Grant Agreement No.: 101080718
Call: HORIZON-HLTH-2022-STAYHLTH-01-two-stage
Topic: HORIZON-HLTH-2022-STAYHLTH-01-05-two-stage
Type of action: HORIZON-RIA

BIO-STREAMS

D7.2 Impact creation and assessment report – mid-term v1 M18

Dissemination, Communication & Exploitation

Revision: V0.8

Work package	7
Task	7.1, 7.2, 7.3, 7.5
Due date	14/03/2025
Submission date	14/03/2025
Deliverable lead	MARTEL
Version	V0.8
Authors	Giada Martello (MARTEL); Danai Kyrkou (VILABS); Iliana Korma (UKEMED); Lisa Heggie (EASO)
Reviewers	Sheree Bryant (EASO); Takis Kotis (UKEMED)

Abstract	This deliverable presents a comprehensive overview and report of the activities outlined in D7.1 within Work Package 7 – Dissemination, Communication, and Exploitation. It aims to report on and evaluate the impact of communication and dissemination efforts carried out from month 1 to month 18 of the BIO-STREAMS project. This includes updates on website content, events, social media, synergies with similar projects, an

	assessment on impact, and future steps. In addition, considerations on exploitation, commercialisation, quality impact on stakeholders and policy impact have also been addressed.
Keywords	Communication strategy, Stakeholder engagement, Healthcare, Nutrition, Obesity, Children, Knowledge exchange

DOCUMENT REVISION HISTORY

Version	Date	Description of change	List of contributor(s)
V0.1	09/10/2024	ToC and first draft of the deliverable	Giada Martello (MARTEL)
V0.2	09/10/2024	Content for communication and dissemination	Giada Martello (MARTEL)
V0.3	15/10/2024	Content for Community Engagement, Networking & Joint Activities	Joana Silva; Sara Anjos (NUCLIO)
V0.4	15/10/2024	Content for Impact Assessment	Danai Kyrkou (VILABS)
V0.5	12/03/2025	Content for Impact Assessment	Danai Kyrkou (VILABS)
V0.1	13/03/2025	Content for Exploitation	Iliana Korma (UKEMED)
V0.1	13/03/2025	Content for Policy Impact	Lisa Heggie (EASO)
V0.6	18/10/2024	Integration of the contributions from partners	Giada Martello (MARTEL)
V.0.7	25/10/2024	Partners' contribution review	Valentin Popescu (MARTEL)
V0.8	14/03/2025	Preparation of the final version	Giada Martello (MARTEL)

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* *R: Document, report (excluding the periodic and final reports)*
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DATA: Data sets, microdata, etc
DMP: Data management plan
ETHICS: Deliverables related to ethics issues.
SECURITY: Deliverables related to security issues
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Executive summary

Deliverable 7.2 (D7.2) provides a comprehensive report of the communication and dissemination activities detailed in the Impact Creation and Assessment Plan forming Deliverable 7.1 (D7.1) of Work Package 7 “Dissemination, Communication & Exploitation”.

These outreach activities were designed to raise awareness and engage key stakeholders, focusing on the effective use and reuse of health data to generate meaningful insights and develop innovative tools. These efforts are contributing toward several project’s goals, including the creation and implementation of the BIO-STREAMS Biobank, the prevention of childhood obesity, the empowerment of young people’s health management, and the promotion of collaboration between authorities and policymakers to advance cross-sector health promotion strategies.

Firstly, the report outlines the primary objectives for communication and dissemination, followed by an analysis of the strategy implemented for promotion and the identification of target stakeholders. Secondly, it examines the channels and tools utilised, assessing their impact against the established KPIs. Further, the report provides an overview of the synergies developed with partner projects, and discusses an impact assessment plan, offering insights into the next steps and future direction. Lastly, the report provides an overview of IPRs, commercialisation and sustainability beyond project funding, as well as considerations on the policy landscape.

This document serves as a guiding framework for the BIO-STREAMS consortium partners and key stakeholders to effectively contribute to, and benefit from, the project's communication and dissemination activities.

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Abbreviations

AI	Artificial Intelligence
CDE	Communication, Dissemination and Exploitation
DMP	Data Management Plan
EC	European Commission
EU	European Union
IP	Internet Protocol
IPR	Intellectual Property Rights
TCP	Transmission Control Protocol
WP	Work Package
KPI	Key Performance Indicator
iKPI	Impact Key Performance Indicator

1 INTRODUCTION

During the first 18 months of the project, WP7 employed a variety of tools and initiatives aimed at raising awareness about BIO-STREAMS and engaging key stakeholders. This report offers an in-depth review of the project's strategy for communicating and disseminating its research outcomes and innovations, along with an evaluation of the implemented tools.

1.1 Purpose of the document

The Dissemination and Communication Report details the communication and dissemination activities of the BIO-STREAMS project, including discussing the tools and actions for awareness creation and engagement of all target stakeholders.

This Deliverable builds on the strategic framework established in the Deliverable 7.1 “Dissemination and Communication Strategy and Plan’’ for the reporting period (May 2023 – October 2024) and aims to:

- Describe communication and engagement activities that have been implemented, monitored and evaluated.
- Depict how the methods, tools and promotional materials have been used in the project’s dissemination and communication.
- Provide a complete overview of the communication activities.

1.2 Structure of the document

This document is organised into 6 sections to ensure ease of navigation and reference:

- Section 1 introduces the document, detailing its purpose and structure.
- Section 2 outlines the mission of BIO-STREAMS, and the fundamental aspects of its communication and dissemination strategy, including key objectives, target audiences, and the strategic planning of activities.
- Section 3 highlights the collaborations and synergies BIO-STREAMS has with other industry projects, including discussing workshops and a dedicated hackathon.
- Section 4 provides an overview of the dissemination activities carried out, the tools utilised, and performance metrics.
- Section 5 discusses the impact assessment plan designed to support the project in achieving its proposed goals.
- Section 6 summarises considerations related to exploitation aspects.
- Section 7 expands on the impact at policy level.
- Section 8 concludes the document, summarising key insights and outlining the next steps.

2 DISSEMINATION AND COMMUNICATION

2.1 Objectives

BIO-STREAMS is a Horizon Europe Research and Innovation project aimed at addressing the epidemic of childhood obesity in the EU through a holistic approach that integrates data driven research, prevention measures, and community engagement. The project mobilises diverse partners who joined forces to establish the first EU Childhood/Adolescence Obesity Biobank, create an integrated digital platform for personalised risk assessments and prevention programs, and develop a community network that facilitates knowledge sharing and promotes healthier environments. This collaborative effort seeks to reduce obesity rates among children and adolescents across Europe.

The BIO-STREAMS communication and dissemination strategy emphasises active collaboration among partners, tailored messaging for various audiences, multi-channel outreach, and regular updates. It leverages synergies with related projects and continuously monitors progress to maximise impact in the relevant sectors. This strategy is implemented through a series of activities with the following primary objectives:

- To raise awareness and interest in the project among target audience groups.
- To effectively communicate the project's results, benefits, and potential applications.
- To engage relevant stakeholders and create opportunities for collaboration and knowledge exchange.
- To promote the adoption of BIO-STREAMS research findings, innovations, and best practices within the healthcare sector.

2.2 BIO-STREAMS target stakeholders

The engagement of a diverse range of stakeholders is crucial to the success of the BIO-STREAMS project. During the reporting period (M01-M18), activities were designed to ensure stakeholders could both benefit from and contribute to the project's outcomes. The table below outlines the rationale for reaching diverse target audiences, including their contribution to the BIO-STREAMS project and their impact to its overall success.

Table 1: Target audience for BIO-STREAMS project

Target audience and partners	Rationale for reaching them	Expected impact
Health professionals	Access to a vast, harmonised database for informed clinical decisions.	Improved diagnostic and therapeutic approaches; more personalised care.
Researchers	Opportunity for in-depth obesity-related research and innovation.	Breakthroughs in understanding and treating obesity; innovative solutions and methodologies.
Policymakers/ authorities	Data-driven insights for effective health policy formulation.	Creation of informed, evidence-based policies for obesity prevention and health promotion.
Schools	Equip educational institutions with tools and resources for healthy lifestyle promotion.	Healthier school environments; increased teacher and student awareness about obesity and its prevention.

Citizens/general public	Empowerment through personalised risk-assessment and healthy living tools.	Improved health literacy, better self-management of weight, and increased adoption of healthy lifestyles.
Children & adolescents	Direct beneficiaries of obesity prevention efforts.	Decreased prevalence of childhood obesity, better health outcomes, and well-being.
Parents	Central role in influencing children's lifestyles and habits.	Adoption of family-centric healthy practices; increased knowledge about obesity prevention.
Standardisation bodies	Standardisation can enhance the credibility and acceptance of BIO-STREAMS.	Recognition and potential standardisation of the BIO-STREAMS results.
Tech developers & entrepreneurs	Opportunity to develop and market health-centric tools and apps.	Informed decision-making, increased collaboration, and synergised efforts in addressing obesity challenges.

2.3 Communication phases

The core structure of the BIO-STREAMS dissemination and communication plan is organised into four stages. In this report, we will focus on Year 1 (M01-M12) and Year 2 (M13-to date), providing a glimpse into future next steps.

- **Year 1 - Awareness creation and communication foundation (M01-M12):** In this initial phase of the project, it was crucial to design a communication strategy and plan, which included specific target audiences, a broad palette of online and offline tools, and initiating community-building activities to inform all relevant stakeholders about BIO-STREAMS scope and objectives. Key deliverables for this phase included the creation of the BIO-STREAMS website, the Communication and Dissemination Strategy and Plan, a dedicated calendar of events, promotional materials, a slide-based project presentation, a project video, one newsletter, and the establishment of dedicated social media channels. Additionally, consortium partners participated in numerous conferences, presenting the BIO-STREAMS project, with more events planned for the current year.

These activities performed during the first year of BIO-STREAMS helped raise awareness, strengthen the project's brand, and establish credibility among target stakeholders, while also laying a strong communication foundation for the years to come.

- **Year 2 - Sharing innovations to address children obesity (M13-M24)**: During the months 13 to 18, BIO-STREAMS actively engaged with target stakeholders, generating interest in its activities and results, and laying a solid foundation for future dissemination efforts. This phase focused on promoting the project, showcasing its progress, organising and participating in events, and presenting relevant use cases. It also aimed to enhance collaboration with other H2020 and HE initiatives. Key activities include updating the project website, publishing additional newsletters, regularly animating social media channels, issuing a new press release, presenting at international conferences, and organising the first project workshop.

2.4 Communication and dissemination tools and measures

Following the introduction to BIO-STREAMS' tools and measures outlined in D7.1, this section will explore their impact during this reporting period. In addition, a detailed overview of the produced assets and resources will be provided.

2.4.1 Website

The BIO-STREAMS website (https://www.bio-streams.eu/) serves as a central hub for comprehensive information on the project's aims and objectives. Designed with user-friendliness in mind, it provides easy access to public materials generated within the project and information collected from various work package activities related to relevant initiatives.

This platform is the primary access point for both the public and stakeholders, including existing and new participants, to explore the activities, services, and resources that BIO-STREAMS plans to create and share.

Since its inception, the website has been updated with:

- 15 news articles, featuring events participation in chronological order, projects, and research
    - BIO-STREAMS 4th Consortium Meeting: Expanding Our Efforts to Tackle Childhood Obesity: https://www.bio-streams.eu/bio-streams-4th-consortium-meeting-expanding-our-efforts-to-tackle-childhood-obesity/
    - BIO-STREAMS Partner Develops a Groundbreaking Cost-Related Data Model to Combat Childhood Obesity:
    - https://www.bio-streams.eu/bio-streams-partner-develops-a-groundbreaking-cost-related-data-model-to-combat-childhood-obesity/
    - BIO-STREAMS Partner Publishes a Study on Associations Between Meal Patterns and Risk of Overweight/Obesity
    - https://www.bio-streams.eu/bio-streams-partner-publishes-a-study-on-associations-between-meal-patterns-and-risk-of-overweight-obesity/
    - Exploring Dietary Patterns and their Impact on Childhood Obesity:
    - https://www.bio-streams.eu/exploring-dietary-patterns-and-their-impact-on-childhood-obesity/
    - Unpacking the Impact of Meal Patterns on Childhood Obesity
    - https://www.bio-streams.eu/unpacking-the-impact-of-meal-patterns-on-childhood-obesity/
    - BIO-STREAMS Partners Unveil New Findings on Childhood Obesity at Nutrition Society Congress 2024
    - https://www.bio-streams.eu/bio-streams-partners-unveil-new-findings-on-childhood-obesity-at-nutrition-society-congress-2024/
    - Addressing Childhood Obesity at the 31st ECO
    - https://www.bio-streams.eu/taking-on-childhood-obesity-at-the-31st-eoc/
    - BIO-STREAMS in Schools: Knowledge to Pursue a Healthier Lifestyle
    - https://www.bio-streams.eu/bio-streams-in-schools-knowledge-to-pursue-a-healthier-lifestyle/
    - BIO-STREAMS 3rd Consortium Meeting in Zürich: Advancing Childhood Obesity Research
    - https://www.bio-streams.eu/biostreams-3rd-consortium-meeting-in-zurich-advancing-childhood-obesity-research/
    - Advancing Research Infrastructure: Insights from the Health and Wellbeing Living Lab Symposium
    - https://www.bio-streams.eu/advancing-research-infrastructure-insights-from-the-health-and-wellbeing-living-lab-symposium/

    - BIO-STREAMS at the 13TH conference of the Greek Pediatric Psychiatry Society
    - https://www.bio-streams.eu/13th-conference-of-the-greek-pediatric-psychiatry-society/
    - BIO-STREAMS at the 4th Sports Cardiology 2023 Congress
    - https://www.bio-streams.eu/bio-streams-at-the-4th-sports-cardiology-2023-congress/
    - BIO-STREAMS 2nd Plenary Agenda
    - https://www.bio-streams.eu/bio-streams-2nd-plenary-agenda/
    - BIO-STREAMS presented at the Smart Bear Info Day
    - https://www.bio-streams.eu/bio-streams-presented-at-the-smart-bear-info-day/
    - BIO-STREAMS was kicked off!
    - https://www.bio-streams.eu/bio-streams-was-kicked-off/
- 3 press releases: a first one on the project's kick-start, a second one on its collaboration with other EU-funded projects targeting obesity prevention, and a third one from partner BLOCKS on their involvement on BIO-STREAMS and how the project can address childhood obesity in Bulgaria
- 2 newsletters, with more to come
- 2 publications and 1 conference abstract book published; one publication pending approval
- 2 videos, with additional interviews filmed at the 4th consortium meeting to come
- 1 press kit, comprising a detailed project factsheet and brand guidelines
- Promotional materials (two flyers, one roll-up) to be displayed at events

Website analytics

During the reporting period (May 2023 – October 2024), BIO-STREAMS' website gathered a total of 2,521 visits at the time of writing (+248% since the monitoring conducted in task D 7.1, which showed 724 visits).

Website visitors of BIO-STREAMS perform following activities: page views, downloads, outlinks and internal site searches.

Regarding total page views, the website has achieved a total of 7,585 page views at the time of writing (+247% since the monitoring conducted in task D 7.1, which showed 2,183 page views) and 5,631 unique page views, corresponding to +275% since the previous 1,500 unique page views).

The website has also achieved 129 unique downloads, with an average visit duration of nearly 3 minutes. Overall, current data are suggesting a steady increase since D7.1, showcasing high engagement among visitors.

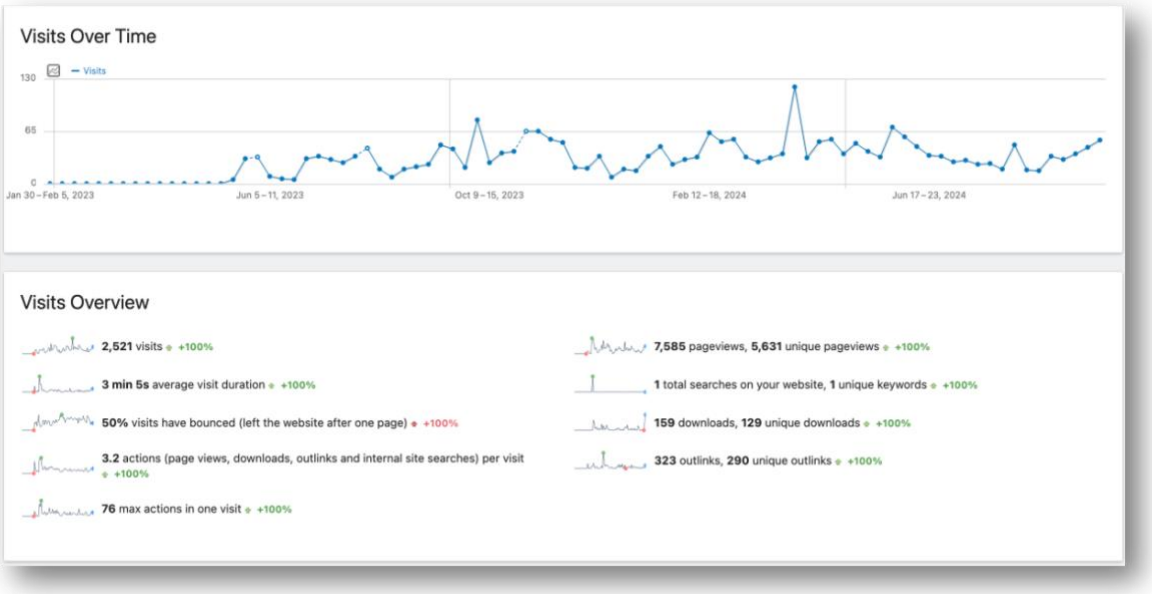

Figure 1: BIO-STREAMS website Matomo analytics visitors' overview (M01-M18)

2.4.2 Press releases

BIO-STREAMS's first press release was released in June 2023. The release was distributed throughout Europe, with particular focus on the consortium partner countries. The press release has garnered significant attention and has been featured across multiple media outlets. The English version has been translated into Slovenian, Greek, Italian, Bulgarian, Dutch, Danish, Portuguese, French, and was distributed to media outlets in respective countries.

A second press release was published in May 2024, identifying synergies with other Horizon Europe projects addressing obesity.

A third press release was published in August 2024 from partner BLOKS in Bulgarian, and is available on the project's website.

Based on milestones achieved in the project, other press releases are in the pipeline.

2.4.3 Newsletter

A first newsletter was sent in October 2023 to introduce the project. The newsletter included a "Latest News" section that introduced the website and announced the project kickoff. Additionally, it featured an "Upcoming Events" section highlighting pertinent industry events. Impressively, 84% of recipients opened the newsletter, suggesting high anticipation.

A second edition was issued in October 2024, which covered the 4th consortium meeting in Maribor, Slovenia, along with the latest developments, research updates, and upcoming workshops.

2.4.4 Press Kit and Promotional Materials

A broad palette of promotional materials and a press kit are available on the website, under the dedicated “Resources” section on the top bar. The press kit includes a detailed factsheet in PDF format, providing information on childhood obesity in the EU, and detailing BIO-STREAMS' scope. In addition, the press kit contains a document called “Brand guidelines” aimed at providing directions that are central to the BIO-STREAMS brand, including fonts, corporate colours, dos and don’ts, and acknowledgments. These guidelines are available for partners and intended as guiding elements when creating communications assets that are consistent with the brand. Finally, the press kit includes also a file dedicated to logos, named “BIO-STREAMS logo kit”, including different sizes of the logos, available for partners’ use.

Promotional Materials are a set of multimedia content meant to promote the project during dedicated events. At the time of writing, this section includes: an introduction flyer, a roll-up, and a flyer made ad-hoc for a past event. Promotional materials are intended to grow in number according to partners’ presence at relevant events.


View in browser

BIO-STREAMS

Multi-Pillar Framework for children Anti-Obesity Behaviour building on an EU Biobank, Micro-Nutrients and Mobile Recommendation Systems

NEWSLETTER 2

October 2024

Welcome to our second newsletter!

Dear readers,

A lot has happened since our kick-off newsletter back in May 2023, but one constant unites every partner: our mission to tackle underage obesity in the EU!

Below, you'll find insights into what we've been working on. Stay tuned, and happy reading!

Consortium meetings

Being a large consortium means bringing together diverse areas of expertise, all critical to helping BIO-STREAMS achieve its mission. From clinical partners to research institutions, technology companies, and consultancies, each of us plays a vital role in addressing the growing epidemic of underage obesity in Europe.

Over the past few months, we have met periodically in various locations to brainstorm creative ideas and engage in productive problem-solving. We started in Athens, where partners introduced themselves along their areas of expertise. We then moved to Copenhagen and Zurich, updating each other on project developments, challenges and wins. Most recently, we gathered for our 4th meeting in Maribor. During this last meeting, our partner UKC Maribor held a press conference that received national coverage (you can read more about it in our recent LinkedIn post and on our website).

Figure 2: BIO-STREAMS second newsletter, October 2024

2.4.5 Social media channels

BIO-STREAMS has established various social media channels to facilitate the communication and dissemination of the project's activities and outcomes. The project has an active presence on social media platforms such as Twitter (X) and LinkedIn. The social media channels are linked to the BIO-STREAMS website and are used to promote the project's activities and outputs regularly. In addition, BIO-STREAMS created a YouTube channel to release videos related to the project on Year 2. The following is a brief overview of the social media channels created for BIO-STREAMS, including their performance.

LinkedIn

The BIO-STREAMS LinkedIn channel was opened in September 2023 to highlight the project's activities, progress, and outcomes to a wide professional network. This includes consortium meetings, industry events, workshops, publications and other project updates. LinkedIn enables project partners to connect, exchange knowledge and industry updates with stakeholders and professionals across healthcare, nutrition, and related fields. At the time of writing this deliverable (October 2024), BIO-STREAMS' LinkedIn page counts 355 followers, 13,200 post impressions, and 44 posts.

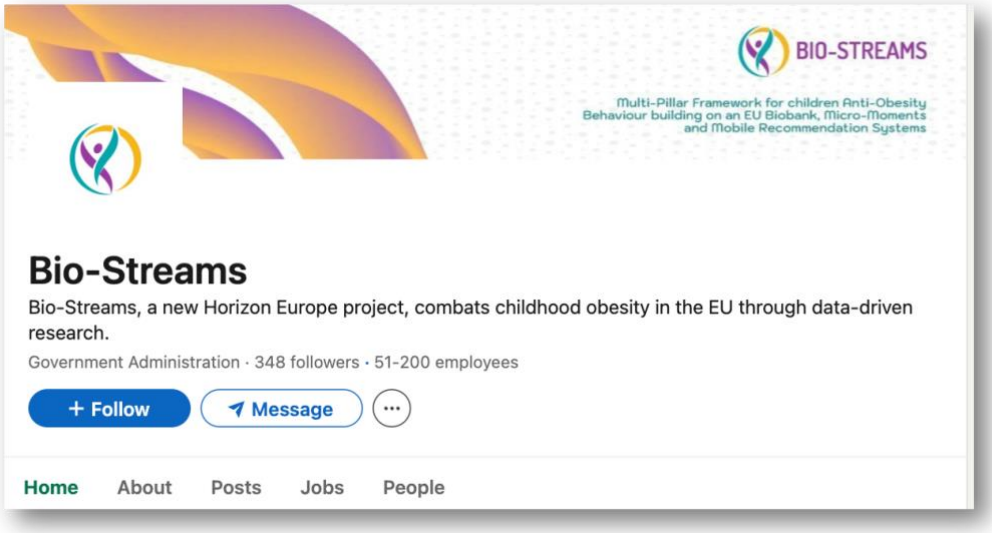

Figure 3: BIO-STREAMS LinkedIn channel

X (formerly known as Twitter)

The BIO-STREAMS X channel was opened to promote the project's activities and outcomes, and to engage with a diverse target audience, including industry institutions, healthcare professionals, and partners.

With this channel, BIO-STREAMS leverages X's distinct real-time marketing feature, with frequent updates during meetings and events, aimed at further strengthening its brand.

BIO-STREAMS's X account, **@BioStreams_EU,** was set up in May 2023 (M1). At the time of writing, it counts 173 followers, over 4,850 impressions, and 70 posts.

As a Horizon Europe project, BIO-STREAMS also follows the official X account of the Horizon Europe programme @HorizonEU and @EU_HaDEA, joining the community of projects on social media. In compliance with the EC guidelines, the accounts of @HorizonEU, @EU_Commission and @EU_HaDEA are tagged when sharing relevant news demonstrating the real impact of our research. The same will apply to cluster projects and relevant partners' organisations and representatives, including hashtags of initiatives and events.

Figure 4: BIO-STREAMS X channel (formerly known as Twitter)

Facebook

The BIO-STREAMS' Facebook page was opened in February 2024 to engage the general public on the project's developments and research. The page is currently undergoing a new strategic approach with the aim of increasing the number of followers (currently 11), and spark engagement. It is worth mentioning that BIO-STREAMS' engagement among LinkedIn and X is considerable – with these social media channels accounting over 18,000 total impressions across the total number of posts from their inception to date.

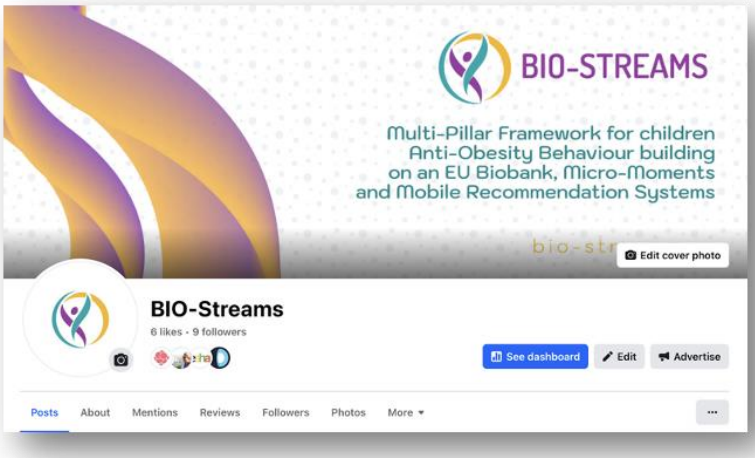

Figure 5: BIO-STREAMS Facebook page

YouTube

To ensure a broad reach of the project's activities, the BIO-STREAMS YouTube channel was created in April 2024. The channel currently showcases two videos, garnering a total of 35 views, where partners highlight the purpose and progress of the BIO-STREAMS project. Moving forward, we plan to upload additional content, including partner interviews, to both our YouTube channel and website, with promotions across social media platforms.

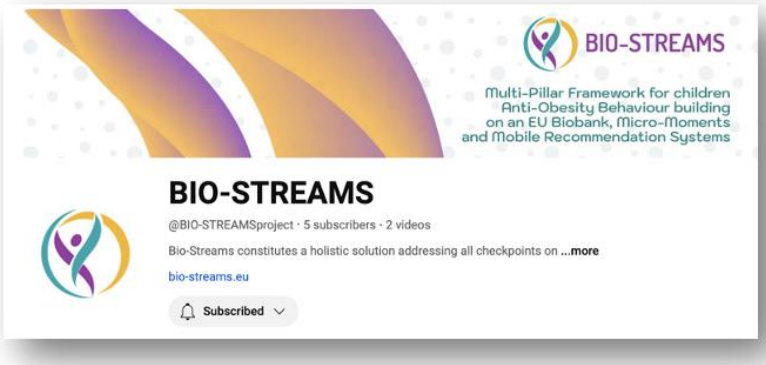

Figure 6: BIO-STREAMS YouTube channel

2.4.6 Research platforms

In D7.1, we discussed the possibility of opening a ResearchGate account for research papers. However, after a careful analysis of benefits and costs, we opted for Zenodo, a repository funded by the European Commission, built and operated by CERN and OpenAIRE, to ensure full availability of Open Science.

It is in the BIO-STREAMS project's interest to ensure broad visibility within the scientific community, foster collaboration opportunities among researchers and organisations and keep updated with recent advancements in the field. When evaluating ResearchGate, the open-source option was not included. It was in this context that the consortium decided to explore other possibilities, founding a key asset in Zenodo, an open-access repository with more attractive benefits for the BIO-STREAMS project. Among its core features are the assignment of a Digital Object Identifier (DOI) to every upload, ensuring easy citation and greater visibility. In addition, Zenodo supports a wider range of research outputs beyond publications, such as datasets and software, making it more versatile. Zenodo also complies with open science mandates, offers full control over licensing, and integrates seamlessly with platforms like GitHub. It also offers the possibility of custom data sharing (open or closed). In contrast, ResearchGate lacks formal open-access infrastructure, does not offer direct copyright protection to users, and is a for-profit platform. A project community was created on on Zenodo in October 2024, informing the consortium and instructing members (especially authors) on the upload of publications. To date, four open access publications of the project have been uploaded accordingly, including a slide deck on the construction of personas for digital health interventions for the prevention and management of childhood obesity. On Zenodo, the uploaded assets totaled 65 downloads and 63 views to date. BIO-STREAMS will continue to use this open repository to foster knowledge exchange and support open science.

2.4.7 Publications

Publications are an important tool to communicate research advancements and to further strengthen partners' collaboration and knowledge sharing, as well as credibility in the project. The BIO-STREAMS website features a dedicated section for publications, and further promotes these through news articles and social media posts.

In the reporting period, BIO-STREAMS partners published three publications relevant to the project field, included in the table below.

Table 2: BIO-STREAMS publications overview

Work Package	Reference	Link/DOI	Date
2	**BIO-STREAMS: Multi-Pillar Framework for children Anti-Obesity Behavior building on an EU biobank, Micro Moments and Mobile Recommendation Systems.** *Penio Kassari, Sofia-Maria Genitsaridi, Eleni Ramouzi, Eleni Giannopoulou, Marina Papadopoulou, Diamanto Koutaki, Garyfallia Stefanou, Christos Nikitas, Athanasios Bibas, Marios Prasinos, Theodora Brisimi, Stavros Pitoglou, Eleni Georga, Izidor Mlakar, Meropi Kontogianni, George Matsopoulos, Dimitris Koutsouris, Evangelia Charmandari.* Conference Abstract Book.	https://eepeeconqress.gr/wp-content/uploads/2024/05/ABSTRACT-BOOK_3P.pdf	May 2024
2	**Associations between Meal Patterns and Risk of Overweight/Obesity in Children and Adolescents in Western Countries: A Systematic Review of Longitudinal Studies and Randomised Controlled Trials.** *Saltaouras, G.; Kyrkili, A.; Bathrellou, E.; Georgoulis, M.; Yannakoulia, M.; Bountziouka, V.; Smrke, U.; Dimitrakopoulos, G.; Kontogianni, M.D. (Charokopeio Panepistimio).* Children 2024, 11, 1100.	https://doi.org/10.3390/children11091100	January 2024

1, 4	**Conducting a Data Protection Impact Assessment in Health Science: A Comprehensive Guide.** European Health & Pharmaceutical Law Review Volume 7, Issue 3 (2023) *Corrales Compagnucci, M., Dahi, A. , & Alexander Earls Davis, P.*	https://doi.org/10.21552/ehpl/2023/3/5	2023
2	**Key Themes and Gaps of Obesity in Children and Adolescents: A Critical Appraisal of Clinical Guidelines,** Obesity Facts	Pending	Pending

2.4.8 Participation in events

In the reporting period, BIO-STREAMS partners participated in relevant events in the healthcare industry, where they promoted the project.

Table 3: Past health-related events

Targeted events	Date	Link
Open Air Policy festival Folkemødet Møn	15-18 June 2023	https://folkemoedemoen.dk/
Smart Bear Day	26 July 2023	https://www.smart-bear.eu/general-meeting-and-information-day/
Health Forum	11– 12 September 2023	
Sports Cardiology 2023	22– 24 September 2023	https://tmg.gr/event/4th-international-congress-sports-cardiology-2023/
Development Conference on NAFPAKTOS 2030	23 – 24 September 2023	https://cognifog.eu/development-conference-on-nafpaktos-2030/

European Health Forum Gastein	26 – 29 September 2023	https://www.ehfg.org/
UEG (United European Gastroenterology) week	14 – 15 October 2023	https://ueg.eu/week
ESHA 2023	24 – 27 October 2023	https://esha2023dubrovnik.com/
EHiN	7 – 8 November 2023	https://ehin.no/2023/
European Public Health Conference (EHiN)	8 – 11 November 2023	https://ephconference.eu/
European Public Health Conference (EPH)	08 – 11 November 2023	https://ephconference.eu/conference-2023-dublin-ireland-619
ISPOR Europe 2023	12 – 15 November 2023	https://www.ispor.org/conferences-education/conferences/upcoming-conferences/ispor-europe-2023
Self-Care Week Europe	13 – 19 November 2023	https://www.scie.eu/scwe
17th Hellenic Congress of Nutrition and Dietetics	8 – 10 December 2023	https://www.efad.org/
Schools4Health European Seminar	31 January 2024	https://www.bio-streams.eu/event/schools4health-european-seminar/
Health & Wellbeing Living Lab Symposium powered by VITALISE project and ENoLL	20 February 2024	https://vitalise-project.eu/health-and-wellbeing-living-lab-symposium-save-the-date/

International Conference on Health Informatics	21 – 23 February 2024	https://healthinf.scitevents.org/Home.aspx
World Health Day	7 April 2024	https://www.who.int/campaigns/world-health-day
EAU Congress 2024	5 – 8 April 2024	https://eaucongress.uroweb.org/announcing-eau24/
XXIII Meeting of Paediatrics	18-19 April 2024	https://zzp.si/srecanje-pediatrov-v-mariboru-2024/
European Congress on Obesity (ECO)	12-15 May 2024	https://eco2024.org/
Nutrition Society Congress	2 – 5 July 2024	https://www.nutritionsociety.org/events/nutrition-society-congress-2024
34th Medical Informatics Europe Conference (#MIE2024) – Athens, Greece, 25 to 28 August 2024	25 – 28 August 2024	https://efmi.org/conferences-journals/mie-confererence/
2ND International Conference of Nutritional Sciences and Dietetics	11 – 13 October 2024	https://iconsd.eu/index_en.html

For the incoming period, BIO-STREAMS partners have identified a diverse array of initiatives and events to support the project's promotion, facilitate knowledge exchange, enhance networking, and disseminate findings. The table below provides a summary of the partners' participation in these events, including upcoming opportunities.

Table 4: Relevant health-related events planned from Nov 2024-early 2025

Targeted events	Date	Link
European Public Health WEEK	12 – 15 November 2024	https://ephconference.eu/future-conferences-24

62nd Annual ESPE Meeting 2024	16-18 November 2024	https://www.eurospe.org/event/62nd-espe-meeting/
XX Congreso Nacional SEEDO	27-29 November 2024	https://congresoseedo.es/index.php
NOT	21– 25 January 2025	https://www.not-online.nl/
ECO 2025	11-14 May 2025	https://eco2025.org/
Biennial ESHA Conference	October 2025	TBD
World Physiotherapy Congress 2025	29-31 November 2025	https://wp2025.world.physio/

In addition, BIO-STREAMS will explore the opportunity to connect with researchers in the EIC community to advance its work and promote knowledge sharing, and to attend open events organized by EIC to explore possibilities that could boost its impact and intensify dissemination efforts.

The project could also explore EIT Health, a Knowledge & Innovation Community (KIC) of the EU Institute of Innovation and Technology and potentially connect and exchange knowledge with other innovators. By exploring this community, BIO-STREAMS could evaluate how to connect with potential partners and collaborators to open new business opportunities or maximize the existing ones.

3 COMMUNITY BUILDING

The BIO-STREAMS project is creating an ecosystem of researchers, professionals and stakeholders through networking events, which are crucial for community building, especially for research and innovation projects like this one. Recognising that community building and stakeholder engagement are essential for fostering collaboration, sharing best practices, and promoting project outcomes, we have outlined a series of activities to maintain their involvement. These initiatives focus on enhancing communication, outreach, and engagement efforts, ensuring continuous collaboration and knowledge exchange throughout the project lifecycle and beyond.

By cultivating a strong community, we aim to integrate their perspectives into project outcomes, ensuring their needs and ideas are reflected. This approach facilitates solution adoption, strengthens partnerships, and aligns results with stakeholder priorities, ensuring project sustainability and long-term impact.

Among those activities, we outline the following:

- Synergies with projects of the same cluster and other relevant organisations
- Workshops
- Organisation of the first project hackathon

3.1 Synergies with projects of the same cluster and other relevant organisations

BIO-STREAMS started a collaboration with other projects of the obesity cluster, initially establishing synergies with projects PAS GRAS, BETTER4U, and OBCT, as announced in its second press release published in May 2024. The collaboration includes common dissemination efforts (such as webinars and social media activities). This approach aims to establish thematic working groups, facilitating collaborative publications and shared resources, thereby driving innovation and helping raise awareness. In addition, collaboration with other obesity-related projects expanded in November 2024, when WP7 took the lead to organise and moderate a first cluster meeting, acting as the WG Communications & Dissemination Coordinator, aimed at establishing a communication and dissemination working group with common objectives to raise awareness on the cluster's activities. The cluster is envisioned to organise a first joint webinar between March and April 2025 to support awareness stemming from World Obesity Day (held on 4 March 2024), and projects' members will take advantage of future workshops and industry events to reinforce synergies and disseminate the findings and expertise of OBEClust.

Table 5: Projects or initiatives collaborating with BIO-STREAMS

Project	Link
PAS GRAS	https://cnc.uc.pt/en/rd-projects/pas-gras
OBCT	https://www.obct.nl
BETTER4U	https://better4u.eu/
OBELISK	https://obeliskproject.eu/
EPROBES	https://eprobes.eu/

HEALTHYW8	https://www.healthyw8.eu/
CODIET	https://www.codiet.eu/
SHIFT2HEALTH	https://shift2health.eu/

Clinical and educational partners are encouraged to leverage their networks to strengthen relationships with similar projects. Many partners actively participate in European health and education networks, facilitating integration with other relevant clusters and enhancing broader community engagement.

In addition to fostering synergies with projects within our cluster, BIO-STREAMS is committed to expanding its collaborative network to encompass a diverse range of relevant organisations across Europe. To this end, BIO-STREAMS will actively engage with European nutrition associations, such as the European Federation of the Associations of Dietitians (EFAD), to leverage their expertise and extensive networks. The project will also establish connections with national organisations, like the Portuguese Association of Nutritionists (https://www.apn.org.pt/). Such approaches enable BIO-STREAMS to tailor its interventions to specific cultural and regional contexts, ensuring that obesity prevention strategies are both culturally sensitive and locally relevant. National bodies can also serve as conduits for disseminating project findings and implementing best practices at country level.

3.2 Workshops

The BIO-STREAMS Project is focusing on behavioural interventions for obesity prevention, particularly through workshops and awareness campaigns. These activities are key to achieving the project's goals, especially in promoting healthy living among children and adolescents across various EU countries.

From its inception up until M18, some project partners have been developing initiatives to involve key stakeholders, including children, adolescents, school heads, and their communities.

The workshops, led by partners such as NUCLIO (Portugal), ESHA (Netherlands), UNIVERZA V MARIBORU (Slovenia), CHAROKOPEIO PANEPISTIMIO (Greece), and KOMITEEN FOR SUNDHEDSOPLYSNING (Denmark), aim to empower educators and learners to become agents of change in their local communities. These interdisciplinary workshops promote strategies to address childhood and adolescent obesity, helping schools and local communities by integrating best practices and guidelines for healthy living, tailored to the needs of the project's objectives (e.g., SBO.1).

During 21 and 22 October, partner NUCLIO organised two co-creation workshops in recognition of Healthy Food Week (which began on 16 October, on International Food Day) with a total of 50 students, of age groups 9-12 and 12-14. The aim was to explore habits that students associate with a healthy lifestyle. The workshops were also a valuable opportunity to enquire about the students' preferred learning formats regarding health literacy. Workshop findings will be incorporated to better target health-related behaviours when designing awareness campaigns.

Figure 7: BIO-STREAMS co-creation school workshop in Portugal, October 2024

The workshops use interactive methodologies such as role-playing exercises, art-based approaches and collaborative problem-solving activities to ensure active participation and involvement. Participants are encouraged to reflect on their specific contexts, which they can discuss in their schools or communities. This is made in articulation with WP2 academic findings on topics that are relevant to identify prognostic factors for the development of childhood obesity and unhealthy habits, promoting community interventions to manage and prevent childhood obesity.

Support is facilitated through a BIO-STREAMS online platform where participants can exchange experiences, seek professional advice and access supplementary project resources. This sustained involvement serves to reinforce the impact of the workshop and promotes the development of a network made up of dedicated professionals united in their commitment to reducing childhood obesity across Europe and promoting healthier lifestyles.

A key goal is to engage at least seven EU countries in these actions, which focus on identifying and addressing health inequalities through design-thinking approaches. These efforts will contribute to building the BIO-STREAMS Living Lab (T6.1), aiming to map health inequalities in targeted communities. The awareness campaigns will be adapted to each community's characteristics, focusing on optimising meal choices, physical activity patterns, and snacking habits.

Figure 8: BIO-STREAMS workshop in Ljubljana with ESHA and school heads, April 2024

Equipping educators and community leaders with the tools they need to build cohesive, health-conscious communities generates a cascade effect of positive change. This approach extends the reach of the project's health literacy initiatives far beyond the immediate participant base, potentially influencing wider societal attitudes and behaviours related to childhood health and well-being.

3.3 Organization of the project hackathon

Plans to organise the BIO-STREAMS Project Hackathon in school settings are being discussed as an intensive, collaborative event designed to accelerate innovation in the prevention and management of childhood obesity. The idea is to bring together diverse participants, including educators, data scientists, health professionals, nutrition experts, app developers and community health advocates. Participants will form interdisciplinary teams to develop innovative solutions, taking advantage of the BIO-STREAMS Biobank and the integrated digital platform. The hackathon aims to stimulate creative approaches to personalised risk assessment, prevention programmes and community involvement strategies.

Teams will cooperate to create the most impactful and viable solutions, with a focus on data-driven and scalable interventions that can be implemented in diverse European contexts. Proposals could include mobile apps for personalised nutrition and activity plans, gamified educational tools for children and families, predictive models for early detection of obesity risk or innovative community awareness programmes based on citizen science approaches. A panel of experts from the BIO-STREAMS consortium and external consultants will evaluate the projects based on their potential impact, technical feasibility and alignment with the project's objectives.

4 IMPACT CREATION MONITORING

4.1 Dissemination and Communication KPIs

The following metrics are used to monitor and assess the progress of the dissemination and communication activities and provide measurable outcomes related to their impact created (as far as this is feasible from a quantitative point of view).

Table 6: Dissemination and Communication KPIs

Channels	Activity Measures	Target value at M48	Target value at M18
Dissemination activities			
Scientific publications	Journal publications	≥5 peer-reviewed publications	2 publications
		≥12 participations and/or publications	12 conferences attended
International events and demonstrators	Workshops	≥2 workshops/special sessions; ≥80 attendees;	4 workshops with children, 74 attendees. 1 with school heads, 66 attendees. 1 with non-formal health educators, 15 attendees
	EU-focused events	≥2 demonstrations	Planned later in the project
	Technical Academic events	≥4 demonstrations	Planned later in the project
Communication activities			
Electronic activities	Project website	≥ 5,000 access annually	7,555 access
		≥ 500 downloads (deliverables, data, results & materials)	150 downloads
	Video clips	≥ 10 online video clips;	2 videos
		≥ 8000 views	38 views
	Social media	≥ 500 connections/followers on Facebook and X	188 followers
		≥ 150 social networks posts	82 posts

	Press releases	≥ 4 press releases	3 press releases
	Newsletters	≥ 8 newsletters	2 newsletters
	S&T communities Research networks	LinkedIn: ≥ 100 connections/followers ≥ 50 posts on social networks	 354 followers 57 posts
		ResearchGate	Replace with Zenodo
Non-electronic activities	Presentation materials	≥ 10 press/media kits containing detailed press releases, videos, publishable images, flyers	1 Roll-up 1 intro flyer 1 promo flyer 1 factsheet
	Traditional media	≥1 articles/interviews to national magazines and/or newspapers per participating country	15 in total, covering Slovenia, Portugal, Spain, Greece
Networking and Outreach	Interactive networking	≥4 training webinars jointly organised with other initiatives towards best practices & knowledge exchange	Planned for later in the project
	Collaboration with other projects	≥6 synergies established with pertinent EU projects ≥8 workshops jointly organised with other projects (2 per year); >4 participations in events organized by other initiatives	3 synergies established, with plans to organise initiatives with other cluster projects; Workshops with other projects to be organised in the future
	Collaboration with Policy Makers	≥1 meeting with health policy makers per pilot country	Planned for later in the project
		≥2 meetings with EU healthcare & citizen associations	Planned for later in the project

5 IMPACT ASSESSMENT

5.1 Introduction

Childhood obesity significantly elevates the risk of developing other health complications, not only during childhood but also in adulthood. These complications include serious conditions such as non-insulin-dependent diabetes, cardiovascular problems, bronchial asthma, obstructive sleep apnoea, hypertension, hepatic steatosis, gastroesophageal reflux, and psychosocial issues. BIO-STREAMS places a strong emphasis on preventing childhood obesity, acting both as a research platform and a vital tool for raising awareness about preventive measures, such as promoting healthy eating, increasing physical activity, and limiting sedentary behaviours like screen time.

The primary objective of the BIO-STREAMS project is to facilitate the effective use and reuse of health data, enabling the generation of metadata and actionable insights to support the prevention of childhood obesity. The project focuses on the following key areas:

a) Examining the progression from metabolic health to dysfunction to develop strategies that prevent childhood obesity.
b) Developing enhanced strategies to educate and empower children in managing their health.
c) Collaborating with policymakers to create cross-sectoral approaches for health promotion and obesity prevention in youth.

To achieve these goals, the project has designed an impact assessment framework targeting three main areas: Research & Services, Economic Impact, and Community Engagement & Social Innovation.

The BIO-STREAMS impact assessment plan is currently evaluating the project's anticipated outcomes and contributions, as well as outlining the strategies to be followed toward achieving the identified impact pathways and impact iKPIs. This ongoing assessment is helping to determine the scale and significance of the project's contributions to the desired outcomes and impacts. As the project progresses, the impact pathways are being continuously evaluated, validated, and, when necessary, updated to ensure optimal impact creation and alignment with the iKPIs. To foster external stakeholder engagement, specific activities involving end-users and the broader community are being planned. These efforts aim to ensure meaningful participation in the project's initiatives. Both quantitative and qualitative approaches are being utilised to assess the project's impact.

The following sections are describing the methodology, and the literature that is being used. The impact assessment methodology is a live process that is constantly being reassessed and adapted to the project's needs.

5.2 Methodology

The impact assessment methodology is a live organism that evolves as the project progresses, following the five distinct phases of BIO-STREAMS:

- **Phase 1:** Requirements and knowledge extraction on childhood obesity (M1-M12)
- **Phase 2:** Establishing the BIO-STREAMS Biobank (M6-M30)
- **Phase 3:** Integration of BIO-STREAMS solutions (M6-M44)
- **Phase 4:** Building the BIO-STREAMS community network (M13-M48)
- **Phase 5:** Pilot-based evaluation and efficacy validation (M18-M48)

5.2.1 Logic Model Approach

The core of the impact assessment methodology is the **Logic Model Approach**. This approach was chosen for its ability to provide a clear and systematic representation of the relationships between project resources (inputs), activities, outputs, outcomes, and long-term impacts. The Logic Model is highly adaptable, and it effectively outlines how different components of the project interact to achieve the desired outcomes.

The key components of the Logic Model include:

- **Inputs**: Resources such as scientific knowledge, theoretical work, and systematic reviews.
- **Activities**: Actions like the development of the BIO-STREAMS ecosystem, clinical and school pilots.
- **Outputs**: Tangible results such as the Biobank, knowledge hub, and number of interventions.
- **Outcomes and Impact**: Changes in understanding of obesity pathways, citizen empowerment, and the adoption of evidence-based guidelines.

This methodology has been adapted to monitor the progress and impact of the BIO-STREAMS project.

The Logic Model Approach continues to be a widely used tool for project planning, implementation, and evaluation, especially in health, education, and social service sectors. It provides a structured and visual way to connect inputs with activities, outputs, and intended outcomes. Despite its broad acceptance, the Logic Model has been criticised for its linear structure and limitations in capturing the complexity of real-world interventions. Recent research has addressed some of these criticisms and explored ways to integrate the Logic Model with other methodologies to enhance its applicability in complex settings.

However, the Logic Model remains a key tool for project evaluation, particularly in health interventions. Recent literature highlights its utility in clarifying project theory and aligning activities with intended outcomes, while also acknowledging its limitations. McDavid, Huse, and Hawthorn (2018) emphasised the importance of logic models in simplifying complex projects into understandable components that can guide evaluation efforts, but they also noted that such simplification may overlook the nuances of more dynamic systems.

Knowlton and Phillips (2012) argue that the Logic Model remains crucial for mapping out project objectives and making underlying assumptions about cause-and-effect relationships explicit. Their work emphasises the use of logic models in both strategic planning and evaluation, allowing for better communication with stakeholders and clearer identification of goals and necessary resources. They also suggest that logic models can serve as a starting point for more complex evaluations, especially in health and community development projects.

In health-related projects, the Logic Model continues to be widely used to evaluate projects and initiatives. Logic models effectively guide the planning and implementation phases of the interventions by clarifying the connections between the project's resources, activities, and desired outcomes.

Following the Logic Model, the tables below can summarise the components of the project based on input, activities, outputs, outcomes, and impact.

Table 7: BIO-STREAMS' input, activities and outputs using the Logic Model

Input	Activities	Outputs
Scientific knowledge, theoretical work, systematic reviews	Development of the BIO-STREAMS Ecosystem	Biobank
		Knowledge hub
		Open toolkit
		Marketplace
		Community network
	Clinical pilots, School pilots	Number of participants
		Number of interventions

The activities of the project will generate the following outcomes and impacts:

Table 8: BIO-STREAMS' outcomes and impact using the Logic Model

Outcomes	Impact
Better understanding of the biological pathways involved in overweight/obesity for researchers, medical intervention developers, and healthcare professionals.	Citizen empowerment to adopt healthier lifestyles and behaviours, promoting long-lasting health and reducing disease burdens, even for older or vulnerable patients.
Access to evidence-based clinical guidelines for obesity and related health issues across all age groups for educational organisations, schools, obesity professionals, academics, relevant organisations, policymakers.	Citizens to take control of their physical and mental health by providing tools and resources for self-management and interaction with healthcare providers.
A robust outcomes framework and toolkit for monitoring overweight and obesity at the European level useful for obesity professionals, academics, technological providers, the food industry, and the policymakers.	Enhancement of citizens' trust in knowledge-based health interventions and guidance from health authorities while improving health literacy, including among young individuals, to ensure patient safety.

Tailored prevention campaigns to address obesity.	
New tools and services for parents and children to make informed decisions about preventing obesity.	

Tables 7 and 8 are an overview of the BIO-STREAMS components based on the Logic Model.

5.2.2 The BIO-STREAMS impact paths

There are three different impact paths that have been identified from the beginning of the project. These paths are the Scientific impact, the Economic impact and the Social impact, each divided into two sub-categories, addressing different target groups. To ensure the effective assessment of the BIO-STREAMS impact results, constant monitoring of the work is needed, to acquire the necessary input from the different parts of the project.

Research & Services (Scientific impact)

The scientific impact focuses on the scientific prospects and the technological innovations of the project using different tools and metrics. The scientific prospects represent the insights the project will provide into the mechanisms governing childhood obesity, in relation to genetic and epigenetic factors. The technological innovations include technological solutions, educational material, and new frameworks in order to increase understanding and raise awareness around data sharing, security and AI/ML when designing policies for addressing childhood obesity. Metrics such as iKPIs for the identification of prognostic biomarkers and the validation of machine learning models will measure this impact:

- **iKPI-4** Identification of prognostic biomarkers: > 15 new related insights analysed
- **iKPI-8** Publicly available architecture, code & anonymised data sources: 100% of transparency & openness of BIO-STREAMS framework
- **iKPI-11** Validation of the ML developed models: > 0.85 Recommendation Engine MAP@K (Mean Average Precision @ K), >85% Risk Assessment specificity
- **iKPI-17** Improved assessment of individuals' status in the context of a clinical intervention: At least 3 clinical partners adopt the ActiveHealth App for clinical monitoring
- **iKPI-18** Contribution to the adoption of policies/standards/ clinical guidelines
- **iKPI-19** Generation of high-quality synthetic data
- **iKPI-21** Identification of obesity prognostic biomarkers: At least 3 behavioural and at least 2 biologicals.

The abovementioned iKPIs will synthesise the scientific impact of BIO-STREAMS, providing an innovative perspective with new research insights on the prevention of childhood obesity.

Economic Impact

The economic dimension focuses on the cost-effectiveness and the digital impact of interventions. Since the project intends to use and combine multiple data sources, a standardisation framework aligned with the EU regulations is needed. Also, a cost-effective framework to support the technologies for EU AI-based health services will be delivered. The Digital Solutions that will arise, will be clinically validated and disseminated among EU tech industry players, allowing also third-party developers to deploy relevant applications. Specific

iKPIs will evaluate data accumulation, service usability, and compliance with health data standards:

- **iKPI-1** Initial biological/virtual/cost data accumulation
- **iKPI-2** Collection of biological/virtual/cost data
- **iKPI-3** Guidelines for a federated data space (on top of those from Digital Europe Programme70)
- **iKPI-9** Gauge cost-effectiveness of BIO-STREAMS data utilisation VS. other sources
- **iKPI-12** High degree of BIO-STREAMS services usability-user friendliness/acceptance
- **iKPI-15** Promoting partnerships for the BIO-STREAMS's Marketplace Apps deployment: At least 2 external partnerships
- **iKPI-19** Generation of high-quality synthetic data
- **iKPI-20** Compliance of the harmonised health data hubs with HL7 standards: 100% of compliance with FHIR protocol, 100% of usability of the data models

In the context of the economic impact, the main objective is to provide a cost-effective solution, capable to support both the health professionals and the families to address childhood obesity, whilst promoting digital innovation through the interventions.

Community Engagement & Social Innovation (Social Impact)

The social impact assessment considers the project's influence on public awareness and policy development. The focus of the first is on the interdisciplinary approaches via an obesity community network with the purpose of raising awareness and increasing health literacy, resulting in behavioural change. Likewise, a transnational network will also be established in order to support policy design by facilitating the flow of information, existing policies, and best practices on preventing childhood obesity among national hubs, creating a common base. iKPIs for this path will assess the extent to which the project improves quality of life and supports policy design:

- **iKPI-4** Identification of prognostic biomarkers
- **iKPI-5** Adherence to suggested interventions
- **iKPI-6** Efficient healthcare pathways: >10% following the EC71 & WHO72 methodologies
- **iKPI-7** Establish strong links with EU-driven initiatives regarding childhood obesity
- **iKPI-10** Large number of joint communication events
- **iKPI-13** Improve quality of life & well-being
- **iIKPI-14** High overall satisfaction with the interventions received: >7.5 score in the Questionnaire for User Interaction Satisfaction
- **iKPI-15** Promoting partnerships for the BIO-STREAMS's Marketplace Apps deployment
- **iKPI-16** High convenience/usability of the BIO-STREAMS Associative Catalogue
- **iKPI-18** Contribution to the adoption of policies/standards/ clinical guidelines

Social impact is vital for BIO-STREAMS. The project aspires to create an accessible hub for all relevant stakeholders and support the exchange of knowledge, strategies and proposed policies.

5.2.3 iKPIs's role in impact pathways

During the first 18 months of the project, initial impact actions focused on dissemination and stakeholder awareness, as the BIO-STREAMS platform was not yet available for broader use and piloting activities were still in preparation. This period allowed for a thorough stakeholder mapping, identifying benefits for each group and planning engagement strategies. While

qualitative impact research was not yet feasible, iKPIs were established to measure both quantitative and qualitative impact. Some iKPIs were adjusted to align with the project timeline, but they remain valuable across scientific, economic, and social pathways, ensuring a comprehensive assessment of BIO-STREAMS' impact. Even though each iKPI has a prominent impact, that doesn't mean it cannot contribute to the other two pathways. Below is an overview of the role of each iKPI in all pathways.

iKPI-1: Initial Biological/Virtual/Cost Data Accumulation

- **Scientific Impact**: Establishing a robust dataset ensures AI-driven childhood obesity research by integrating biological, virtual, and cost-related data. This improves AI accuracy in risk assessment and early detection. It also enables longitudinal studies, on obesity progression and the effectiveness of interventions over time.
- **Economic Impact:** This KPI supports cost-effectiveness analysis, helping stakeholders assess the financial viability of interventions. It enhances the understanding of direct and indirect obesity costs, including healthcare expenses and productivity losses. By providing economic insights, it optimizes resource allocation for healthcare providers, and policymakers, ensuring cost-efficient prevention and treatment strategies.
- **Social Impact:** Encouraging public participation in research, this KPI fosters data-sharing initiatives that ensure diverse population representation. This promotes inclusivity and transparency in research, empowering communities and families to actively contribute to obesity prevention efforts.

iKPI-2: Collection of Biological/Virtual/Cost Data

- **Scientific Impact:** Expanding dataset collection enhances AI-driven risk prediction models by refining machine learning algorithms with updated, diverse inputs. This iKPI supports biomarker validation, fine-tunes intervention strategies, and strengthens research on genetic, behavioural, and socioeconomic correlations in childhood obesity.
- **Economic Impact:** Strengthening digital health applications through comprehensive data collection justifies investments in AI-driven solutions. This KPI supports efficient decision-making, reduces inefficiencies, and improves patient outcomes. It also facilitates partnerships between startups, and pharmaceutical companies, towards obesity prevention solutions.
- **Social Impact:** By incorporating real-world behavioural and lifestyle data, this iKPI enables personalised interventions tailored to diverse communities. Engaging communities in data-sharing initiatives ensures inclusivity, transparency, and wider acceptance of AI-driven obesity prevention programs.

iKPI-3: Guidelines for a Federated Data Space

- **Scientific Impact:** A federated data space enables secure, interoperable data sharing, allowing researchers to collaborate without privacy risks. This iKPI strengthens cross-border research cooperation, fostering ethical and data-driven scientific advancements.
- **Economic Impact:** Standardized guidelines enhance reproducibility, scalability, and AI model training, lowering research costs, optimizing resource allocation for AI-driven healthcare.
- **Social Impact:** A secure data-sharing framework protects individual privacy while ensuring that public health strategies remain equitable and inclusive.

iKPI-4: Identification of Prognostic Biomarkers

- **Scientific Impact:** Identifying genetic, epigenetic, and behavioural biomarkers enhances early childhood obesity risk detection. This iKPI advances predictive modelling, enabling targeted interventions. It integrates AI, genetics, and epidemiology, refining precision medicine strategies for personalised obesity prevention while expanding multidisciplinary research on obesity's biological and environmental determinants.

- **Economic Impact:** Early biomarker identification reduces long-term obesity-related healthcare costs by shifting toward preventive interventions. This KPI also helps in optimising risk assessment models, improving cost-effectiveness in childhood obesity prevention strategies.

- **Social Impact:** Personalised interventions empower families, caregivers, and children to make informed health decisions. Addressing both genetic and lifestyle factors, this iKPI fosters a holistic, proactive approach to obesity prevention.

iKPI-5: Adherence to Suggested Interventions

- **Scientific Impact:** This iKPI validates the BIO-STREAMS interventions by assessing adherence during the pilot activities. By analysing adherence patterns, it improves intervention feasibility, effectiveness, and understanding of socioeconomic and psychological factors affecting long-term behavioural change.
- **Economic Impact:** This KPI ensures efficient resource allocation for public health programs and personalised care plans. Improved adherence increases return on investment for digital health solutions, supporting economically viable preventive healthcare strategies that prioritise sustainable obesity management.
- **Social Impact:** Adherence fosters sustained behaviour change, empowering children and families to follow structured health interventions. By strengthening health literacy, it encourages community participation in obesity prevention.

iKPI-6: Efficient Healthcare Pathways

- **Scientific Impact:** This KPI aligns obesity management with WHO and EU health strategies, ensuring early detection and coordinated care. It validates healthcare pathways, integrating preventive, diagnostic, and treatment strategies into a structured model.
- **Economic Impact:** By reducing inefficiencies in obesity management, this KPI optimizes healthcare spending and minimises unnecessary hospital visits, emergency care utilisation, and long-term complications. Efficient pathways also improve workforce productivity, reducing obesity-related absenteeism and ensuring better patient care coordination, contributing to overall public health cost savings.
- **Social Impact:** Standardized healthcare pathways enhance access to high-quality obesity management for at-risk populations.

iKPI-7: Establish Strong Links with EU-Driven Initiatives

- **Scientific Impact:** Strengthening ties with EU research initiatives enhances cross-border collaborations in childhood obesity prevention. This iKPI facilitates knowledge-sharing across nutrition, genetics, behavioral science, ensuring that findings from BIO-STREAMS contribute to broader European obesity prevention frameworks.
- **Economic Impact:** Establishing partnerships with EU-funded programs enables access to Horizon Europe, Digital Europe, and health research grants. This KPI supports collaborative funding models, attracting industry investments for public health innovations and encouraging joint development of digital obesity prevention solutions with tech and healthcare stakeholders.

- **Social Impact:** This iKPI enhances best-practice exchange, cultural adaptation of interventions, and broad accessibility, ensuring solutions are inclusive. By promoting citizen engagement, it reinforces a Europe-wide movement for obesity prevention.

iKPI-8: Publicly Available Architecture, Code & Anonymized Data Sources

- **Scientific Impact:** Open access to BIO-STREAMS architecture, code, and data fosters transparency and reproducibility in healthcare research. This iKPI accelerates innovation in childhood obesity prediction, allowing researchers to validate and refine the solutions, strengthening collaboration between academia, tech developers, and healthcare professionals.
- **Economic Impact:** Publicly available data reduces R&D costs for startups, SMEs, and researchers, fostering affordable AI innovation. By lowering entry barriers, this iKPI enables faster co-development and commercialisation of digital health applications.
- **Social Impact:** Transparent healthcare solutions increase public trust, encouraging patients, caregivers, and communities to engage with data-driven obesity prevention programs, such as BIO-STREAMS.

iKPI-9: Gauge Cost-Effectiveness of BIO-STREAMS Data Utilisation

- **Scientific Impact:** This iKPI validates the financial sustainability of the BIO-STREAMS childhood obesity interventions. By comparing BIO-STREAMS cost-effectiveness to other sources, researchers quantify the impact on healthcare efficiency and preventive care, leading to evidence-based interventions.
- **Economic Impact:** Cost-effectiveness assessments highlight the financial benefits of digital applications in healthcare, driving broader adoption in public health. This iKPI helps optimize healthcare resource allocation, reducing obesity-related disease costs and supporting investment in scalable, cost-efficient digital health models.
- **Social Impact:** Ensuring BIO-STREAMS remains affordable and accessible enables wider use across diverse populations, including low-income and at-risk communities.

iKPI-10: Large Number of Joint Communication Events

- **Scientific Impact:** Communication events facilitate interdisciplinary collaboration among researchers, healthcare professionals, and policymakers, by increasing scientific visibility, and promoting knowledge sharing and open science.
- **Economic Impact:** Increased public visibility can attract funding and investment, opportunities with industry stakeholders and boost the commercialization of BIO-STREAMS.
- **Social Impact:** Awareness campaigns improve health literacy, strengthening collective action on obesity prevention, and ensure interventions are aligned with real-world social needs and public health priorities.

iKPI-11: Validation of the ML Developed Models

- **Scientific Impact:** This iKPI ensures that the BIO-STREAMS ML models meet high predictive accuracy for childhood obesity risk assessment. This enhances scientific confidence in the solution of the project and raises the interest for further research and development.
- **Economic Impact:** Improved predictive accuracy reduces financial waste from misdiagnoses and unnecessary medical tests, while optimised risk assessment lowers healthcare costs, making prevention programs more cost-effective. ML models enhance resource allocation, reducing preventable obesity-related expenses in both public and private healthcare systems, leading to long-term cost savings.

- **Social Impact:** This iKPI ensures children and families receive personalized obesity prevention plans, improving lifestyle behaviours and health outcomes while making tailored interventions more accessible.

iKPI-12: High Usability of BIO-STREAMS Services

- **Scientific Impact:** High usability enhances adoption of AI-driven health applications. This iKPI ensures intuitive, accessible digital tools, increasing engagement from healthcare professionals, researchers, and end-users. Usability improvements strengthen scientific validation, boosting the effectiveness and real-world impact of AI-based obesity prevention models.
- **Economic Impact:** Reducing usability barriers will make BIO-STREAMS attractive to healthcare providers and families, increasing opportunities for further funding or investment.
- **Social Impact:** A highly usable system increases patient engagement and satisfaction, encouraging families to actively use digital health tools for obesity prevention. BIO-STREAMS ensures low-tech literacy and vulnerable groups benefit from accessible, inclusive digital health solutions.

iKPI-13: Improve Quality of Life & Well-Being

- **Scientific Impact:** Addressing childhood obesity's health impacts prevents diabetes, cardiovascular diseases, and metabolic disorders. This iKPI validates BIO-STREAMS interventions, regarding its effectiveness in enhancing physical and mental well-being.
- **Economic Impact:** BIO-STREAMS interventions demonstrate how early interventions can lead to improved quality of life and reduces long-term healthcare costs by preventing chronic conditions.
- **Social Impact:** Promoting healthy behaviours early through the project activities, ensures inclusivity, empowering children and caregivers to make informed health choices.

iKPI-14: High Overall Satisfaction with Interventions

- **Scientific Impact:** A high satisfaction score after the project activities, validates the methodology of the BIO-STREAMS interventions. This adds to the credibility of the activities, leading to optimised patient-centric research.
- **Economic Impact:** High satisfaction increases market viability of BIO-STREAMS solutions, encouraging adoption by healthcare providers.
- **Social Impact:** High satisfaction proves participants' trust in the project solutions, fostering wider acceptance of digital health tools in the future.

iKPI-15: Promoting Partnerships for BIO-STREAMS Marketplace Apps

- **Scientific Impact:** This iKPI ensures validated interventions are integrated into digital health platforms, strengthening scientific credibility and supporting evidence-based applications in obesity prevention.
- **Economic Impact:** Strengthening partnerships facilitates commercialisation. This iKPI promotes business sustainability, investment in startups, and new revenue streams for digital health markets. Public-private partnerships accelerate innovation, ensuring long-term viability of the BIO-STREAM solutions.
- **Social Impact:** Expanding partnerships increases accessibility to obesity prevention tools, ensuring healthcare providers, families, and communities benefit from high-quality digital interventions. By encouraging co-creation with end-users, this iKPI makes solutions culturally adaptable and socially inclusive.

iKPI-16: High Convenience/Usability of the Associative Catalogue

- **Scientific Impact:** The Associative Catalogue enhances knowledge exchange among researchers and practitioners. Ensuring high usability, this iKPI facilitates access to validated obesity prevention strategies, supporting data-sharing and research interoperability.
- **Economic Impact:** This iKPI facilitates seamless adoption of the BIO-STREAMS solution, improving cost-effectiveness in obesity management.
- **Social Impact:** This iKPI ensures patients, caregivers, and professionals can quickly find relevant health resources, promoting better community participation.

iKPI-17: Improved Assessment of Individuals' Status in Clinical Interventions

- **Scientific Impact:** This iKPI validates AI-powered clinical monitoring tools, improving real-time patient assessment. Adoption of ActiveHealth App by clinical partners enhances data-driven obesity management, ensuring precision in intervention strategies and personalized treatment planning.
- **Economic Impact:** This iKPI ensures that at least 3 clinical partners adopt the ActiveHealth App for clinical monitoring. This supports the exploitation and sustainability plan of the project.
- **Social Impact:** Empowering individuals with self-monitoring tools fosters engagement in obesity prevention, boosting patient autonomy.

iKPI-18: Contribution to the Adoption of Policies/Standards/Clinical Guidelines

- **Scientific Impact:** This iKPI ensures research findings inform clinical obesity guidelines, promoting evidence-based protocols for healthcare professionals. Aligning obesity prevention with standardised clinical practices, strengthens scientific credibility and enables harmonised implementation across EU healthcare systems.
- **Economic Impact:** Harmonised policies and standards improve healthcare efficiency, lowering obesity-related treatment costs. By aligning clinical interventions with regulatory frameworks, this iKPI enhances economic sustainability for digital health applications such as BIO-STREAMS in obesity prevention.
- **Social Impact:** This iKPI enhances healthcare standardization, ensuring patients, receive evidence-based treatment. It also builds public trust, driving widespread adoption of digital health interventions.

iKPI-19: Generation of High-Quality Synthetic Data

- **Scientific Impact:** This iKPI enhances model accuracy and robustness, ensuring generalizability across different populations. Bias reduction in machine learning models fosters equitable data-driven obesity prevention, improving research credibility and health outcomes.
- **Economic Impact:** This iKPI leads to the reduction of data collection costs, eliminating the need for real-world patient recruitment, and lowers operational expenses. It also supports commercialization, enabling more health-tech companies to access high-quality, cost-efficient datasets.
- **Social Impact:** Synthetic data enhances healthcare inclusivity. By addressing privacy concerns, this iKPI strengthens public confidence in digital health tools, promoting wider adoption and community engagement.

iKPI-20: Compliance with HL7 Standards (FHIR Protocol & Data Model Usability)

- **Scientific Impact:** Ensuring HL7 FHIR compliance facilitates interoperability and seamless data exchange across healthcare systems. This iKPI improves BIO-STREAMS' integration into clinical workflows, enhancing real-time data utilization.

- **Economic Impact:** Full FHIR compliance increases scalability, making BIO-STREAMS solutions market-ready.
- **Social Impact:** Standardised health data models improve digital health accessibility, ensuring patients, caregivers, and healthcare providers benefit from personalised obesity prevention tools.

iKPI-21: Identification of Obesity Prognostic Biomarkers

- **Scientific Impact:** Identifying biological and behavioural biomarkers enables precision medicine approaches, improving predictive modelling for targeted prevention strategies. It advances research on obesity pathophysiology, integrating genetics, metabolism, and lifestyle factors.
- **Economic Impact:** Early biomarker identification shifts healthcare focus from treatment to prevention, reducing long-term medical costs.
- **Social Impact:** This iKPI empowers individuals and families to make informed health decisions, promoting personalised intervention strategies.

As the project moves forward, a key priority will be strengthening the qualitative assessment of stakeholder engagement and evaluating its broader impact beyond numerical indicators. Dedicated actions will take place to capture how dissemination, communication, and exploitation efforts have shaped stakeholder perceptions, behaviours, and decision-making processes. This assessment will rely on qualitative insights drawn from interviews, focus groups, and surveys with key stakeholder groups, including healthcare professionals, policymakers, industry representatives, and patient organisations. By analysing their evolving engagement throughout the BIO-STREAMS activities, the project will provide a deeper understanding of how awareness-raising efforts have influenced their perspectives and actions.

Target Groups and Stakeholders

The project has an impact on a plethora of different target groups from the individual level to the national or European level:

- Citizens: Parents and children
- Schools & supportive environments
- Obesity-related healthcare professionals
- Research institutes & academia
- Childhood obesity organisations & NGOs
- Industries & technological providers
- Food industry
- Policy makers & regulatory bodies

5.2.4 Reporting of the BIO-STREAMS iKPIs

To achieve the iKPIs, a variety of both qualitative and quantitative methods will be employed. In addition to conducting a literature review, these methods will involve focus groups, expert panels, interviews, and surveys, along with questionnaires that align with engagement activities outlined by other work packages. The responsible partners are designing these tools to meet the specific needs of the project while ensuring alignment with the iKPIs. Impact assessment managers oversee the process, collecting and analysing results to confirm that the iKPIs are successfully achieved.

A reporting template has been developed to present the progress of each iKPI, including:

A) Introduction

- Objective: Brief description of the iKPI and its relevance to the project's overall goals.
- iKPI Definition: Clear definition of what is being measured and why it's important.
- Related tasks/deliverables of the project.
- Timeline.

B) Methodology

- Action plan: The BIO-STREAMS activities that are contributing to the achievement of this iKPI.
- Tools & sources: Tools that are being used to show progress.

C) Results and deviations

- Risk: Any challenges encountered during the project towards the achievement of the iKPI.
- Results: Comparison between the progress and the target set for the iKPI.
- Mitigation Strategies (if applicable): List actions or interventions that have been taken to improve performance against the iKPI.
- Adjustments: Mid-course corrections made based on data or feedback.

D) Conclusions

- Summary: Key takeaways regarding the iKPI progress.
- Impact on the Overall Project: How the progress (or lack thereof) affects the broader project goals.

This systematic approach ensures that all tools and strategies used for data collection are aligned with the project's needs and objectives. Continuous monitoring and mid-course adjustments will help the project achieve its intended impact effectively.

By adopting a comprehensive impact assessment methodology, the BIO-STREAMS project is well-positioned to track its progress and make informed decisions that enhance its contributions to childhood obesity prevention.

6 EXPLOITATION CONSIDERATIONS

6.1 Intellectual Property Rights (IPRs)

The BIO-STREAMS Intellectual Property Rights (IPRs) strategy, that will be outlined in D7.4 and submitted by April 2025, ensures clear data ownership, AI-driven recommendation system protection, and software licensing while promoting international collaboration and scalability. Data remains owned by the contributing partners, with controlled access through a federated biobank model to ensure compliance with CDISC, GDPR and EU data governance standards. AI models and intervention technologies are protected under copyright and selective licensing, balancing open science contributions with commercial opportunities for sustainability.

6.2 Commercialization considerations and project impact

To enhance long-term impact, BIO-STREAMS aligns with EU regulatory frameworks (CDISC, HL7 FHIR, BBMRI-ERIC) and integrates a hybrid business model combining open-access and subscription-based services. Strategic partnerships with research institutions, healthcare providers, and innovation hubs support technology transfer, ensuring the project's solutions remain scalable, financially viable, and embedded into public health systems beyond the funding period.

During the project's lifetime, there will be a sustainability strategy developed ensuring its impact extends beyond the funding period by integrating financial, operational, and strategic measures. This includes a subscription-based model for premium features of the Knowledge Hub and AI-driven intervention tools, licensing agreements for healthcare and research institutions, and partnerships with public health authorities and private sector stakeholders to support long-term adoption.

The project also aligns with EU health initiatives (EIT Health, BBMRI-ERIC) and explores further Horizon Europe funding opportunities to sustain innovation. Annual exploitation workshops, continuous stakeholder engagement, and policy integration efforts will ensure BIO-STREAMS remains a valuable tool for childhood obesity prevention and public health advancement across Europe and beyond.

To summarize, commercialization, standardization, and regulatory compliance are actively pursued to ensure long-term sustainability.

6.3 Quality Impact on Stakeholders

Quality impact on stakeholders is a critical process to ensure that the outcomes of the BIO-STREAMS project align with the needs and expectations of its diverse stakeholders. This evaluation involves assessing how the project's deliverables—such as its innovations, methodologies, and technologies—affect various groups, including end-users, industry partners, policymakers, and the broader community.

It is essential to gather feedback and measure the effectiveness of the project in achieving its goals, such as improving sustainability, enhancing economic viability, or advancing scientific knowledge. Through targeted surveys, interviews, and performance metric, the quality impact on stakeholders can be monitored, ensuring that the project delivers value to all involved while fostering long-term engagement and collaboration. It is worth mentioning that through the

targeted surveys, we assess stakeholder impact and policy influence. These include a Healthcare Provider Feedback Survey to evaluate clinicians' perspectives on the usability of BIO-STREAMS tools, a Policy Impact Assessment Survey to measure policymakers' awareness and application of project findings, and an End-User Experience Survey to gather insights from parents, children, and educators on the effectiveness of digital interventions. Additionally, an Industry & Research Collaboration Survey assesses commercial interest, technology transfer potential, and research engagement with BIO-STREAMS' AI-driven solutions. To track performance, BIO-STREAMS monitors adoption rates, measuring the number of healthcare providers, schools, and policymakers integrating project recommendations. Engagement metrics, including website visits, social media interactions, and Knowledge Hub downloads, gauge public outreach. Policy influence indicators track the inclusion of BIO-STREAMS data in government reports or EU health strategies. Commercialization and innovation metrics assess licensing agreements, industry partnerships, and AI tool deployments, while behavioral change indicators measure improvements in health literacy and obesity prevention practices among participating families and schools. The systematic evaluation of these tools, helped us continuously refine BIOSTREAMS' strategies and deliverables, ensuring the long-term success and relevance of its outcomes.

Additionally, the in-depth stakeholder's qualitative analysis provides valuable insights into stakeholders' perceptions, needs, and concerns, helping to better understand their expectations and refine project strategies accordingly. This qualitative approach ensures that the project remains responsive to stakeholder feedback and maximizes its impact across diverse groups.

- **Children & Parents:** The project empowers children and parents by providing accessible, AI-driven digital interventions that promote health literacy and sustainable lifestyle changes. By fostering better nutrition and physical activity habits, BIO-STREAMS contributes to reducing obesity rates and improving overall well-being. The long-term impact includes healthier future generations with a strong foundation in preventive healthcare.
- **Educators & Teachers:** For educators, BIO-STREAMS offers evidence-based teaching tools and resources to integrate health education seamlessly into school curricula. The project enhances teachers' capacity to deliver engaging lessons on nutrition, physical activity, and digital well-being. Long-term, this contributes to systemic improvements in school-based health programs and a more informed, health-conscious student population.
- **Healthcare Professionals:** Clinicians and healthcare providers benefit from BIO-STREAMS' AI-powered tools, which aid in early detection, personalized intervention, and data-driven decision-making. These innovations enhance patient engagement, streamline preventive care, and improve long-term health outcomes. Additionally, by integrating BIO-STREAMS' recommendations into clinical practice, healthcare systems can optimize resource allocation and reduce the burden of non-communicable diseases.
- **Policy Makers & Public Health Authorities:** BIO-STREAMS informs policy decisions by providing robust, real-world data on childhood obesity trends, intervention effectiveness, and behavioral health patterns. By incorporating BIO-STREAMS insights into national and EU health policies, decision-makers can drive evidence-based strategies that enhance public health frameworks. The long-term vision includes capacity-building initiatives that strengthen institutional capabilities to address childhood obesity sustainably.
- **Industry & Research Communities:** The project fosters innovation by promoting collaboration between academic researchers, AI developers, and industry partners. This drives technology transfer, accelerates the commercialization of AI-driven health

solutions, and encourages the adoption of digital tools in healthcare and education. Long-term, BIO-STREAMS contributes to the development of a thriving ecosystem for digital health innovation.

7 POLICY IMPACT

In Reporting Period 1, a policy landscape mapping exercise was conducted by EASO to provide foundation for future policy recommendations, which will be based on the final scientific outcomes of the project. The mapping aimed to analyse existing food and physical activity policies across Europe related to childhood obesity, and to identify relevant policy-related audiences for BIO-STREAMS. The exercise highlighted key strengths and weaknesses of existing policies, and gathered information to inform the development of tailored recommendations for different policy audiences which will be finalised in the last Reporting Period of the project.

The mapping exercise, informed by the World Cancer Research Fund's Nourishing and Moving policy databases, identified several gaps in current policies that BIO-STREAMS has the potential to address through planned project activities. Many European countries have implemented policies as part of broader childhood obesity action plans. Some of these policies promote general health improvements, such as encouraging healthier lifestyle behaviours, and target specific areas like school lunches and physical activity in schools. When effectively implemented, these policies can create positive impacts on childhood health within their respective areas. However, the mapping also identified significant weaknesses in currently implemented policies. For example, many existing strategies do not account for individual risk factors for obesity, which is an issue that BIO-STREAMS has the potential to address through identification of tailored obesity interventions. Public health campaigns often fail to convey the chronic nature of obesity and the complex interplay of factors that contribute to its development. BIO-STREAMS can advocate for more comprehensive health literacy initiatives that help the public better understand the multifaceted causes of obesity.

The policy landscape mapping also provided valuable insights into the roles, expected influence, and needs of key stakeholders for BIO-STREAMS, including government agencies, public health organisations, and educational institutions. Policymakers at the EU level, particularly members of the European Commission and the European Parliament (MEPs) focused on public health, food security, and digital transformation, were identified as key target stakeholders. These stakeholders require access to robust data on childhood obesity trends, risk factors, and evidence-based policy approaches from across Europe. BIO-STREAMS has the potential to make related insights available to inform EU-level policymaking, supporting the development of policies based on scientifically robust recommendations. At the national and regional levels, government agencies such as national health ministries and public health authorities play an essential role in translating EU policies into actionable strategies. These stakeholders require support in implementing evidence-based policies and guidance on policy development and evaluation. BIO-STREAMS may assist by providing insights and recommendations to help governments develop more effective obesity prevention strategies. Educational institutions, such as schools, school nutrition staff, and parent-teacher associations, play an important role at the grassroots level for implementing policies and fostering healthier school environments. These institutions need guidance on improving school environments and resources to promote better health. The findings of BIO-STREAMS have the potential to support schools in creating healthier learning environments. While their influence on policy is moderate, their role in local implementation is critical.

In summary, BIO-STREAMS has the potential to influence policies related to childhood obesity prevention. However, this potential is contingent on the generation of robust, evidence-based findings through the BIO-STREAMS scientific activities. In the short-term, while robust scientific findings necessary for a critical analysis of BIO-STREAMS policy influence are pending, EASO plans to target the EU Health Data Space for engagement with BIO-STREAMS. This is a highly relevant body for gathering input on the project's tools and identifying potential challenges. BIO-STREAMS will also be promoted to policymakers at the

EU level as part of broader EASO-led activities focused on obesity health policies across Europe. This will include distributing flyers with QR codes linking to the BIO-STREAMS newsletter sign-up and other project-related information.

8 CONCLUSIONS AND NEXT STEPS

The dissemination and communication activities outlined in this deliverable have primarily focused on raising awareness and engaging stakeholders. The evaluation of the first phase of communication highlights several key successes, including the creation of a project website, the production of multimedia content, and the regular coordination of meetings among partners.

During the first phase of Year 2 (M12 - M18), significant efforts have been made to sustain social media presence, foster synergies with related projects, and organise networking events and workshops involving all relevant stakeholders.

Looking ahead to the remainder of Year 2, BIO-STREAMS will continue to produce and upload various materials on the project website, such as news articles, newsletters, and videos. Social media activities will remain consistent, with a particular focus on Facebook and YouTube. Additionally, the project will closely monitor and report on the pilot phase, set to begin in selected schools across the participating countries.

BIO-STREAMS is implementing a robust impact assessment framework designed to track its contributions across scientific, economic, and social dimensions. By employing both the Logic Model and continuous monitoring through well-defined iKPIs, the project ensures that every phase remains aligned with its overarching goal of preventing childhood obesity. The use of qualitative and quantitative tools, combined with adaptive methodologies, allows for real-time adjustments, ensuring that the project's impact is both measurable and meaningful. The final and complete version of the BIO-STREAMS impact assessment will be presented in D7.7, at the end of the project. In addition, the incoming D7.4 Exploitation and Sustainability Report Mid-Term will provide extensive considerations on stakeholders' engagement, IPRs, standardisation and quality impact.

As the project is progressing, this dynamic approach will continue to foster innovation, empower citizens, and provide policymakers with valuable insights for developing sustainable obesity prevention strategies. The commitment to ongoing evaluation and stakeholder engagement positions BIO-STREAMS to make a lasting contribution to public health, enhancing both the quality of life and healthcare outcomes for children.

Appendix A

References

5. IMPACT ASSESSMENT

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