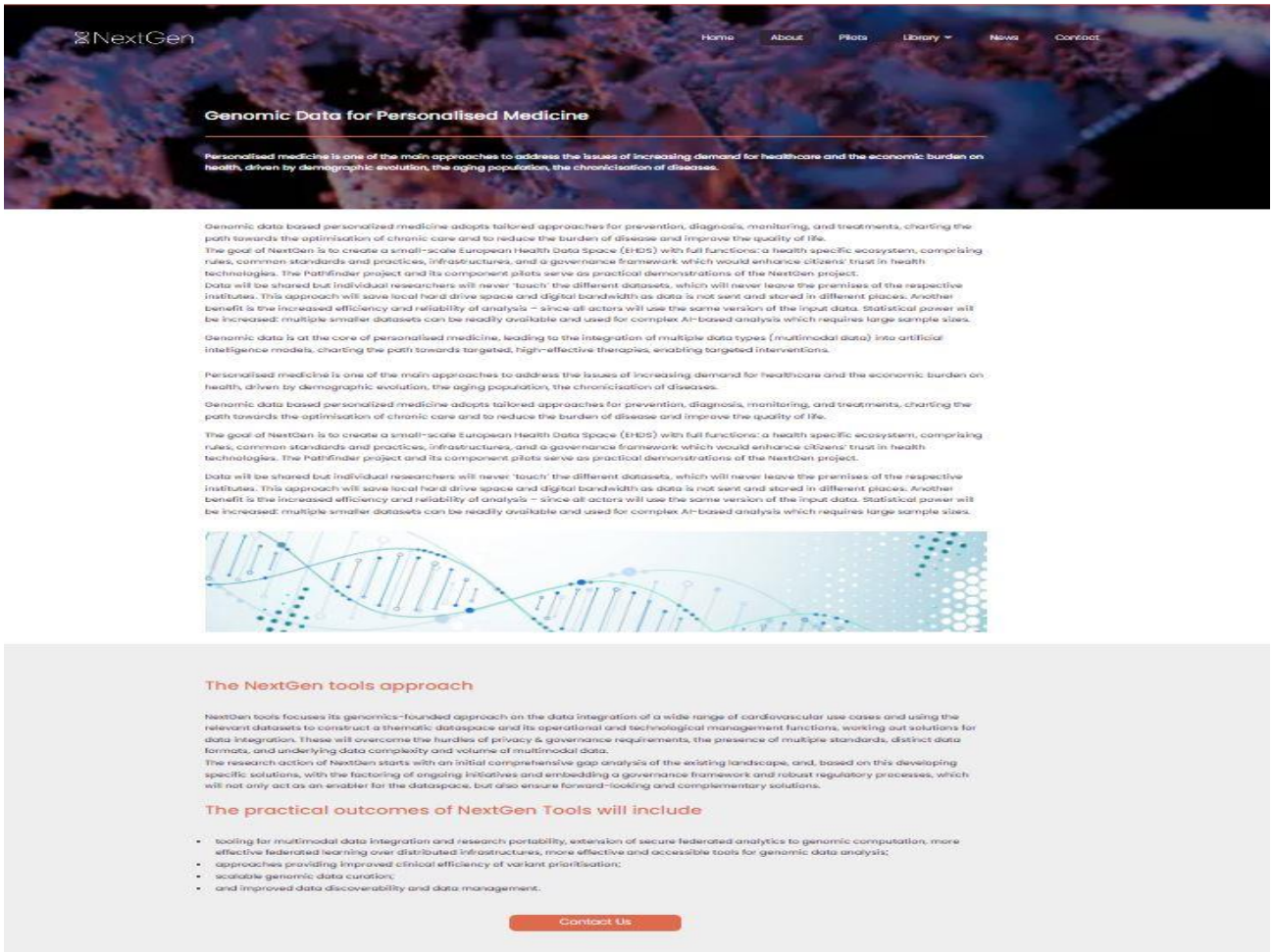


Figure 4: NextGen – About the project scope and main contents

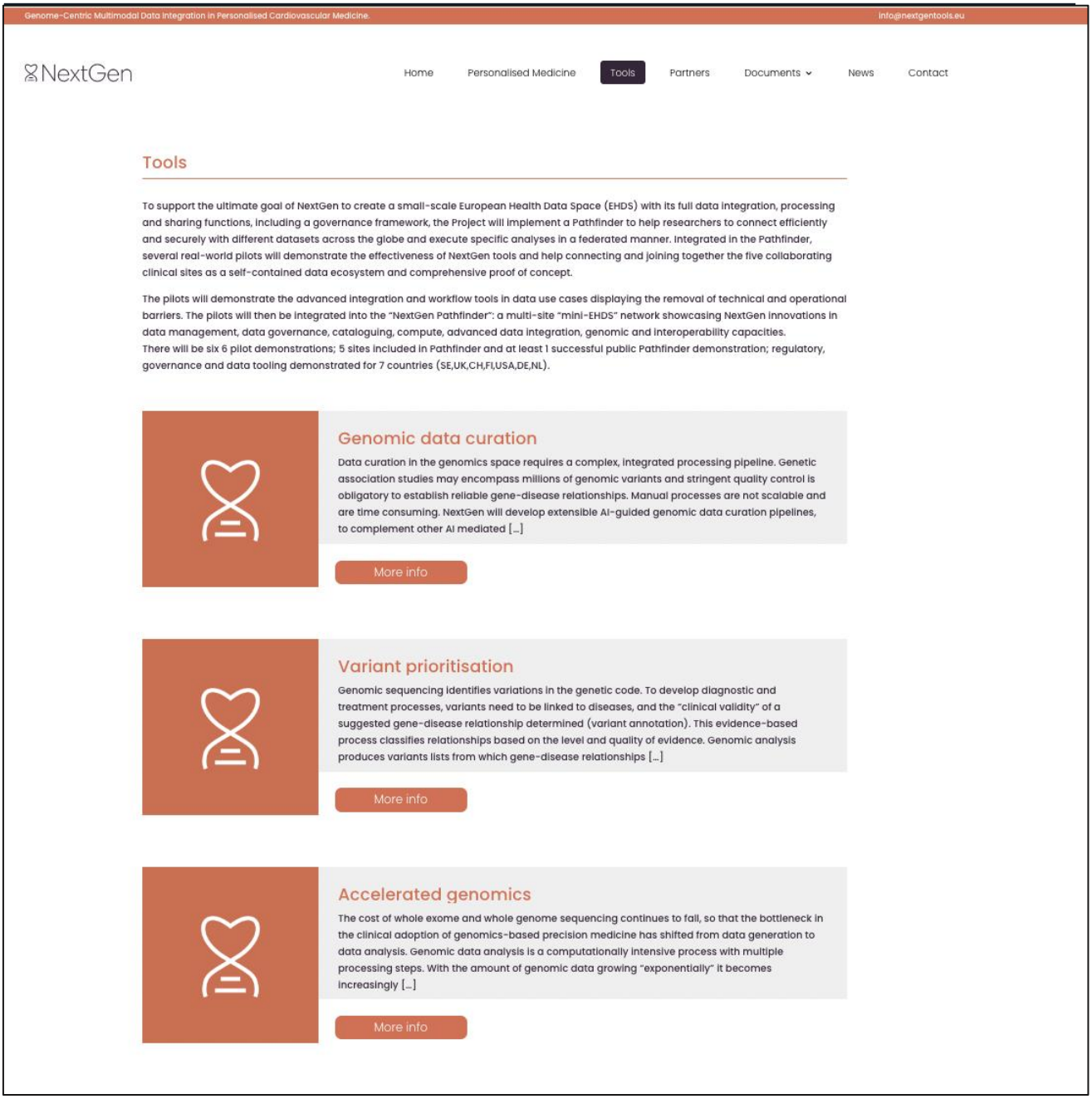


Figure 5: NextGen Project's Tools

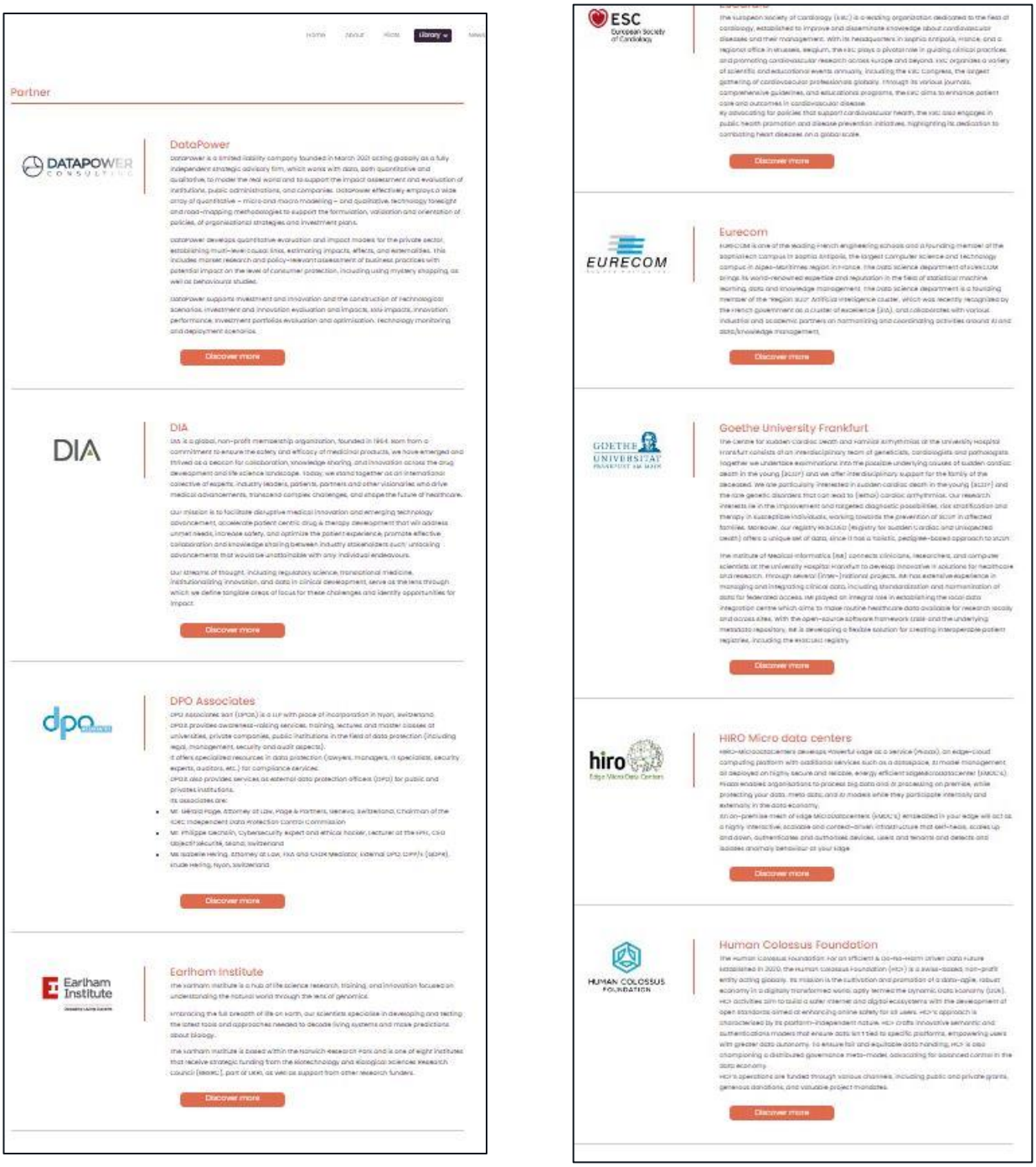
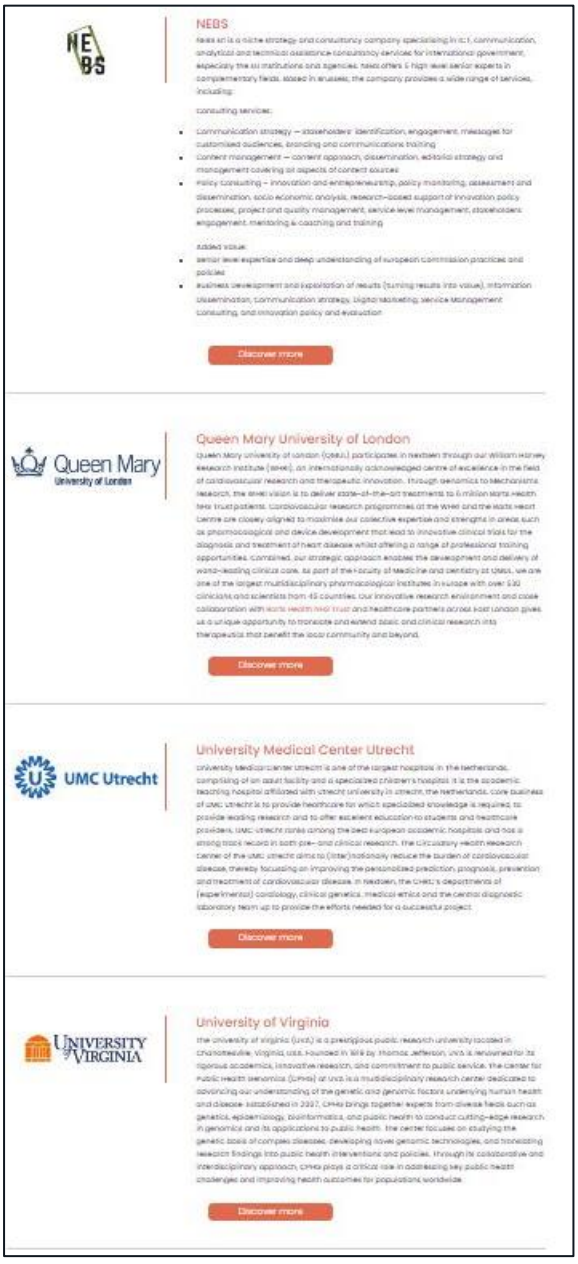


Figure 6: NextGen Project's Partners (part 1)



NEBS

Nebs an is a niche strategy and consultancy company specialising in ict, communication, analytical and technical assistance consultancy services for international government, especially the eu institutions and agencies. nebs offers it high level senior experts in complementary fields. based in brussels, the company provides a wide range of services, including:

consulting services:

- communication strategy – stakeholders' identification, engagement, messages for customised audiences, branding and communications training
- content management – content approach, dissemination, editorial strategy and management covering all aspects of content sources
- policy consulting – innovation and entrepreneurship, policy monitoring, assessment and dissemination, socio economic analysis, research-based support of innovation policy processes, project and quality management, service level management, stakeholders engagement, mentoring & coaching and training

Added value:

- senior level expertise and deep understanding of european commission practices and policies
- business development and exploitation of results (turning results into value), information dissemination, communication strategy, digital marketing, service management consulting, and innovation policy and evaluation

Discover more

Queen Mary University of London

Queen Mary University of London (QMUL) participates in nextgen through our William Harvey Research Institute (WHRI), an internationally acknowledged centre of excellence in the field of cardiovascular research and therapeutic innovation. through genomics to mechanisms research, the whri vision is to deliver state-of-the-art treatments to 6 million barts health nhs trust patients. cardiovascular research programmes at the whri and the barts heart centre are closely aligned to maximise our collective expertise and strengths in areas such as pharmacological and device development that lead to innovative clinical trials for the diagnosis and treatment of heart disease whilst offering a range of professional training opportunities. combined, our strategic approach enables the development and delivery of world-leading clinical care. as part of the faculty of medicine and dentistry at qmul, we are one of the largest multidisciplinary pharmacological institutes in europe with over 230 clinicians and scientists from 45 countries. our innovative research environment and close collaboration with barts health nhs trust and healthcare partners across east london gives us a unique opportunity to translate and extend basic and clinical research into therapeutics that benefit the local community and beyond.

Discover more

UMC Utrecht

University Medical Center Utrecht

university medical center utrecht is one of the largest hospitals in the netherlands, comprising of an adult facility and a specialised children's hospital. it is the academic teaching hospital affiliated with utrecht university in utrecht, the netherlands. core business of umc utrecht is to provide healthcare for which specialised knowledge is required, to provide leading research and to offer excellent education to students and healthcare providers. umc utrecht ranks among the best european academic hospitals and has a strong track record in both pre- and clinical research. the circulatory health research center of the umc utrecht aims to (inter)nationally reduce the burden of cardiovascular disease, thereby focussing on improving the personalized prediction, prognosis, prevention and treatment of cardiovascular disease. in nextgen, the chrc's departments of (experimental) cardiology, clinical genetics, medical ethics and the central diagnostic laboratory team up to provide the efforts needed for a successful project.

Discover more

University of Virginia

the university of virginia (uva) is a prestigious public research university located in charlottesville, virginia, usa. founded in 1819 by thomas jefferson, uva is renowned for its rigorous academics, innovative research, and commitment to public service. the center for public health genomics (cphg) at uva is a multidisciplinary research center dedicated to advancing our understanding of the genetic and genomic factors underlying human health and disease. established in 2007, cphg brings together experts from diverse fields such as genetics, epidemiology, bioinformatics, and public health to conduct cutting-edge research in genomics and its applications to public health. the center focuses on studying the genetic basis of complex diseases, developing novel genomic technologies, and translating research findings into public health interventions and policies. through its collaborative and interdisciplinary approach, cphg plays a critical role in addressing key public health challenges and improving health outcomes for populations worldwide.

Discover more

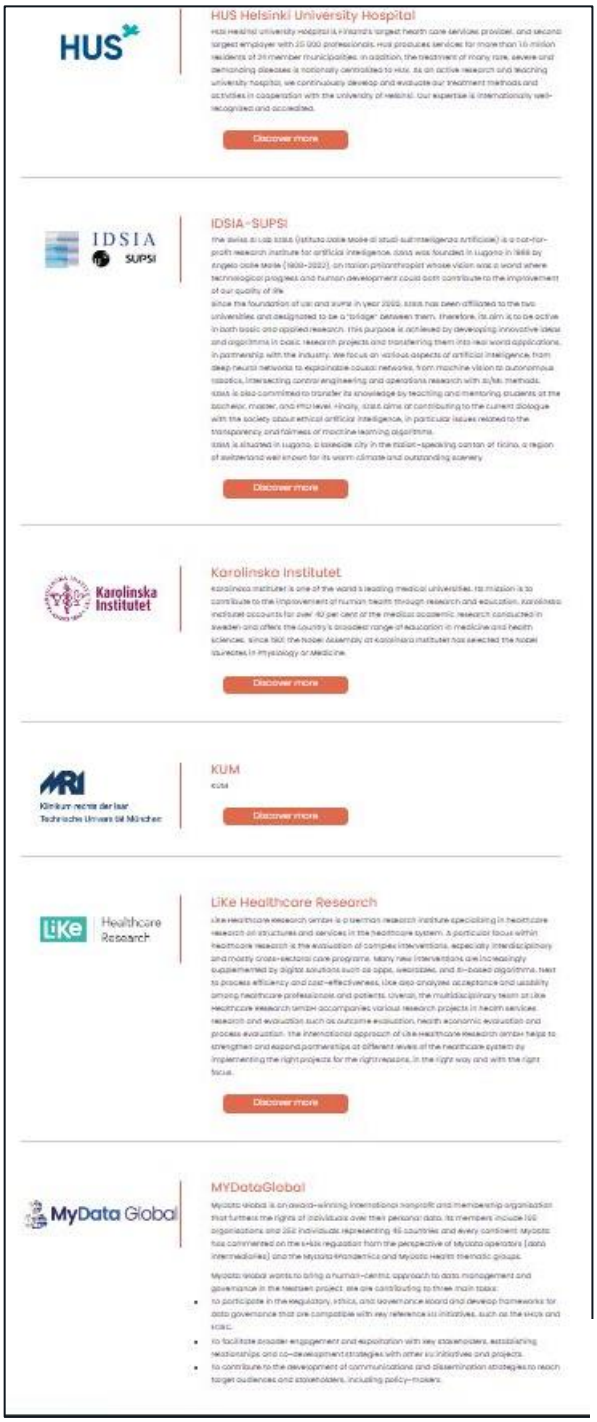
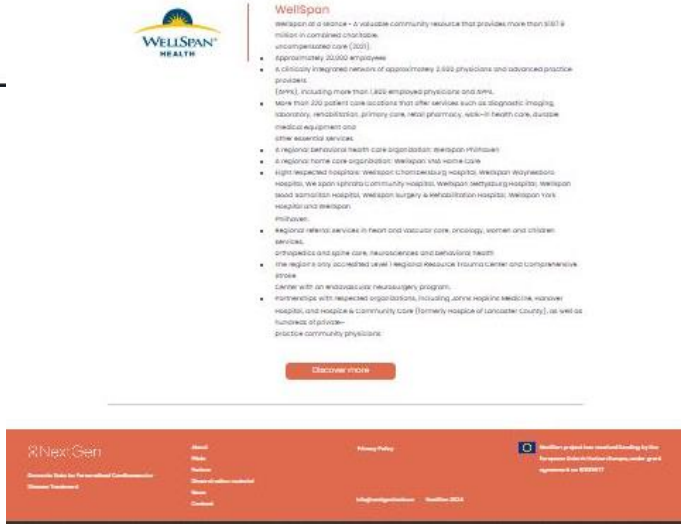


Figure 7: NextGen Project's Partners (part 2)



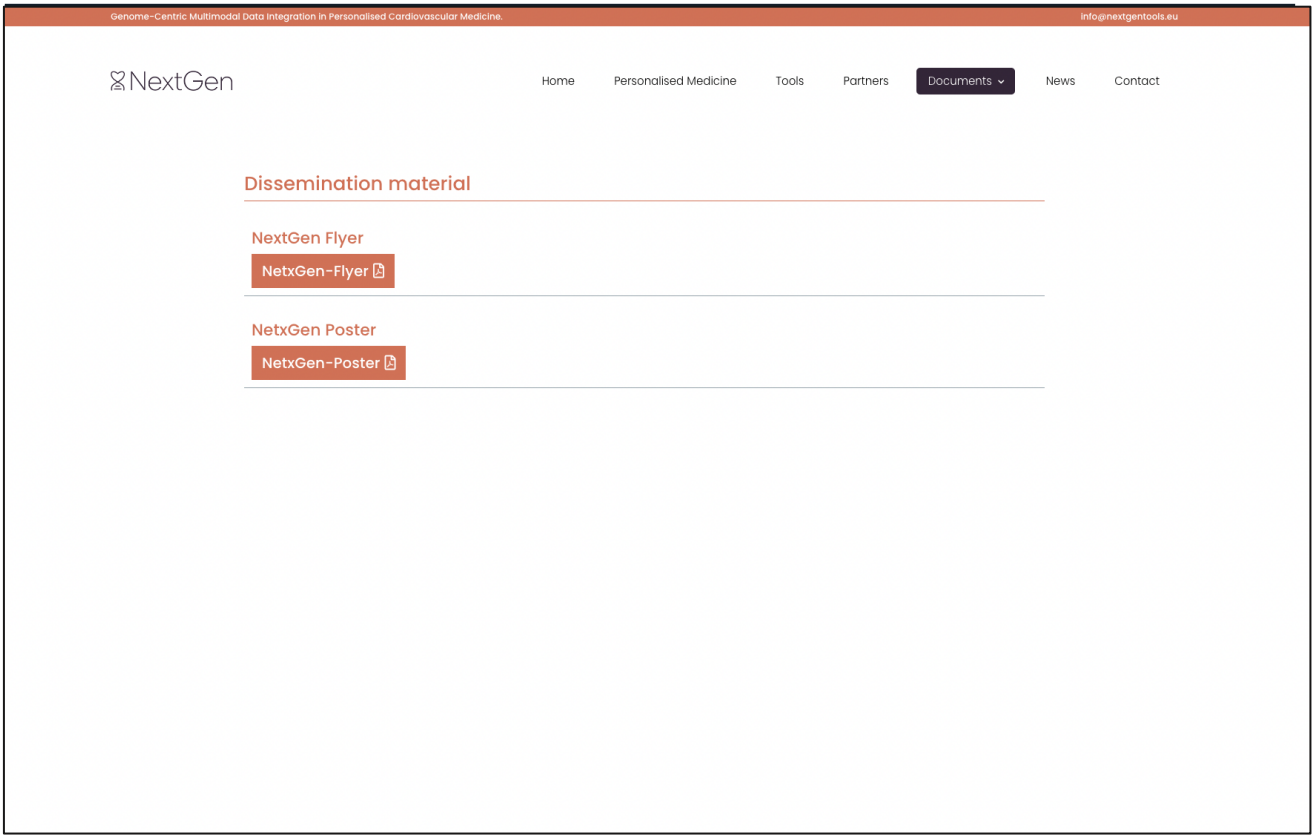


Figure 8: NextGen Dissemination material

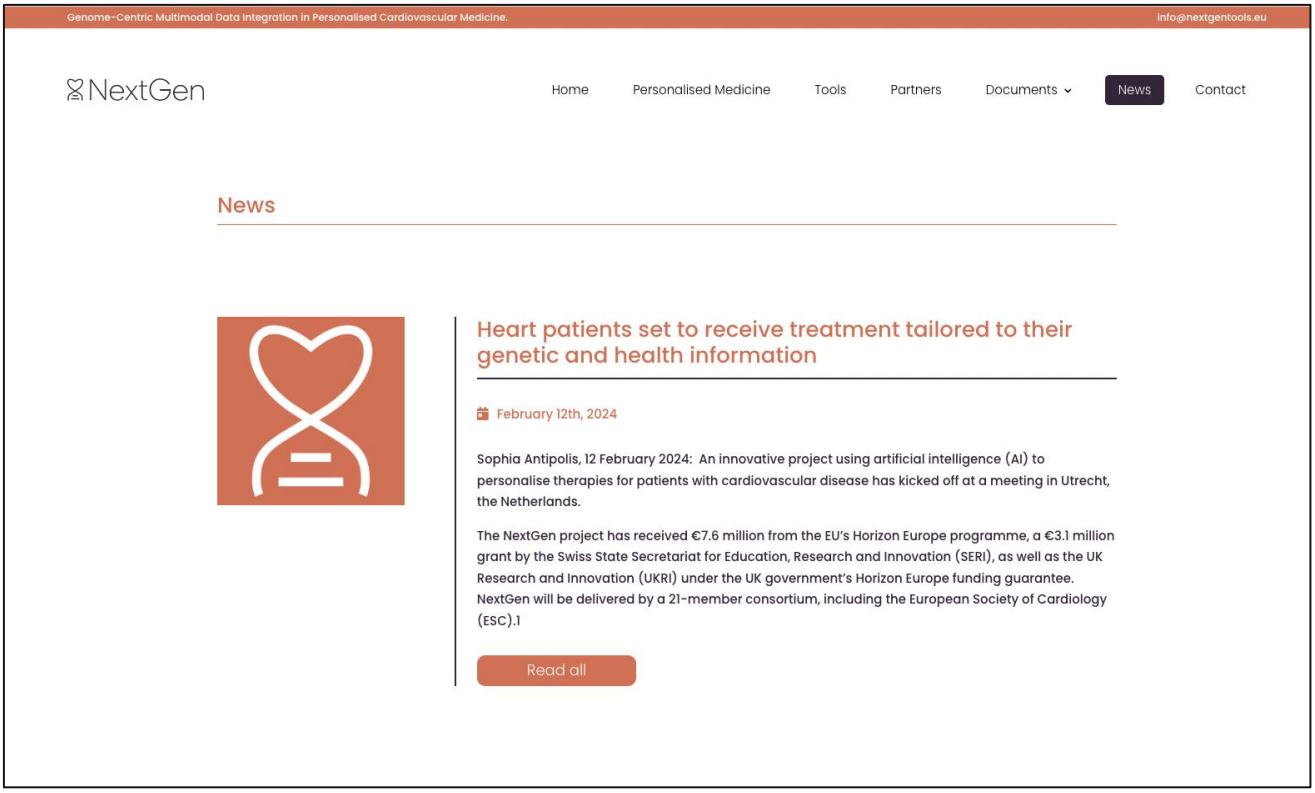


Figure 9: NextGen News

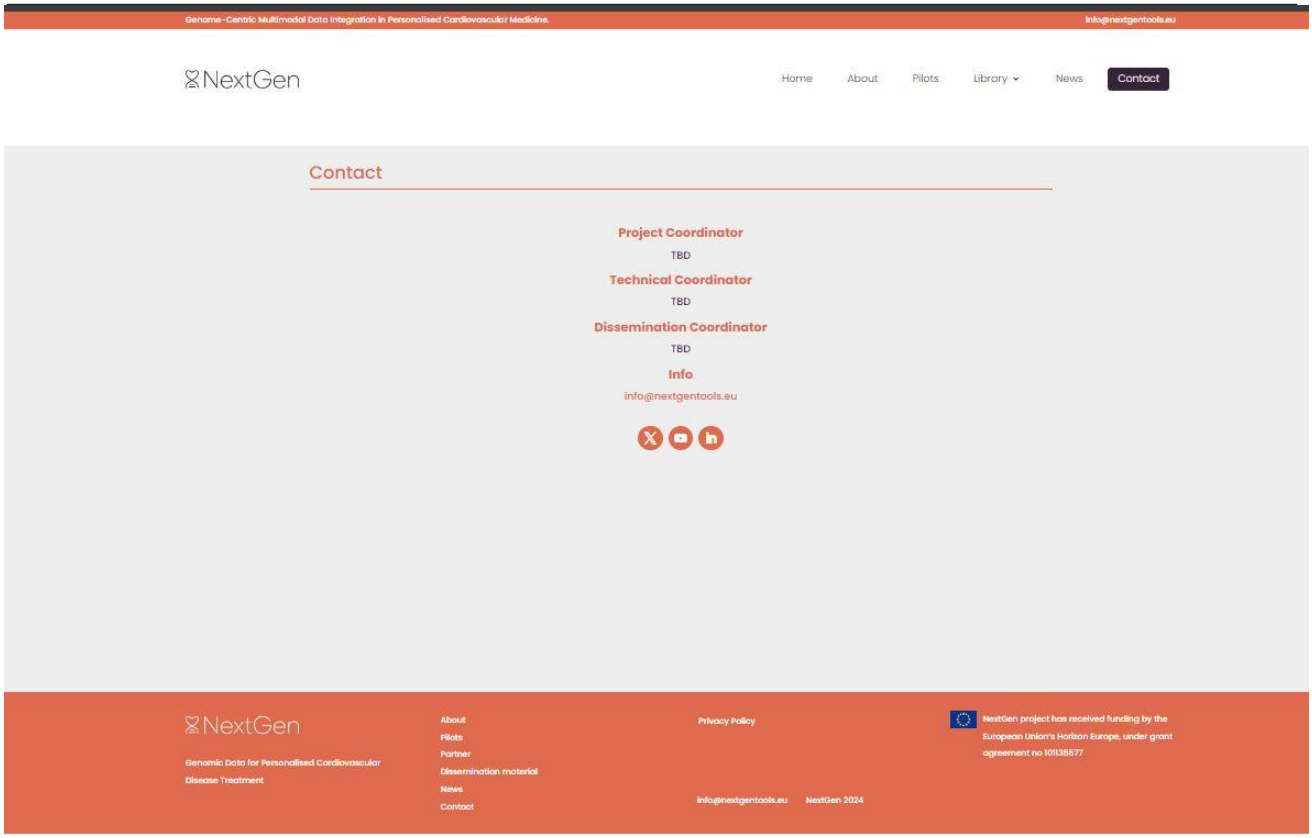


Figure 10:NextGen Contacts

2.3 NextGen blog in the project's website

NextGen leverages online blog posts as a dynamic platform to disseminate valuable content, enhancing the project's public profile and accessibility. The blog serves as a critical tool in amplifying NextGen's online presence, offering regular updates and insights into the project's progress and achievements.

Purpose and Content Strategy:

- **Information Sharing:** The blog is a primary channel for communicating relevant happenings, key successes, and updates. It serves as a continuous stream of fresh content that keeps the audience informed about the latest developments and breakthroughs within the project.
- **Engagement:** Beyond merely sharing updates, the blog is strategically used to engage with potential customers, partners, and the broader scientific community. Each post is crafted to provide deep insights into the project's deliverables and milestones, helping to foster a collaborative spirit and invite professional dialogue.
- **Educational Value:** The content is informative and educational, offering readers in-depth analyses of complex scientific concepts and methodologies employed by NextGen. This educational approach helps demystify advanced topics in personalized cardiovascular medicine and genomics-centric data integration.

Building Credibility and Community:

- **Showcasing Achievements:** By consistently highlighting its achievements and technological advancements, the blog builds and sustains credibility for NextGen. It serves as a testament to the project's commitment to excellence and innovation in the field.
- **Highlighting Strengths:** Each blog post is an opportunity to showcase the unique strengths of NextGen, from cutting-edge research and development to collaborative initiatives with global impacts. This not only enhances the project's image but also positions it as a leader in the scientific community.

- **Interactive Engagement:** The blog encourages interaction through comments and social media sharing, facilitating an active and engaged community of followers. This interaction often provides valuable feedback and new perspectives that can influence future research directions and project focus.

Driving Traffic and Interest:

- **Attracting New Audiences:** Strategic SEO practices and engaging content work in tandem to attract new visitors to the blog. By addressing current trends and hot topics in the industry, the blog draws interest from a wider audience, including students, academics, industry professionals, and even the general public interested in health innovations.
- **Encouraging Involvement:** The blog also plays a pivotal role in converting casual visitors into active participants or collaborators. By illustrating ways to get involved, from community forums and webinars to volunteering opportunities or collaborative projects, it opens up avenues for deeper engagement with NextGen.

Overall Impact: In essence, the NextGen blog is more than just a news feed; it is a comprehensive engagement tool that supports the project's dissemination strategy. It enhances visibility, promotes user interaction, and builds a knowledgeable community around the themes of NextGen, thereby extending its reach and impact well beyond traditional academic circles.

2.4 NextGen website technical information

The NextGen website is crafted as a primary digital interface for engaging with the global community interested in the breakthroughs of NextGen. It is meticulously designed using WordPress, Divi Builder, and optimized through various plugins, providing a seamless user experience that aligns with the project's innovative ethos.

Technical Aspects:

- **WordPress as CMS**: Our choice of WordPress as the CMS underscores our commitment to robustness and adaptability. It facilitates content management and scalability essential for the evolving needs of NextGen. The platform supports an array of plugins and themes, allowing customization to reflect the project's high scientific and technological standards.
- **Divi Builder for Theme**: Utilizing Divi Builder enhances our ability to create sophisticated, custom layouts that are visually appealing and functionally rich. This page builder's intuitive tools enable our developers to craft a site that not only looks professional but also is highly interactive, supporting multimedia content such as video explanations of research findings, interactive data visualizations, and downloadable resources.
- **Cache Management with WP Optimize**: The performance optimization through Word Press Optimize ensures that the website remains fast and efficient. By minimizing load times and enhancing responsiveness, we facilitate access to information for stakeholders from various bandwidth environments, making the site globally accessible.

Advanced Features and Integration:

- **SEO and Accessibility Optimization**: The site is optimized for search engines to maximize visibility to researchers, industry professionals, and the public. Accessibility enhancements ensure that it is usable by people with disabilities, which is crucial for inclusivity in disseminating important health and research information.
- **Security Measures**: We employ advanced security plugins and regular audits to protect the site from cyber threats and ensure the integrity and confidentiality of the information shared.
- **Multilingual Support**: To reach a global audience, the website includes multilingual support, offering translations in several major languages. This not only broadens accessibility but also enhances engagement by allowing non-English speaking users to interact with the site in their native language.

Analytics and Privacy:

- **Enhanced Matomo Integration**: Beyond basic analytics, our Matomo setup includes custom dashboards and detailed visitor tracking that respects user privacy. This helps us understand engagement patterns without compromising ethical standards, providing insights into how different demographics interact with our content.
- **Feedback and Interaction Channels**: Interactive features such as forums, direct feedback tools, and social media integration enable dynamic communication with our audience. These channels are designed to facilitate direct interaction, gather feedback, and foster a community around NextGen.

Design Philosophy and Communication Strategy:

- **Visual Identity and Branding**: The visual identity, including the logo and colour palette, reflects the fusion of technology and healthcare. It is designed to be aesthetically pleasing yet scientifically grounded, mirroring the dual focus of NextGen on innovation and practical application (see Deliverable 8.1 for more details).
- **Content Strategy**: We employ a structured content strategy that includes regular updates on project progress, feature articles on key research breakthroughs, and spotlight stories on team members and collaborators. This approach not only keeps the community informed but also builds ongoing engagement.
- **Training and Resources**: The website also serves as a portal for training and resources, offering tutorials, webinars, and documentation designed to educate and empower users with tools and knowledge in genomics and personalized medicine.

Through these comprehensive strategies, the NextGenTools.eu website stands as a testament to the project's dedication to transparency, community engagement, and the dissemination of high-impact research. It is not just a repository of information, but a vibrant platform that actively supports the NextGen community's growth and learning.

3 Wrap-up

Deliverable 8.2 underscores the critical importance of the project's digital footprint in effectively disseminating outcomes and engaging with a global audience. The NextGen website is an informative and user-friendly central hub, providing comprehensive coverage of the project's aims, developments, and milestones. The document outlines the structure of the website, including a homepage that introduces the project, detailed pages for each project component, a resources page, and a contact information page. It highlights the integration of interactive elements such as blogs and news tickers, multimedia resources, and a robust search function to enhance the user experience and aid in information dissemination. The implementation of WordPress and Divi Builder ensures the website's responsiveness and aesthetic appeal, while the use of the Matomo analytics platform supports effective monitoring and evaluation. Strict privacy and security protocols are in place to protect visitor information and comply with GDPR regulations. Anticipating the evolving needs of the project, the deliverable outlines planned updates and enhancements to ensure the website remains cutting-edge and continues to meet the expanding requirements of the community. It reaffirms the role of the website in fostering community engagement and extending the reach and impact of the NextGen project's groundbreaking research. The executive summary concludes by highlighting the strategic importance of a well-managed online presence in the success of NextGen, emphasizing how the development and maintenance of the project website are crucial in achieving the dissemination and communication objectives set forth in the Grant Agreement.