



HEROES

D3.3 Final Evaluation Report



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ABSTRACT

This report presents the final evaluation of the Joint Action HEROES, an initiative aimed at strengthening health workforce (HWF) planning capacity across participating European Union Member States. The evaluation assesses the implementation, outputs, and early impacts of the Joint Action using both formative and summative approaches.

The evaluation combined documentary analysis of project deliverables and milestones, quantitative monitoring indicators, a self-evaluation survey among consortium members, and consultations with the Quality Advisory Board (QAB). The analytical framework was structured using the RE-AIM model (Reach, Effectiveness, Adoption, Implementation, and Maintenance).

Results indicate that the Joint Action significantly contributed to improving national capacities for HWF planning through the development of data infrastructures, planning tools, and training programmes. The initiative also strengthened collaboration among countries and facilitated policy dialogue at national and European levels. Despite differences in the maturity of HWF planning systems across countries, the project supported progress toward more structured and evidence informed workforce planning.

The evaluation identifies key achievements, implementation challenges, and lessons learned, and provides recommendations to support the sustainability and further development of health workforce planning capacity in Europe.

STATEMENT OF ORIGINALITY

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation, or both.

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1. Introduction

Background

Health workforce planning is a key component of resilient and sustainable health systems. Across the European Union, many Member States face challenges related to workforce shortages, uneven geographical distribution of health professionals, demographic changes, and evolving health service demands.

The Joint Action HEROES was established to support Member States in strengthening their health workforce planning capacity. The project focuses on improving data availability, developing planning tools and methodologies, enhancing skills among workforce planners, and fostering collaboration between countries and institutions.

The Joint Action brings together national authorities, research institutions, and policy experts from multiple EU Member States. Through collaborative work packages and country-level action plans, the project aims to promote evidence-based workforce planning and support the development of sustainable health systems.

General Presentation of the Joint Action HEROES

The Joint Action HEROES (Health Workforce to Meet Health Challenges) is a collaborative European initiative aimed at strengthening health workforce (HWF) planning capacities across participating Member States. Co-funded by the European Union under the EU4Health Programme, the Joint Action brings together national authorities, research institutions, and policy experts to support the development of more resilient, evidence-informed, and sustainable health workforce systems in Europe.

The project was launched in response to increasing pressures affecting European health systems, including workforce shortages, ageing populations, demographic changes, geographical imbalances in workforce distribution, evolving skill requirements, and the long-term impact of the COVID-19 pandemic. These challenges have highlighted the strategic importance of robust health workforce intelligence and integrated planning mechanisms capable of supporting effective policy decision-making.

The overall objective of HEROES is to improve national and European capacities for health workforce planning through enhanced data systems, innovative forecasting methodologies, strengthened analytical skills, and improved governance mechanisms. The Joint Action promotes a systemic and multidisciplinary approach to workforce planning, recognising the interdependencies between data availability, planning methodologies, institutional capacities, stakeholder engagement, and policy implementation.

The project is structured around several thematic domains, including health workforce data systems, forecasting models and methodologies, planning capacities and skills, and stakeholder engagement and governance. Through collaborative learning processes, peer exchange activities, workshops, expert meetings, and country-level analyses, HEROES supports participating countries in identifying gaps, defining strategic priorities, and developing tailored action plans for strengthening national workforce planning systems.

A key methodological feature of the Joint Action is the use of the “AS-IS / TO-BE / TO-DO” framework, which enables countries to assess their current situation, define desired future states, and identify concrete actions for improvement. The project also promotes mutual learning through cluster-based collaboration and communities of practice, facilitating knowledge exchange between countries with different levels of maturity in health workforce planning.

One of the major contributions of HEROES has been the development and refinement of the Advanced Minimum Dataset (AMDS), aimed at improving the availability, comparability, and usability of workforce data across countries. In parallel, the Joint Action has supported the development of innovative planning tools and methodologies, including scenario-based

approaches and integrated forecasting models that consider demographic, epidemiological, technological, and organisational factors.

The Joint Action also places strong emphasis on capacity building and institutional learning. Training activities, technical workshops, and collaborative exercises have contributed to strengthening the competencies of health workforce planners and fostering a shared European community of expertise in workforce intelligence and planning.

Beyond its technical outputs, HEROES contributes to broader European policy objectives related to health system resilience, preparedness, sustainability, and the development of the European Health Union. Heroes has highlighted the key role of health workforce planning in driving transformation of health systems towards systems supporting more preventive care models, sustaining productive workforce and competitive economies. The Joint Action reinforces the importance of long-term investment in workforce intelligence infrastructures and highlights the need for stronger coordination between national and European levels in addressing future workforce challenges.

Overall, HEROES represents an important step towards more integrated, strategic, and sustainable approaches to health workforce planning in Europe. The Joint Action provides not only methodological tools and technical knowledge, but also a collaborative platform that supports mutual learning, policy dialogue, and the consolidation of a shared European vision for the future of health workforce planning.

Objectives of the evaluation

The objective of the evaluation process is to assess the implementation and outcomes of the HEROES Joint Action and to identify lessons that can inform efforts to keep results sustainable and potential future initiatives on health workforce planning.

Specifically, the evaluation aims to:

1. Assess the implementation and progress of the Joint Action activities.
2. Evaluate the achievement of project outputs and objectives.
3. Analyse the contribution of the Joint Action to strengthening national HWF planning capacity.
4. Identify enabling factors, barriers, and lessons learned.
5. Provide recommendations for sustaining and scaling the results of the Joint Action.

Evaluation framework

The RE-AIM framework is an evaluation model widely used in public health and health systems research to assess not only whether an initiative achieves its objectives, but also how it is implemented, adopted, and sustained over time. Originally developed to evaluate complex health interventions, the framework is particularly suitable for large collaborative initiatives such as Joint Action HEROES, where outcomes depend on multiple institutional, organisational, and policy-related factors.

RE-AIM is based on five interrelated dimensions: Reach, Effectiveness, Adoption, Implementation, and Maintenance. Together, these dimensions provide a comprehensive approach to evaluating both the operational performance and the broader impact of a project.

- **Reach** refers to the extent to which the initiative engages the intended participants and stakeholders. In the context of HEROES, this includes the participation of Member States, ministries of health and other relevant ministries (eg. education, finance, regional authorities), workforce planning institutions, experts, and stakeholders involved in workshops, communities of practice, and collaborative activities. Reach assesses whether the Joint Action was able to involve a sufficiently broad and representative network of actors relevant to health workforce planning.
- **Effectiveness** examines the extent to which the initiative achieved its objectives and generated meaningful outcomes. In HEROES, this dimension focuses on improvements in health workforce planning capacities, development of data systems and forecasting tools, enhancement of analytical skills, and strengthening of governance mechanisms and policy dialogue.

- **Adoption** evaluates the uptake and use of the tools, methodologies, and approaches developed by the project. This includes the integration of planning methodologies into national systems, the use of forecasting tools by institutions, and the incorporation of workforce intelligence into policy processes. Adoption is important because successful outputs do not automatically translate into institutional or policy change.
- **Implementation** analyses how the initiative was carried out in practice. It examines governance structures, coordination mechanisms, delivery of activities, stakeholder collaboration, and operational challenges encountered during implementation. This dimension is particularly relevant in multi-country Joint Actions involving complex organisational arrangements.
- **Maintenance** focuses on sustainability and long-term impact. In HEROES, this includes the institutionalisation of planning tools and methodologies, continuation of collaboration networks, sustainability of workforce intelligence systems, and long-term integration of project results into national and European policy frameworks.

2. Evaluation methodology

Evaluation design

The evaluation uses a mixed-methods approach combining quantitative monitoring indicators and qualitative assessment of project activities and outputs.

Two complementary evaluation components were implemented:

- Formative evaluation, aimed at monitoring project implementation and progress.
- Summative evaluation, aimed at assessing overall outcomes and impact.

Data sources

The evaluation draws on multiple sources of information:

- Project deliverables and milestones
- Internal progress reports
- Meeting minutes and activity reports
- Online self-evaluation survey among consortium partners
- Consultations with the Quality Advisory Board
- Monitoring indicators defined in the evaluation plan

Analytical approach

Quantitative indicators were analysed to assess the timeliness and completion of project activities. Qualitative analysis was used to assess the relevance, quality, and usefulness of project outputs.

The RE-AIM framework was applied to synthesise results and evaluate the broader impact of the Joint Action.

In addition to the contributions from participating Member States, work package leaders, experts, and stakeholder representatives, the WP3 Evaluation Team played a central role throughout the evaluation process. WP3 was responsible for the overall design, coordination, and implementation of the evaluation methodology, ensuring methodological consistency and coherence across the different phases of the Joint Action. The team combined expertise in health workforce planning, health systems governance, programme evaluation, public health policy, and qualitative and quantitative research methodologies. Beyond its formal evaluation role, WP3 also contributed to the continuous monitoring of implementation progress, facilitated reflective learning processes within the consortium, and supported the integration of evaluation findings into the broader strategic development of the Joint Action. Through continuous interaction with participating countries, thematic work packages, advisory bodies, and project governance structures, WP3 helped strengthen the analytical dimension of the Joint Action and promoted a culture of collaborative learning, quality improvement, and evidence-informed reflection across the HEROES consortium.

3. Formative evaluation

The formative evaluation monitored the implementation of the Joint Action through analysis of deliverables and milestones defined in the Grant Agreement and project work plan.

Overall, the majority of deliverables were submitted within the planned timeframe, reflecting effective coordination among participating partners. In cases where delays occurred, these were generally related to administrative constraints, staffing changes, or the complexity of coordinating activities across multiple countries.

Regular monitoring meetings and internal reporting mechanisms supported early identification of potential delays and allowed corrective measures to be implemented.

a. Quantitative indicators during the Joint Action

Quantitative indicators were used throughout the Joint Action HEROES as part of the continuous monitoring and evaluation process to assess the progress, implementation, and operational performance of the project. These indicators provided measurable evidence on the extent to which planned activities, deliverables, and collaborative processes were being implemented according to the objectives and timelines established in the Grant Agreement and work plans.

The indicators focused primarily on monitoring implementation dynamics and participation across the different work packages and participating countries. They included, among others, the number of participating institutions and stakeholders involved in project activities, attendance and participation in workshops and communities of practice, completion of country reports and action plans, delivery of milestones and deliverables, organisation of training activities, and engagement in peer-learning and cluster collaboration mechanisms.

Additional indicators were used to monitor the development and uptake of technical outputs related to health workforce planning, such as the implementation of data collection activities, progress in the development of the Advanced Minimum Dataset (AMDS), production of methodological tools and forecasting approaches, and participation in capacity-building initiatives. Quantitative monitoring also included indicators related to dissemination and

communication activities, such as participation in conferences, webinars, and stakeholder meetings.

These indicators were not intended solely as administrative monitoring tools, but also as mechanisms to support continuous learning and adaptive project management. Regular analysis of quantitative information allowed the consortium to identify implementation delays, variations in participation between countries, operational bottlenecks, and areas requiring additional support or coordination. The indicators therefore contributed to strengthening accountability, improving coordination between work packages, and facilitating evidence-informed decision-making during the implementation of the Joint Action.

Given the complexity and diversity of the participating countries and institutional contexts, quantitative indicators were complemented by qualitative assessment methods, including expert discussions, workshops, country exchanges, and narrative analyses. This mixed-methods approach enabled a more comprehensive understanding of the achievements, challenges, and transformative potential of the Joint Action HEROES.

i. % of deliverables submitted on time

Work Package	Year 1 Deliverables submitted on time	Year 2 Deliverables submitted on time	Year 3 deliverables submitted on time	Year 4 deliverables submitted on time	Total % on time
1	0/1	-	-	1/1	50%
2	1/3	1/1	1/1	2/2	71%
3	1/2	2/2	-	1/1	80%
4	-	-	-	2/2	100%
5	-	-	-	1/1	100%
6	-	-	-	1/1	100%
7	-	-	-	1/1	100%
Total / Average	2/6 (33%)	3/3 (100%)	1/1 (100%)	9/9 (100%)	79%

The overall percentage of deliverables submitted on time across WP1 to WP7 was **79%**. Performance improved substantially throughout the Joint Action, increasing from **33% in Year 1** to **100% on-time submission in Years 2, 3 and 4**. This trend indicates that project management processes, coordination among partners and monitoring mechanisms became progressively more effective as the Joint Action matured.

Reasons for delayed or non-submitted deliverables

The available evidence indicates that most delays occurred during the first year of the project and were generally limited in duration. The main contributing factors included:

- Initial delays in project implementation that had a cascading effect on subsequent activities.
- Late submission of country-level contributions required to complete consortium deliverables.
- Interdependencies between Work Packages, where delays in preceding tasks affected downstream deliverables.
- Additional time required for internal quality assurance, partner consultation and consensus-building before final submission.

Importantly, no evidence suggests that these delays compromised the overall objectives or expected outputs of the Joint Action. On the contrary, the complete on-time submission of all

evaluated deliverables during the last three project years demonstrates a significant improvement in project governance and coordination.

Lessons learned and recommendations

The experience gained during HEROES suggests several measures that could further improve the timely delivery of outputs in future Joint Actions:

- Establish internal deadlines sufficiently ahead of contractual submission dates.
- Strengthen early monitoring of risks through regular progress reviews and milestone tracking.
- Closely monitor the timely submission of national contributions, particularly when deliverables depend on inputs from multiple countries.
- Introduce contingency plans for activities involving complex interdependencies between Work Packages.
- Continue reinforcing communication and coordination mechanisms between WP leaders and participating countries.

Overall, the progressive improvement in on-time delivery throughout the project reflects the increasing maturity of the consortium's project management processes and provides valuable lessons for future European Joint Actions.

ii. % of submitted deliverables that needed revision

Work Package	Year 1 deliverables needing revision	Year 2 deliverables needing revision	Year 3 deliverables needing revision	Year 4 deliverables needing revision	Total
1	1/1	–	–	1/1	2/2 (100%)
2	3/3	1/1	1/1	2/2	7/7 (100%)
3	2/2	2/2	–	1/1	5/5 (100%)
4	–	–	–	2/2	2/2 (100%)
5	–	–	–	1/1	1/1 (100%)
6	–	–	–	1/1	1/1 (100%)
7	–	–	–	1/1	1/1 (100%)
Total	6/6 (100%)	3/3 (100%)	1/1 (100%)	9/9 (100%)	19/19 (100%)

All deliverables included in the evaluation required at least one revision before final acceptance. A total of 19 of 19 deliverables (100%) required at least one revision before final acceptance. The evaluation does not distinguish quantitatively between “major” and other revisions, as no sufficiently consistent operational definition of these categories was established in the project monitoring process.

Nevertheless, the qualitative evidence indicates a progressive improvement in the quality and readiness of deliverables throughout the Joint Action. As the consortium gained experience with reporting requirements and strengthened its internal quality assurance procedures, coordination and internal review processes became more effective. Thus, the 100% figure should be interpreted as indicating that all evaluated deliverables underwent at

least one revision, and not as an indication that all deliverables had major quality deficiencies.

Lessons learned

The experience suggests that investing in robust internal quality assurance mechanisms early in a Joint Action can substantially reduce the need for revisions later in the project. Key success factors include:

- early internal peer review before submission;
- clear quality criteria shared across Work Packages;
- timely feedback from the coordinating team;
- continuous communication between WP leaders and contributors;
- progressive harmonisation of reporting standards across the consortium.

Overall, the results indicate a clear maturation of the consortium's quality management processes over the lifetime of the Joint Action, culminating in a 100% first-time acceptance rate for the evaluated deliverables submitted during the final two project years.

iii. % of milestones completed on time

Work Package	Year 1 N milestones	Year 2 N milestones	Year 3 N milestones	Year 4 N milestones	Total % completed
1	1/1	-	-	-	100%
2	2/2	1/1	1/1	-	100%
3	1/1	1/1	-	1/1	100%
4	1/1	1/1	1/1	-	100%
5	1/1	4/4	1/1	-	100%
6	1/1	4/4	1/1	-	100%
7	1/1	4/4	1/1	-	100%
Total / Average	8 (100%)	15 (100%)	5 (100%)	1 (100%)	100%

The Joint Action achieved 100% on-time completion of all planned milestones throughout its implementation. Across the 42 project months, all 29 contractual milestones were achieved according to the planned schedule, demonstrating effective project management, close coordination between Work Packages and successful monitoring of the implementation process.

Unlike deliverables, which required additional review before final acceptance, milestones represent key implementation achievements and decision points within the project. Their consistent completion on schedule indicates that the Joint Action maintained its strategic roadmap and successfully delivered the critical outputs required to support subsequent activities.

The sustained achievement of milestones across all Work Packages reflects strong governance, effective collaboration among partners and proactive risk management. Regular monitoring through Project Management Team meetings, Policy Board meetings and internal follow-up mechanisms enabled potential delays to be identified and addressed before they affected the overall project timeline.

Lessons learned

The experience of HEROES demonstrates that robust governance structures, regular progress monitoring and clear allocation of responsibilities are key factors in ensuring timely milestone achievement. Future Joint Actions should continue to:

- establish clear milestone ownership within each Work Package;
- monitor milestone progress through regular management meetings;

- identify dependencies between milestones at an early stage;
- implement early corrective actions when risks emerge; and
- maintain close communication between the Coordination Team and WP leaders.

Overall, the **100% on-time completion rate** demonstrates that the consortium successfully maintained the planned implementation schedule throughout the Joint Action, providing a solid foundation for achieving the project's objectives and expected impacts.

iv. % of countries assigned to a milestone/deliverable who delivered their internal reports on time

Work Package	Year 1 N milestones	Year 2 N milestones	Year 3 N milestones	Year 4 N milestones	Total % on time
5	1	4	1	2	100%
6	1	4	1	2	100%
7	1	4	1	2	100%
Total / Average	3 (100%)	12 (100%)	3 (100%)	6 (100%)	24 (100%)

The evaluation demonstrates an excellent level of compliance regarding the timely submission of national reports supporting the milestones and deliverables of WP5, WP6 and WP7. Across the entire Joint Action, all national reports required for the monitored milestones were submitted within the agreed internal deadlines, resulting in an overall compliance rate of 100%.

This achievement reflects the effectiveness of the coordination mechanisms established between the Work Package leaders and participating countries. Regular follow-up meetings, continuous communication, clear guidance and systematic monitoring of country contributions enabled the consortium to collect the necessary information according to the planned schedule.

The timely submission of national reports was particularly important because many project outputs depended on contributions from multiple countries. Maintaining full compliance minimised the risk of cascading delays and ensured that subsequent analyses, comparative reports and policy recommendations could be completed according to schedule.

Lessons learned

The experience of HEROES highlights several good practices that contributed to this successful outcome:

- clear definition of responsibilities and reporting timelines;
- regular communication between WP leaders and national representatives;
- early monitoring of country contributions;
- proactive follow-up with countries requiring additional support; and
- effective coordination between the thematic Work Packages and the Project Management Team.

The 100% compliance rate demonstrates a high level of commitment from participating countries and represents one of the main operational strengths of the Joint Action. It also confirms that the collaborative governance model established within HEROES was effective in coordinating multinational reporting activities and ensuring the timely delivery of the evidence required for project implementation.

b. Qualitative indicators (per milestone/deliverable)

Beyond administrative monitoring, deliverables were qualitatively assessed according to the following criteria:

- Relevance to the objectives of the Joint Action
- Scientific and methodological quality
- Clarity and usability for stakeholders
- Contribution to strengthening HWF planning capacity

Overall, deliverables demonstrated a high level of methodological quality and provided valuable guidance for countries participating in the Joint Action. In particular, the national situation analyses ("AS-IS" reports) and country action plans represented important milestones in identifying gaps and priorities for health workforce planning.

i. Were the tasks done, contributing to the milestone/deliverable as defined?

Across all Work Packages, the activities foreseen in the Grant Agreement were carried out, although in some cases with delays, changes in leadership, or adaptations to the implementation timeline. The evidence collected from deliverables, milestone reports, action plans, training programmes, policy dialogues, and dissemination activities demonstrates that the planned outputs were produced and contributed to the expected results of the Joint Action.

Several implementation challenges affected progress during the project, including changes in coordination and WP leadership, staffing constraints, administrative transitions within partner organisations, delays in country contributions, and difficulties engaging some partners. Nevertheless, corrective actions were implemented, including leadership transfers, extensions of deadlines, enhanced monitoring, regular coordination meetings, targeted support to countries, and strengthened communication mechanisms. These measures enabled the recovery of most delays and ensured the completion of the planned activities.

The final outputs demonstrate that the work performed went beyond the production of deliverables and contributed to the broader objectives of HEROES. Countries developed action plans, minimum datasets, forecasting tools, training programmes, policy dialogues, and policy action plans that strengthened national health workforce planning capacities. The implementation of 18 national and 2 European Policy Dialogues, the development of national Policy Action Plans, the establishment of training programmes, and the production of policy recommendations provide evidence that the tasks were completed and translated into concrete results supporting sustainable health workforce planning across participating countries.

While not all activities were completed according to the original timetable, there is sufficient evidence that the planned tasks were ultimately carried out and contributed to the corresponding milestones and deliverables. The most notable implementation delay concerned the preparation of the Policy Briefs, which were essential inputs for the national Policy Dialogues. Although these delays did not prevent the completion of the planned outputs, they reduced the opportunity for timely discussion and integration of the evidence into some national policy processes.

This experience highlights the importance of ensuring stronger coordination and shared ownership among all international partners involved in future Joint Actions. In particular, products that underpin subsequent implementation activities—such as Policy Briefs—should be recognised and managed as joint consortium deliverables, rather than as outputs primarily associated with individual organisations. Strengthening collaborative ownership, clarifying shared responsibilities and aligning partner contributions more closely with Member States' priorities and the overall intervention logic would improve coherence, facilitate timely delivery and enhance the effectiveness of implementation.

ii. Were the goals defined for the milestone/deliverable achieved?

The Joint Action successfully delivered the core outputs foreseen in the Grant Agreement, including the development of national datasets and action plans, forecasting tools and methodologies, training programmes, policy dialogues, policy recommendations, dissemination products, and sustainability frameworks. These outputs contributed directly to the overarching objectives of strengthening health workforce planning capacities, improving workforce intelligence, enhancing planning skills, fostering stakeholder engagement, and supporting evidence-based policymaking.

Evidence from the final deliverables indicates that countries made substantial progress in improving health workforce planning systems. Most participating countries developed or strengthened minimum datasets, planning tools, governance mechanisms, training activities, and stakeholder engagement processes. The national and European Policy Dialogues contributed to the development of Policy Action Plans and promoted the integration of technical evidence into policy processes. The project also facilitated knowledge exchange and capacity building across countries, supporting the institutionalisation of health workforce planning as a strategic governance function rather than solely a technical exercise.

Some objectives were achieved with delays or only partially during the project period. Differences in baseline capacity, governance structures, political contexts, and implementation maturity resulted in varying levels of progress across countries. In some cases, the full implementation of action plans, governance reforms, forecasting systems, or sustainability measures will continue beyond the lifetime of the Joint Action. However, the necessary foundations, tools, partnerships, and policy commitments have largely been established, creating favourable conditions for future implementation and long-term impact.

Importantly, HEROES achieved several goals that extend beyond the production of project outputs. The Joint Action fostered collaboration between national authorities, experts, educational institutions, professional organisations, and other stakeholders; increased awareness of the strategic importance of health workforce planning; strengthened the use of evidence in decision-making; and promoted a culture of continuous improvement and mutual learning among participating countries.

Therefore, the goals defined for the milestones and deliverables can be considered substantially achieved. While some activities remain at different stages of implementation and certain long-term objectives will require continued effort beyond the project period, HEROES successfully delivered the expected outputs and generated significant progress towards its intended outcomes and strategic objectives.

iii. Were all (research) questions of the milestone/deliverable clearly answered?

Across the Joint Action, the deliverables generated substantial evidence, analyses, methodologies, tools, policy recommendations, training materials, and implementation experiences that addressed the key questions underpinning HEROES. The project successfully explored how to improve health workforce data systems, forecasting methodologies, planning capacities, governance arrangements, stakeholder engagement mechanisms, and policy development processes in participating countries.

The deliverables provide clear answers to the main objectives of the Joint Action, including how Member States can strengthen health workforce planning capacities, improve the quality and use of workforce data, develop forecasting and planning tools, enhance the skills of planners, and promote sustainable governance mechanisms. The findings generated through country assessments, action plans, training activities, policy dialogues, policy action plans,

and sustainability work packages offer practical and evidence-based responses to these questions.

In addition, the project provided important insights into the diversity of national health workforce planning systems and demonstrated that sustainable planning depends not only on technical tools but also on governance, institutional capacity, stakeholder engagement, and policy commitment. The comparative analyses and policy recommendations developed through HEROES helped answer broader strategic questions regarding the future development of health workforce planning at both national and European levels.

Nevertheless, some questions could only be answered partially because they relate to long-term implementation, sustainability, and policy impact that extend beyond the duration of the Joint Action. In several countries, reforms, action plans, governance arrangements, and forecasting systems are still being implemented, and their full effects will only become measurable in the coming years. Furthermore, differences in data availability, institutional maturity, and national contexts limited the degree to which fully comparable answers could be obtained across all participating countries. These limitations are inherent to a large multi-country Joint Action operating in diverse policy environments.

Therefore, the research and operational questions addressed by the milestones and deliverables can be considered largely answered. The project generated robust evidence and practical solutions for the areas within its scope, while also identifying future challenges and areas where continued monitoring, implementation, and evaluation will be required to fully assess long-term impact.

iv. Does the milestone/deliverable have a clear structure and good level of solidity, rigor and readability?

Throughout the Joint Action, all major outputs were developed following agreed templates, internal review procedures, quality assurance mechanisms, and iterative feedback processes involving work package leaders, reviewers, the coordination team, the Quality and Evaluation Team, the Quality Advisory Board, and, where applicable, DG SANTE and HaDEA. These processes contributed significantly to improving the consistency, clarity, and quality of the final outputs.

The deliverables generally present their objectives, methodologies, findings, conclusions, and recommendations in a logical and coherent manner. Reports combine technical evidence with practical implications, facilitating their use by policymakers, planners, researchers, and other stakeholders. In particular, the major strategic outputs developed during HEROES, including the policy recommendations, sustainability frameworks, forecasting methodologies, action plans, and training materials, provide comprehensive and well-structured information that supports both national and European health workforce planning activities.

The review process also helped ensure methodological rigor and scientific consistency. Deliverables underwent multiple rounds of internal and external review before submission, allowing weaknesses, inconsistencies, and areas requiring clarification to be identified and addressed. Several deliverables were substantially improved through quality reviews and feedback received from reviewers, the Quality Advisory Board, DG SANTE and HaDEA, resulting in stronger final outputs.

Some variation in style, depth, and presentation is inevitable in a large Joint Action involving multiple countries, institutions, and work packages. In certain cases, differences in national contexts, data availability, methodological maturity, or authorship resulted in varying levels of detail and sophistication across outputs. Nevertheless, these differences do not substantially affect the overall quality, credibility, or usefulness of the deliverables. The final products provide sufficiently robust, transparent, and understandable information to support decision-making and future implementation activities.

Therefore, this criterion can be considered achieved. The milestones and deliverables produced by HEROES are generally well-structured, methodologically sound, evidence-based, and accessible to their intended audiences, reflecting a strong commitment to quality assurance and continuous improvement throughout the project lifecycle.

v. Does the milestone/deliverable contribute to the aims and objectives of the Joint Action HEROES?

The outputs collectively address the three overarching objectives of the project: (1) strengthening health workforce planning capacities in Member States, (2) improving health workforce data, methods, tools and skills for planning, and (3) ensuring the long-term sustainability and uptake of project results beyond the lifetime of the Joint Action (<https://healthworkforce.eu/knowledge-hub/outcomes/>).

The deliverables developed under the different work packages contribute to these objectives in complementary ways. WP5–WP7 outputs strengthened the evidence base for health workforce planning through the development of country assessments, advanced datasets, planning methodologies, forecasting tools, skills development activities, and action plans tailored to national contexts. These outputs directly support improved planning capacity and evidence-based decision-making across participating countries.

WP4 outputs, particularly the national and European Policy Dialogues and the Policy Action Plans, played a critical role in translating technical evidence into policy recommendations and implementation pathways. The analysis of the Policy Action Plans demonstrates that countries identified concrete actions to strengthen workforce supply, retention, governance, stakeholder engagement, workforce intelligence systems, and planning capacities. This directly supports the HEROES objective of embedding health workforce planning within broader health system governance and policymaking processes.

Several deliverables also contribute to the sustainability objective of HEROES. The Sustainability Plans, Sustainable Health Workforce Intelligence Framework, Self-Assessment Tool, Toolkit, Policy Briefs and associated policy recommendations provide countries with practical mechanisms to maintain, institutionalise, and further develop health workforce planning capacities after the Joint Action ends. These outputs explicitly address the long-term continuity and scalability of HEROES achievements.

In addition, communication, dissemination, stakeholder engagement, mutual learning activities, and Quality Advisory Board processes contributed to fostering collaboration between countries, facilitating the exchange of good practices, and promoting the uptake of project results at both national and European levels. These activities enhanced the visibility, relevance, and potential impact of the Joint Action beyond the consortium itself.

While the degree of contribution varies across individual milestones and deliverables, reflecting their different purposes and stages within the project lifecycle, all major outputs can be linked directly to one or more of the strategic objectives of HEROES. Furthermore, the strong alignment observed between the challenges identified in the national assessments, the actions proposed in the Policy Action Plans, and the sustainability mechanisms developed throughout the project indicates a coherent intervention logic across work packages.

Therefore, this criterion can be considered fully achieved. The milestones and deliverables have collectively generated knowledge, tools, governance mechanisms, policy recommendations, stakeholder networks, and capacity-building resources that directly support the strategic aims of HEROES and provide a foundation for continued improvement of health workforce planning systems across Europe.

4. Summative evaluation

This section presents the summative evaluation of the Joint Action HEROES, conducted at the end of the project to assess the extent to which its objectives, expected results, and broader impacts have been achieved. While the formative and mid-term evaluations focused on monitoring implementation processes, identifying challenges, and supporting continuous improvement, the summative evaluation adopts a retrospective perspective, examining the overall performance and achievements of the Joint Action over its entire duration.

The evaluation assesses the effectiveness, relevance, efficiency, coherence, sustainability, and potential impact of HEROES, considering both project-level outcomes and the added value generated for participating Member States and the European Union. Particular attention is given to the extent to which the Joint Action has strengthened health workforce planning and forecasting capacities, supported evidence-informed policymaking, fostered mutual learning and collaboration among countries, and contributed to the development of sustainable structures, tools, and governance mechanisms for health workforce intelligence.

The findings presented in this section draw on multiple sources of evidence collected throughout the project, including monitoring data, deliverables and milestones, surveys, interviews, observations of project activities, feedback from participating countries and stakeholders, reflection sessions, Policy Board discussions, Quality Advisory Board recommendations, and the results of the mid-term evaluation. By triangulating these sources, the summative evaluation provides a comprehensive assessment of the achievements, limitations, lessons learned, and future opportunities arising from the HEROES Joint Action.

The purpose of this assessment is not only to determine whether the Joint Action achieved its intended objectives, but also to identify the conditions that may support the sustainability and further development of its results beyond the project lifetime, thereby informing potential future European and national initiatives in health workforce planning and forecasting.

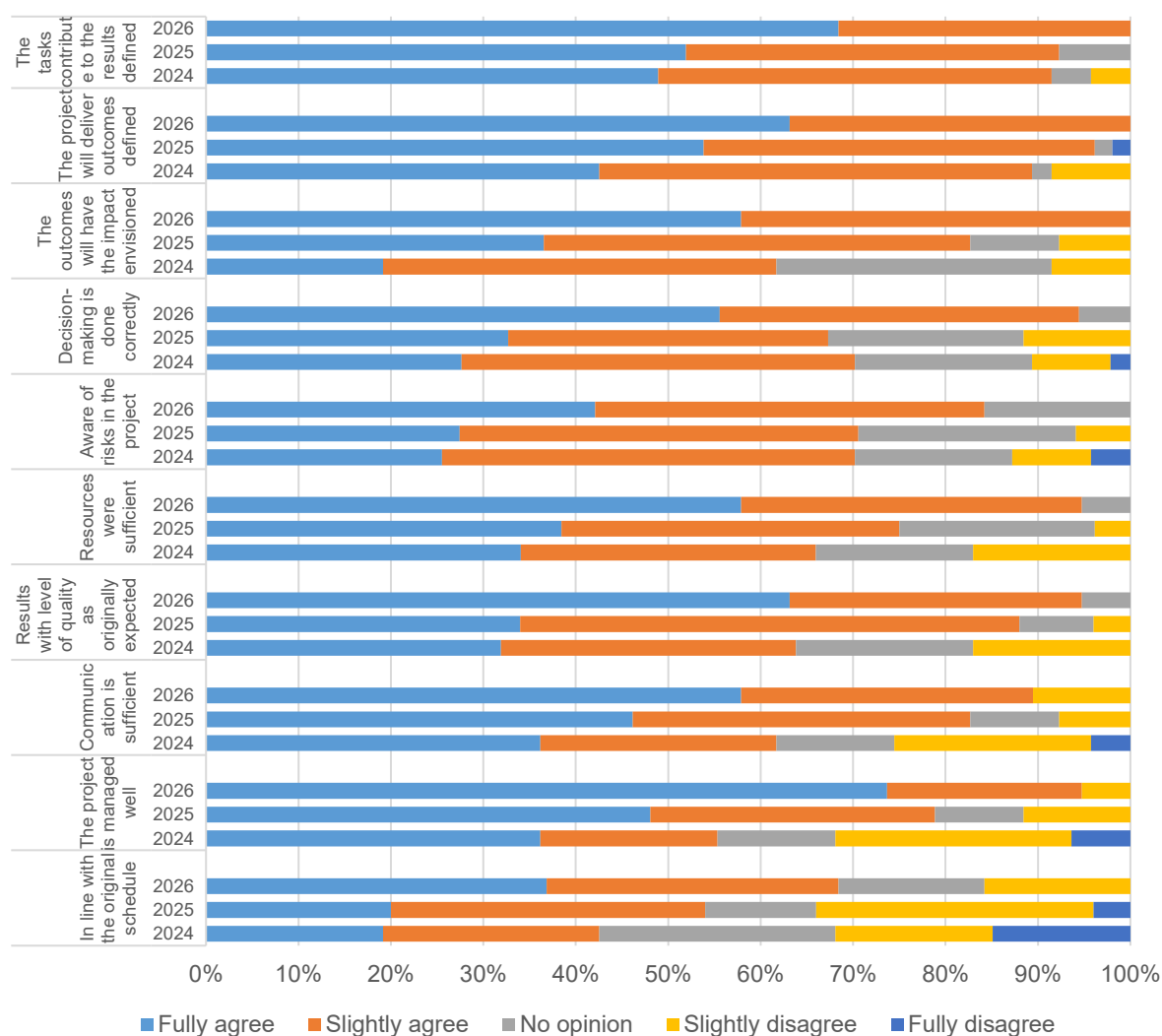
a. Self-evaluation

In June 2024, April 2025, and July 2026 all members of the HEROES consortium were invited to complete a self-evaluation questionnaire (SEQ). The design of this questionnaire is explained in the Evaluation Plan (D3.1), and is based on internal evaluation surveys that have been applied in other European projects comparable to the JA HEROES. The SEQ was conducted according to plan, i.e. at the beginning, mid-term and at the end of the JA. All country representatives, as well as all members that were involved in the actual execution of Tasks within the different Work Packages (WPs), were included.

The following table shows the distribution of the respondents by the Work Package (WP) they were contributing to and/or leading per self-evaluation questionnaire. As can be seen, quite a number of the consortium members were actually involved in more than one WP. The number of respondents per WP in the table includes these members, resulting in percentages and obviously adding up to more than 100%. The relevant conclusion is that responses were received that reflect each of the WPs.

Workpackage	Number of answers (% out of total n)		
	June 2024 (n=46)	April 2025 (n=52)	July 2026 (n=19)
More than 1 WP	17 (37%)	20 (38%)	9 (47%)
WP1	7 (15%)	7 (13%)	3 (16%)
WP2	6 (13%)	3 (6%)	0 (0%)
WP3	8 (17%)	9 (17%)	5 (26%)
WP4	8 (17%)	14 (27%)	5 (26%)
WP5	28 (61%)	20 (38%)	9 (47%)
WP6	11 (24%)	12 (23%)	2 (11%)
WP7	18 (39%)	13 (25%)	6 (32%)

The self-evaluation questionnaire contained 10 validated items presented on a 5-point Likert scale (ranging from fully agree to fully disagree). The graph below shows the proportional distribution of the responses across the 10 items for the three SEQs conducted in 2024, 2025 and 2026. The items are sorted by their added full and slightly agree percentage in June 2024.



As can be seen from the graph, the results show an overall good satisfaction with the performance and progress of the Joint Action HEROES throughout. With one exception, the majority of respondents (i.e. more than 50%) fully or slightly agreed with all items in all years. Mostly agreed were three items at the top of the graph, referring to the intended goals and aimed results of the Joint Action HEROES (“The tasks contribute to the results envisioned”, “The project will deliver the outcomes defined” and “The outcomes will have the impact envisioned”). A relative lower (but still high) percentage agreed with items concerned the (internal) communication, management and if the project was in line with the original schedule.

For all items, the graph also shows that the proportion of respondents who strongly agreed increased consistently across all four survey rounds. Particularly marked improvements were observed for the items that had received the lowest levels of support in the 2024 survey, namely: “the project is managed well”, “the communication in the project is sufficient”, “we are still in line with the original schedule”, and “the results will have the level of quality as originally expected”. These findings indicate that the corrective actions implemented following the mid-term evaluation were effective in addressing the concerns identified during the early stages of the Joint Action.

The improvement also reflects the successful resolution of the management and coordination challenges experienced during the first year of implementation, including changes in the leadership of several Work Packages. The transition was effectively managed through strengthened governance arrangements, improved communication and closer coordination among partners, allowing the consortium to regain momentum and successfully deliver the planned activities. Overall, the survey results provide evidence of the consortium's capacity to adapt to implementation challenges and continuously improve project management and collaboration throughout the lifetime of HEROES.

The results of the three SEQ clearly indicate that an increased consensus emerged in terms of the satisfaction of the participants with the achievements of Joint Action HEROES. Looking at the items, this is most prominently demonstrated by the high confidence about the results and achievements in all countries and at the consortium level, as well as the shared understanding and willingness to exchange and collaborate. The SEQ results therefore also reflect the collective commitment to address the key issues and move forward with a unified approach.

Still, it should also be mentioned that (in addition to the item assessments) respondents mentioned several challenges and action points during the project, expressed by answering the open question at the end of the SEQ. A number of action points mentioned in several SEQ rounds were:

- There was a need for better instructions and a tailored time schedule of the task and WP deadlines. To provide this on time, with context and to be regularly communicated by the coordination team to all WP leaders.
- The periodic Steering Committee meetings were experienced as quite static and ‘one-way’. The need is to redesign the meeting to increase the balance between sharing the needs, knowledge and expertise on health workforce planning in the participating countries. It was mentioned that this will improve more content-related exchange and brainstorming across the three country clusters, supporting the country-specific action plans and policy dialogues. Project participants expressed that they want to be motivated and inspired, next to discussing the administrative related topics that also need to be addressed in the Steering Committee meetings.
- There was need for additional meetings to be held with the coordinating team and the three task leaders, to strengthen collaboration and alignment on the content and deliverables of Joint Action HEROES. There was a need to ensure and align the objectives between the tasks.
- It was proposed (and executed) to organize ‘reflection meetings’ at the end of each year, to internally e-evaluate the points of improvement, as well as an evaluation meeting every four months.

All four action points have been follow-up, which resulted in the (very) positive results of the SEQ at the end of the project. In particular, the project management, the structure of the internal meetings and the need for more structure were improved. The initial challenges as described above have been addressed by the action points, while as a result internal meetings were restructured to get more 'meaning' from the meetings.

Success factors

In the self-evaluations respondents mentioned the following subjects as success factors of Joint Action HEROES:

- Exchange and learn of experiences with other countries
- Thinking of solutions together
- Cooperation and collaboration
- Learning from experts and task leaders
- Interdisciplinary approach

Of these subjects, the exchange between countries was the most mentioned success factor. This factor added the most value according to the SEQ respondents, and the Joint Action was seen as very successful in facilitating this exchange and collaboration between countries, both online and in off-line meetings. In addition, the participants and partners of the Joint Action mentioned in the SEQ (and the interviews conducted by the WP3 team) two major added values of the Joint Action:

- The benefits resulting from a collaborative European approach,
- The mutual learning and cross-country cooperation bring to participating countries

Sustainability, lessons learned and future perspectives

The developments that countries made in their planning system during (and as a result) of the Joint Action HEROES are significant. And they will be beneficial since HWF planning and shortages of HWF will remain a prominent issue. The main challenge is, however, to keep politics and other stakeholders involved. Future themes to sustain the collaboration between the countries in HEROES could focus on (e.g.): cross-border mobility and workforce migration, working conditions and wellbeing of the HWF, as well as the retention of professionals. Countries will continue to struggle with these problems where a European approach could be useful to address, understand and fight these.

For potential future European initiatives, the participants/countries consulted in the context of the WP3 evaluation of the Joint Action HEROES, expressed their interest in a number of 'next themes'. One is to evolve HWF planning and policies from single occupational groups towards multidisciplinary teams – also addressed as the 'skill-mix planning'. But this multidisciplinary or team approach also concerns the planning stakeholders themselves. The idea is that of each country participates with a team that consists of different stakeholders (researchers, ministry of health, educational institutes, professional associations) it is suggested that changes and developments can be implemented better and with more mandate.

Evaluation Summary of the Reflection Sessions within the Joint Action HEROES

The reflection sessions conducted throughout the Joint Action HEROES represented one of the most valuable components of the project's formative evaluation strategy. Rather than functioning as conventional project meetings, they were designed as structured learning and evaluation exercises in which participating countries, Work Package leaders, technical experts and project coordinators critically examined implementation progress, emerging findings, operational challenges and opportunities for improvement. Through an iterative process of reflection, feedback and follow-up, these sessions promoted organisational learning, adaptive project management and continuous quality improvement while reinforcing the long-term sustainability of Health Workforce (HWF) planning systems across Europe.

Four structured reflection sessions were organised between July 2024 and May 2025 (8 July 2024, 18 December 2024, 4 February 2025 and 21 May 2025). Together, they followed a progressive evaluation cycle, moving from the identification of challenges and priority areas, through the development of improvement actions, to the review of their implementation and impact. This sequential approach enabled project partners not only to monitor progress but also to adjust activities in response to emerging evidence, thereby embedding formative evaluation within the day-to-day management of the Joint Action.

From an evaluative perspective, the reflection sessions generated clear evidence of collaborative learning and continuous organisational improvement. They created a safe and constructive environment in which participants openly exchanged experiences, discussed implementation barriers and shared practical solutions. Countries with more mature HWF planning systems were able to present methodologies, governance arrangements and operational practices that could be transferred and adapted by countries at earlier stages of development. This peer-learning approach strengthened mutual understanding, accelerated capacity building and fostered methodological convergence across participating Member States, confirming one of the principal European added values of the Joint Action.

Equally important was the contribution of the reflection sessions to adaptive project management. Discussions extended well beyond reporting on completed activities and focused instead on validating assumptions, identifying implementation barriers, reviewing emerging outputs and refining project methodologies. Issues identified during the initial sessions—including improving the visibility of country achievements, clarifying roles and responsibilities, strengthening communication between Work Packages, increasing country engagement, reinforcing sustainability activities and integrating policy perspectives more effectively—were systematically revisited during subsequent meetings to assess progress and define corrective actions. This iterative process illustrates how formative evaluation supported continuous adaptation of the project rather than serving solely as a retrospective assessment mechanism.

The sessions also reinforced the project's systems-thinking perspective on health workforce planning. Throughout the discussions, participants consistently recognised that sustainable HWF planning depends on far more than sophisticated forecasting models or technical analytical tools. Effective workforce planning requires strong governance arrangements, institutional ownership, integrated workforce intelligence systems, high-quality data, competent planners, meaningful stakeholder engagement and continuous policy dialogue. Over time, the reflection process demonstrated a clear conceptual shift from viewing workforce planning primarily as a technical exercise towards recognising it as a strategic governance function embedded within broader health system development. This perspective became a defining characteristic of the project's final conceptual framework.

A particularly important contribution of the reflection process was the validation and refinement of the Sustainable Health Workforce Intelligence Framework. Participants confirmed that the framework accurately reflected the diversity of planning maturity observed across participating countries while providing a practical roadmap for future development. Discussions highlighted broad consensus that governance, planners' competencies, workforce intelligence, data quality, forecasting methodologies and political commitment are interdependent components that must evolve together if workforce planning is to become sustainable and institutionalised. Feedback generated during the sessions directly informed the further development of the Sustainability Framework, Policy Action Plans, forecasting methodologies, governance approaches and stakeholder engagement strategies developed throughout the Joint Action.

The reflection sessions also strengthened stakeholder ownership and collective responsibility for project outcomes. By bringing together ministries, country representatives, technical experts, Work Package leaders and project coordinators in a participatory setting, they encouraged shared responsibility for both successes and challenges. Rather than evaluating individual countries in isolation, discussions concentrated on identifying common European challenges, exchanging transferable solutions and strengthening collaboration across countries and work packages. This participatory approach fostered trust, reinforced

commitment to implementing national Policy Action Plans beyond the lifetime of the Joint Action and contributed to building a sustainable European community of practice in HWF planning.

The evaluation nevertheless highlighted several persistent challenges that emerged consistently throughout the reflection process. Participating countries displayed considerable heterogeneity regarding governance arrangements, workforce data availability, analytical capacity and institutional maturity, requiring flexible adaptation of methodologies and limiting direct comparison of progress. Participants also recognised that many of the achievements realised during HEROES represented the establishment of enabling conditions for sustainable workforce planning rather than fully institutionalised systems. Maintaining momentum after completion of the Joint Action will therefore require continued political commitment, adequate investment and sustained European collaboration.

The final reflection session, held in May 2025, integrated the findings of the 2025 Self-Evaluation Questionnaire, completed by 52 respondents, allowing qualitative reflections to be complemented by quantitative evidence. The results demonstrated a consistently positive perception of project implementation and showed improvements across most project management dimensions compared with the previous year. Approximately 96% of respondents agreed that project tasks continued to contribute to the expected results, 92% considered that the project would deliver its planned outputs, 88% expressed confidence in the quality of the expected results, and around 83% agreed that project communication and expected impact were satisfactory. Additional questionnaire items showed particularly high levels of satisfaction with project organisation and support: approximately 88% positively evaluated both the organisation of project events and the support provided by task leaders, around 87% considered cluster management effective, and more than 80% expressed positive views regarding project monitoring and support from Work Package leaders. The principal area requiring further attention remained collaboration and communication between countries, where agreement levels of approximately 69–71% indicated opportunities to strengthen cross-country interaction and knowledge exchange.

Taken together, the reflection sessions generated several important cross-cutting lessons for potential future European collaboration in health workforce planning. Participants consistently recognised that sustainable HWF planning requires permanent governance structures, continuous stakeholder dialogue, integrated workforce intelligence systems, skilled planners and strong links between technical evidence and policy decision-making. Equally important was the recognition that European cooperation provides substantial added value by keeping health workforce planning on political agendas and highlighting its key role for transformation of health systems, facilitating mutual learning, methodological convergence and the transfer of good practices across diverse health systems. The sessions demonstrated that continuous reflection, supported by both qualitative dialogue and quantitative evaluation, is itself an essential capability for strengthening workforce planning systems.

Overall, the reflection sessions represented a cornerstone of the HEROES evaluation framework. They moved beyond traditional monitoring of deliverables by creating a continuous cycle of learning, reflection, adaptation and improvement that enhanced both project implementation and strategic outcomes. As a governance and organisational learning mechanism, they complemented the formal evaluation activities by generating actionable recommendations, validating emerging methodologies, strengthening stakeholder ownership and promoting collaboration across participating countries. Their influence extended well beyond project management, directly informing the development of the HEROES Sustainability Framework and reinforcing the long-term institutionalisation of evidence-informed health workforce planning. In doing so, the reflection sessions made a substantial contribution to the quality, impact and sustainability of the Joint Action and demonstrated the value of embedding formative evaluation within complex multinational health policy initiatives.

b. Quality Advisory Board

The **Quality Advisory Board (QAB)** constituted one of the principal external quality assurance mechanisms of the Joint Action HEROES. As foreseen in the Evaluation Plan (D3.1), the Board provided independent scientific, methodological and strategic advice throughout the implementation of the Joint Action, complementing the operational evaluation activities undertaken by WP3. While the evaluation team focused on monitoring implementation and assessing progress, the QAB provided an external perspective on the relevance, coherence, quality and long-term policy value of the project's methodologies, outputs and strategic direction.

The Board brought together internationally recognised experts in health workforce planning, health systems governance, public health policy and European health workforce cooperation. Its multidisciplinary composition ensured that project developments were reviewed not only from a technical perspective but also in relation to their governance implications, practical applicability and contribution to European health policy.

The QAB consisted of:

- Michel van Hoegaerden
- Gilles Dussault
- Heidi Kapstad
- Beatriz González López-Valcárcel
- Mario Dal Poz
- Claudio Costa
- Jim Buchan

Meetings and scope of the advisory process

During the lifetime of HEROES, **five formal QAB meetings** were organised:

- **12 November 2023** – introductory meeting reviewing the overall objectives, methodology and implementation strategy of the Joint Action;
- **16 May 2024** – review of the initial implementation phase, including the AS-IS assessments, country clustering approach and methodological foundations;
- **18 December 2024** – review of interim findings from the country action plans and discussion of common implementation challenges;
- **7 May 2025** – review of the emerging Sustainability Framework, Sustainable Health Workforce Intelligence Framework and Self-Assessment Toolkit;
- **4 April 2026** – review of the draft final deliverables, including the Sustainability Report, the Final Overarching Report and recommendations for future European cooperation.

In addition, four QAB members participated in the **Final Conference held in Rome (June 2026)**, where they provided an independent assessment of the achievements of the Joint Action and discussed future priorities for European cooperation in health workforce planning.

Main contributions to project quality

From an evaluation perspective, the QAB fulfilled a role that went well beyond reviewing deliverables. Throughout the project, Board members consistently encouraged the consortium to strengthen the scientific robustness, policy relevance and sustainability of HEROES outputs.

Several recurrent themes emerged across successive meetings:

- First, the QAB consistently reminded the consortium that HEROES should build upon existing international knowledge rather than develop isolated methodologies. Particular emphasis was placed on aligning the project with previous European initiatives, WHO frameworks and existing evidence on health workforce planning, thereby avoiding duplication and reinforcing methodological continuity.

- Second, Board members repeatedly emphasised that **the principal challenge in health workforce planning is not the development of forecasting tools themselves, but their implementation**. They encouraged the consortium to strengthen stakeholder engagement, governance arrangements and policy dialogue so that technical outputs could effectively influence decision-making. The Board consistently stressed that the transition from the **"TO BE"** vision to the **"TO DO"** implementation phase required continuous involvement of ministries, professional organisations and other key stakeholders.
- Third, the QAB highlighted the considerable heterogeneity among participating countries. Rather than advocating a single standardised model, members recommended adapting methodologies to different levels of planning maturity, governance structures and national contexts. This recommendation strongly influenced the flexible implementation philosophy adopted throughout HEROES and reinforced the country-specific nature of the National Policy Action Plans.
- Another recurring recommendation concerned the quality and governance of workforce data. The Board recognised that many countries continued to experience limitations in data completeness, interoperability and legal access to workforce information. It therefore encouraged further development of the Advanced Minimum Dataset (AMDS), improved governance of workforce intelligence systems and greater use of emerging digital technologies, including artificial intelligence, to strengthen forecasting capabilities and evidence-informed planning.

The Board also drew attention to several strategic issues that should remain priorities for potential future European collaboration, including:

- monitoring health workforce mobility and reducing the risk of "brain drain";
- strengthening European self-sufficiency in workforce supply;
- understanding demographic and generational changes within the workforce;
- integrating gender perspectives, work-life balance and changing professional expectations into planning methodologies;
- reinforcing the links between technical evidence, governance and policy-making.

Influence on project implementation

The recommendations formulated by the QAB were systematically discussed within the consortium and translated into improvements in project implementation. Their influence is particularly evident in several major developments of the Joint Action.

The Board's recommendations contributed to strengthening the governance dimension of the project, increasing the emphasis placed on stakeholder engagement and Policy Dialogues, refining the Sustainability Framework, improving the conceptual development of the Sustainable Health Workforce Intelligence Framework, and enhancing the practical applicability of the National Policy Action Plans. During the final phase of HEROES, the QAB also reviewed the Final Sustainability Report and the Final Overarching Report chapter by chapter, proposing improvements to their structure, clarity and policy messages before finalisation.

The evaluation therefore demonstrates that the QAB functioned as an active quality improvement mechanism rather than as a purely consultative body. Its recommendations were progressively incorporated into project activities, illustrating an effective cycle of independent review, organisational learning and adaptive project management.

Evaluation of the QAB contribution

Overall, the Quality Advisory Board made a substantial contribution to the quality, credibility and strategic orientation of the Joint Action. By combining independent scientific expertise with practical policy experience, it strengthened the methodological robustness of the project while continuously encouraging the consortium to focus on implementation, sustainability and long-term institutionalisation of health workforce planning.

Perhaps its greatest contribution was reinforcing the understanding that sustainable health workforce planning is fundamentally a **governance challenge rather than solely a**

technical exercise. Throughout the Joint Action, the QAB consistently promoted a systems perspective in which data quality, planning methodologies, governance arrangements, stakeholder engagement and political commitment are viewed as mutually reinforcing components of sustainable health workforce intelligence systems.

From the perspective of this final evaluation, the QAB therefore represents an example of good practice in the governance of complex European Joint Actions. Its independent advice strengthened both the quality of project implementation and the policy relevance of the final outputs, while helping to ensure that HEROES leaves not only a set of technical tools and methodologies but also a stronger European vision for sustainable, evidence-informed health workforce planning.

Lessons Learned: Takeaways for Future JA

The discussions held during the Quality Advisory Board (QAB) meetings generated several important lessons that can inform potential future European Joint Actions on Health Workforce Planning and Forecasting (HWP&F).

1. Sustainability requires more than technical tools and methodologies

A recurring message from the QAB was that sustainable health workforce planning cannot be achieved solely through improved datasets, forecasting models, or analytical tools. Long-term success depends on governance structures, institutional ownership, stakeholder engagement, and political commitment. Potential future Joint Actions should therefore adopt a systems-based approach that combines technical capacity building with organisational and policy development.

2. Cross-country learning is most effective when it is structured around shared challenges

QAB members consistently highlighted that many of the challenges identified by participating countries—such as workforce demand estimation, data quality, workforce mobility, retention, and stakeholder engagement—are common across Europe. Future initiatives should facilitate more focused thematic collaboration, peer-learning networks, and practical exchanges between countries facing similar challenges, rather than relying exclusively on general knowledge-sharing activities.

3. Workforce planning must be closely connected to policymaking

The Board repeatedly emphasised that technical evidence alone is insufficient to drive change. Forecasts, models, and workforce intelligence must be translated into policy-relevant messages and integrated into decision-making processes. Future Joint Actions should strengthen the links between technical experts, policymakers, and political leaders to ensure that evidence informs concrete policy actions.

4. Stakeholder engagement is a critical success factor

The QAB recognised that sustainable workforce planning requires the active involvement of a broad range of stakeholders, including ministries, professional organisations, educational institutions, employers, and workforce representatives. Future projects should invest early in stakeholder engagement mechanisms and policy dialogue processes to build ownership, consensus, and implementation capacity.

5. Flexibility is essential to accommodate diverse national contexts

The Board acknowledged the considerable diversity among European health systems in terms of governance arrangements, planning capacity, data availability, and workforce challenges. Potential future Joint Actions should therefore avoid overly prescriptive approaches and instead provide adaptable frameworks, tools, and guidance that can be tailored to national circumstances while maintaining a common European direction.

6. Capacity building should focus on systems, not only individuals

The discussions highlighted that training individual planners is important but insufficient if organisational structures, governance arrangements, and institutional mandates remain weak. Future initiatives should prioritise strengthening planning systems as a whole, including governance mechanisms, workforce intelligence functions, multidisciplinary teams, and organisational learning processes.

7. Sustainable workforce intelligence requires continuous improvement cycles

The QAB strongly supported the concept that workforce planning should be viewed as an ongoing process rather than a series of isolated projects. Potential future Joint Actions should promote continuous monitoring, evaluation, reflection, and adaptation mechanisms that enable countries to update their plans, learn from implementation experiences, and respond to changing workforce needs.

8. European cooperation continues to provide significant added value

A consistent conclusion across all meetings was that many health workforce challenges cannot be addressed effectively by countries acting alone. Shared methodologies, common data standards, mutual learning opportunities, and continued European-level cooperation remain essential. Potential future Joint Actions should build on the networks, partnerships, and trust established through HEROES to support long-term collaboration in health workforce planning and forecasting.

Overall, the QAB concluded that the greatest legacy of HEROES is not only the production of new tools and methodologies, but also the establishment of a stronger European community of practice capable of supporting more sustainable, evidence-informed, and policy-oriented health workforce planning systems in the future.

Summary of Quality Advisory Board Meetings, Key Recommendations and Lessons Learned table

QAB Meeting	Main Topics Discussed	Key Recommendations	Contribution to HEROES / Lessons Learned
12 November 2023	Introduction to the Joint Action, governance structure, evaluation methodology, overall implementation strategy and project objectives.	Build on existing international knowledge and previous European initiatives (WHO, JAHWF); ensure methodological coherence; recognise the diversity of national contexts from the outset.	Established the strategic orientation of the Joint Action and reinforced the importance of adopting a systems approach rather than developing isolated technical solutions.
16 May 2024	Review of the initial implementation phase, AS-IS assessments, country clustering, data availability, implementation approach and stakeholder engagement.	Adapt methodologies to different levels of national maturity; strengthen stakeholder involvement; ensure realistic country-specific objectives; improve data governance and implementation planning.	Reinforced the flexible implementation model adopted in HEROES and highlighted that successful HWF planning depends on governance, stakeholder engagement and country ownership.
18 December 2024	Review of country Action Plans, common implementation challenges, workforce	Promote thematic peer learning; improve data quality and interoperability; strengthen links between technical work and policy-	Confirmed that implementation challenges were largely shared across countries and demonstrated the added value of structured European

	intelligence, demand estimation, data harmonisation and cross-country collaboration.	making; enhance cross-country collaboration.	collaboration and mutual learning.
7 May 2025	Review of the Sustainability Framework, Framework for Sustainable Health Workforce Intelligence, Self-Assessment Toolkit and long-term sustainability strategy.	Strengthen governance and institutional arrangements; adopt systems thinking; clarify sustainability pathways; improve practical usability of sustainability tools.	Contributed directly to refining the Sustainability Framework and reinforced the concept that sustainable HWF planning requires governance, institutional ownership and continuous organisational learning.
4 April 2026	Review of the Final Sustainability Report, Final Overarching Report, Advanced Minimum Dataset (AMDS), Policy Action Plans and future European cooperation.	Improve clarity and policy relevance of final deliverables; strengthen evidence-to-policy translation; support long-term European cooperation; maintain collaboration beyond HEROES.	Enhanced the quality of the final deliverables and reinforced the strategic vision of HEROES as a long-term European initiative supporting sustainable health workforce planning.
Final Conference (Rome, June 2026)	Independent reflection on project achievements, sustainability and future priorities for European cooperation.	Consolidate the European community of practice; continue collaborative learning; strengthen policy uptake and institutionalisation of HWF planning.	Validated the overall achievements of HEROES and highlighted the importance of sustaining European collaboration beyond the lifetime of the Joint Action.
Cross-cutting conclusions	Governance, implementation, sustainability, data quality, stakeholder engagement, workforce mobility, policy integration and European cooperation.	Integrate technical and governance dimensions; strengthen workforce intelligence systems; institutionalise HWF planning; reinforce policy dialogue; support continuous evaluation and organisational learning.	The QAB consistently demonstrated that sustainable HWF planning is fundamentally a governance challenge rather than solely a technical one. Its recommendations strengthened the scientific quality, policy relevance, implementation strategy and long-term sustainability of HEROES, making the Board a key component of the Joint Action's quality assurance and continuous improvement framework.

c. Objectives and indicators within the RE-AIM framework

Evaluation of Objectives Using the RE-AIM Framework

- Reach

The Joint Action successfully engaged a broad range of stakeholders, including national ministries of health, planning agencies, academic institutions, and professional organisations. Participating countries completed national situation analyses and developed action plans to strengthen workforce planning systems.

- Effectiveness

The project contributed to several key outcomes:

- improved understanding of workforce data gaps and fostered coordinated efforts to address them,
- development of new, more advanced, planning tools and models, fostering their use in policy decisions and
- strengthened analytical capacities among workforce planners.

Training programmes and workshops played a central role in building technical capacity within participating institutions.

- Adoption

Many participating countries adopted new approaches to workforce planning, including:

- implementation of minimum data sets,
- development of projection models, and
- strengthened governance and improved stakeholder engagement mechanisms.

The Joint Action facilitated knowledge transfer between countries with more advanced planning systems and those developing new capacities.

- Implementation

Project activities were implemented largely as planned, supported by strong coordination structures and regular communication between partners. Some challenges arose due to institutional changes, staff turnover, or national administrative processes, but these did not substantially affect overall implementation.

- Maintenance

A key objective of the Joint Action is to ensure the sustainability of results beyond the project duration. Several factors support this:

- establishment of national networks of workforce planning stakeholders,
- development of training resources and methodological tools, and
- strengthened collaboration between European institutions and national authorities.

However, continued political commitment and investment in workforce planning systems will be necessary to maintain and build on the achievements of the Joint Action.

RE-AIM operationalisation table

Objective	Reach	Effectiveness	Adoption	Implementation	Maintenance
HWF data systems	Countries completing AS-IS	Improved data quality	MDS adoption	Data collection processes	Long-term data governance
Planning tools	Countries developing tools	Improved projections	Use by ministries	Integration into planning cycles	Institutionalisation
Capacity building	Number trained	Skills improvement	Use of methods	Training implementation	Training programmes sustained

i. Delivering national datasets for planning purposes

Objective: To deliver national datasets for planning purposes in each country participating in the JA, based on the updated version of the Minimum Data Set (MDS) provided by the JAHWF, including common HWF mobility indicators, methods to bridge the gap between needed and currently collected data referred to both supply and demand of HWF.

Indicator	Final Result
Number of situation analyses on available and needed national HWF data sets (R)	19 national situation analyses completed (100%). All participating countries completed national situation analyses through the AS-IS assessment, the Advanced Minimum Dataset (AMDS) exercise and the national assessment of data needs, providing the basis for National Policy Action Plans and country reports.
Number of national plans on HWF data (R)	19 national HWF data action plans completed (100%). By the end of HEROES, all participating countries had developed national actions to improve HWF data as part of their National Policy Action Plans and Sustainability Plans.
% of action plans on HWF data implemented (R)	Implementation initiated in all participating countries (100% initiated). Countries have initiated implementation of the planned actions. Most actions involve medium- and long-term structural reforms (governance, interoperability, registries, data integration and legislation) that will continue beyond the duration of the Joint Action.
Number of MS that started the implementation of a MDS at country level (E)	19 Member States started implementation of the Advanced Minimum Dataset (AMDS). All countries participated in the AMDS exercise and began adapting their national datasets using the HEROES framework for workforce intelligence and planning maturity.
Number of action lists to fill the data gaps (A)	19 national action lists completed. Each participating country developed structured actions ("TO DO") to address the main data gaps identified during the baseline assessments and AMDS exercise.
% of countries planning on implementing at least 3 actions from the data gaps list (I)	100%. National Policy Action Plans and Sustainability Plans include multiple actions aimed at improving HWF data quality, interoperability, governance, analytical capacity and planning systems, generally exceeding

	three priority actions per country.
Impact on data at EU level: assessment of the contribution of the Joint Action to the structured improvement of health workforce data for health workforce planning (I)	High impact. HEROES developed the Advanced Minimum Dataset (AMDS), extending previous minimum datasets by incorporating qualitative dimensions, governance, planning maturity and workforce intelligence. The Joint Action significantly improved methodological convergence, cross-country comparability and the foundations for future alignment with the European Health Data Space (EHDS).
Self-assessment on the feasibility that the list of actions will be implemented within 5 years after the end of JA HEROES (I)	High feasibility. Sustainability Plans and the Final Sustainability Report indicate that most proposed actions are considered feasible within five years, provided that political commitment, institutional ownership and adequate resources are maintained after the Joint Action.

Data trends: Throughout the Joint Action, participating countries demonstrated a clear progression from fragmented health workforce datasets towards more integrated health workforce intelligence systems. The Advanced Minimum Dataset (AMDS) significantly expanded the traditional Minimum Dataset by incorporating qualitative information, governance dimensions and planning maturity assessment. Data availability improved considerably across participating countries, particularly regarding workforce stock, education and retirement indicators, while several countries also strengthened demand-side datasets and interoperability between administrative sources. Persistent challenges remain in monitoring outward mobility, linking supply and demand datasets, integrating qualitative information into routine planning, and improving interoperability across institutions. Nevertheless, HEROES established a common European framework for health workforce intelligence that supports cross-country comparability, evidence-informed policy-making and future alignment with the European Health Data Space (EHDS).

ii. **Developing / improving methods and tools in each participating country to plan HWF**

Objective: To develop / improve methods and tools in each participating country to plan HWF supply and demand building on the main drivers affecting HWF demand detected in the JAHWF and on the MDS developed in objective 1, taking into account among other items, population changes, technological developments, digitalisation, leading to a clear understanding of both quantitative and qualitative needs of HWF across MS.

Indicator	Final Result
Number of situation analyses on the HWF planning tool (R)	19 national situation analyses completed (100%). All participating countries completed an AS-IS analysis of their HWF planning tools and models. These analyses subsequently informed the WP5, WP6 and WP7 reports, as well as the National Policy Action Plans.
Number of action plans on the HWF planning tool (R)	19 national action plans completed (100%). All participating countries developed national actions to establish or improve their HWF planning tools, which were subsequently incorporated into the National Policy Action Plans.
% of action plans implemented (I)	100% (implementation initiated). All participating countries implemented activities arising from their National Action Plans during HEROES, as evidenced by the final country reports.
% of countries that lacked HWF planning tools who started an implementation process / implemented HWF planning tools at country level (I)	100% The implementation process was clearly initiated in all countries that previously lacked national HWF planning tools. The reports clearly show that countries such as Croatia, Greece, Malta, Estonia, Slovakia, Czechia and Germany initiated the development of new planning models.
% of countries with existing HWF planning tools who started an improvement process / improved HWF planning tools at country level (I)	100%. All countries with pre-existing HWF planning tools reported improvements. The national reports describe improvements in countries with more mature planning systems (e.g. the Netherlands, Norway, Belgium, Sweden, Spain and Italy).
Number of countries including new/improved demand-side indicators in their HWF planning tool (A)	19 countries. Evidence demonstrates that several countries incorporated new or improved demand-side indicators. The reports document improvements in countries including Italy, Estonia, Slovakia, Malta, Greece, the Netherlands and Germany, among others.
Self-assessment on the feasibility that the HWF planning tool will have an impact on HWF policy settings and the policy decision-making process (A)	High feasibility. There is broad consensus across the national reports that the planning tools developed are already supporting—or are expected to support—national decision-making on education and training, recruitment, workforce distribution and strategic health workforce planning. The Sustainability Plans indicate a high likelihood of long-term implementation, provided that political commitment and institutional support are maintained.

The national action plans developed under Task 2 leaders have been successfully implemented as strategic roadmaps to strengthen health workforce planning capacity across the participating countries. Building on the baseline analyses ("AS-IS") and the desired future scenarios ("TO-BE"), countries identified actions tailored to their level of maturity, ranging

from the development of first-generation planning models to the refinement of advanced forecasting systems.

Overall, the national reports demonstrate that the actions undertaken have contributed to strengthening planning methodologies, expanding the use of demand-side indicators, improving modelling capacity and fostering the institutionalisation of HWF planning. The implementation process also confirmed that countries followed different development pathways depending on their starting point, governance arrangements and data availability.

Five major strategic areas originally identified during the mid-term evaluation remained highly relevant throughout the implementation period.

1. Model or conceptualise competency or capability frameworks for HWF planning

Countries focusing on competency and capability-based planning further developed conceptual approaches that move beyond traditional profession-based workforce planning. These approaches increasingly consider competencies, multidisciplinary teams, task shifting and capability requirements to support future models of care. Several countries integrated these concepts into their policy dialogues and long-term planning strategies, although implementation remains at different stages depending on national contexts.

2. Set-up and develop a basic projection tool inspired by the NIVEL model

The NIVEL planning methodology proved to be one of the most influential outputs of the Joint Action. Several countries adapted or started implementing projection tools based on the NIVEL stock-and-flow methodology according to their own national data infrastructure and planning needs. Countries with limited previous modelling capacity used HEROES as an opportunity to establish their first structured forecasting models, while others adapted the methodology to national circumstances.

3. Develop models supporting both national and regional workforce planning

Countries with more mature planning systems focused on integrating regional and national planning approaches. Improvements included better alignment between regional workforce planning and national policy objectives, incorporation of multiple professional groups, and increased flexibility to support regional decision-making. Several countries also linked planning tools with education planning, recruitment policies and allocation of training positions.

4. Improve or extend existing HWF planning models

Rather than replacing existing models, many countries concentrated on extending their forecasting capacity by incorporating broader demand-side determinants, demographic trends, epidemiological developments, organisational changes, technological innovation, productivity, digital transformation and scenario analysis. The resulting models provide a more comprehensive basis for evidence-informed policy decisions than traditional population-based forecasting approaches.

5. Create stakeholder engagement and multiparty collaboration

One of the strongest achievements of HEROES was the establishment of structured collaboration between ministries, public authorities, professional organisations, universities, statistical offices and other relevant stakeholders. Policy Dialogues became an effective mechanism for improving coordination, promoting common understanding of workforce planning concepts and increasing ownership of the planning tools developed during the project. In many countries, these collaborative structures are expected to continue beyond the lifetime of HEROES through the Sustainability Plans.

Overall assessment

Overall, Task 2 achieved its main objective of strengthening HWF planning methodologies across participating countries. Rather than producing a single common planning model, HEROES enabled countries to improve or develop planning tools adapted to their national contexts while promoting methodological convergence across Europe. The Joint Action demonstrated that planning tools should be proportionate to national maturity and embedded within governance structures if they are to effectively support policy-making. The combination of improved data, enhanced modelling approaches, strengthened stakeholder engagement and policy dialogues provides a strong foundation for sustainable health workforce intelligence systems after the end of the Joint Action.

iii. Improving skills and capacities of national/regional HWF planners

Objective: To improve skills and capacities of national/regional HWF planners of the participating countries to those needed for an effective implementation of a HWF planning system through training programmes focused in different areas.

Indicator	Final Result
Number of situation analyses on planning skills and capacities needed (R)	18 countries. All participating countries conducted an AS IS assessment of HWF planners' skills and capacities as one of the three core technical domains (Data, Models, Skills) before defining their TO BE and TO DO actions.
Number of action plans to improve the planning skills and capacities needed (R)	18 action plans. Every participating country included actions to strengthen planners' skills and capacities within their national TO DO implementation plans and National Policy Action Plans.
% action plans implemented (I)	100% (implementation initiated). All countries implemented activities related to strengthening HWF planning capacities during the Joint Action. The reports document training, peer learning, mentoring, workshops and implementation of national capacity-building activities, although completion of every individual action was not measured.
Training courses implemented (I)	18 national training programmes + multiple European training activities (Community of Practice, workshops, bilateral exchanges, expert meetings). Every country implemented national training activities, complemented by numerous cross-country learning activities organised through HEROES. D1.2 identifies capacity building as one of the major achievements of the Joint Action.
Number of participants in training courses executed during JA HEROES, per country (R)	Participant numbers are not available in a consolidated form.
Training toolkits delivered (A)	1 comprehensive European training package and associated national training materials. HEROES produced common training materials, planning guidance, the Sustainable Workforce Intelligence Framework, the Self-Assessment Toolkit, methodological guidance and country-adapted training resources supporting long-term capacity building.
Self-assessment on the degree to which HWF planning training	High. Across the final reports, countries consistently report improved analytical skills, modelling capacity, governance competencies, policy translation skills, stakeholder engagement

courses improved the effectiveness of the HWF planning process (E)	and institutional learning. Capacity building is identified as one of the principal added values of HEROES and a key enabler of sustainable HWF planning.
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Explanatory footnotes:

1. **100% implementation** refers to the fact that all participating countries initiated and implemented the planned capacity-building activities during the Joint Action. The project did not define a KPI measuring the percentage completion of each individual action within the national plans.
2. **Number of participants** cannot be reported reliably because HEROES did not maintain a consolidated participant database across all Work Packages.

iv. Fostering governments' commitment for building the HWF planning capacity further

Objective: To foster governments' commitment to further develop the HWF planning capacity, to systematically engage relevant national stakeholders and to promote the 'health in all policies' approach.

Indicator	Final Result
Number of ministries of health represented in the Policy Board (R)	19 Ministries of Health represented (100%). All participating countries were represented by their national competent authorities, mainly Ministries of Health, in the HEROES Policy Board throughout the Joint Action. This governance structure ensured direct governmental involvement in decision-making and strategic oversight.
Number of policy dialogues at national level (E)	19 national Policy Dialogues completed (at least one per participating country). Each participating country organised national Policy Dialogues involving relevant stakeholders. These dialogues formed the basis for the National Policy Action Plans and subsequent Sustainability Plans.
Number of meetings of the Stakeholders' Forum (E)	3 Stakeholders' Forum were performed.
% of stakeholders attending the Stakeholders' Forum relative to all stakeholders invited (E)	69.6% (71 of 102 invited stakeholders attended across the three Stakeholders' Forum meetings). Approximately seven out of every ten invited stakeholders participated in the Stakeholders' Forums, indicating a high level of engagement and sustained interest from key stakeholders throughout the Joint Action. This attendance rate suggests that the Forums successfully reached their intended audience and provided an effective platform for dialogue, knowledge exchange and stakeholder involvement in health workforce planning.
Number of stakeholder meetings organised (E)	Evidence confirms extensive stakeholder engagement, but no consolidated number is available. National reports describe numerous stakeholder meetings, workshops and consultations throughout the project; however, the final deliverables do not provide an aggregated count across all countries.
Number of countries	Several participating countries established or formalised dedicated Health Workforce Planning (HWF) units or institutional structures

establishing an HWF planning task/unit after the launch of the Joint Action (E)	during the implementation of the Joint Action. Clear evidence of newly established or formalised coordinating structures is available for countries such as Croatia, Estonia and Slovenia, while Czechia represents an important transitional case. Through HEROES, Czechia developed a comprehensive governance model, incorporated the creation of a dedicated HWF planning unit into its National Policy Action Plan, and initiated the institutional and political process required for its formal establishment, although full implementation is planned beyond the lifetime of the Joint Action. More broadly, several other countries strengthened existing planning bodies by assigning permanent responsibilities within Ministries of Health or public agencies. Overall, HEROES contributed to the institutionalisation of HWF planning as a permanent governance function rather than a project-based activity.
Reports on Policy Action Plans delivered by the national Policy Dialogues (A)	18 National Policy Action Plans delivered (100%). All participating countries completed National Policy Action Plans derived from the national Policy Dialogues, constituting one of the main outputs.
Self-assessment on the degree to which JA HEROES guidelines and results have impact on policy settings (I)	High impact. The national reports consistently indicate that HEROES strengthened policy dialogue, improved collaboration between ministries and stakeholders, and contributed to evidence-informed policy-making. Countries also report that the Policy Action Plans and Sustainability Plans are expected to continue influencing national HWF governance beyond the lifetime of the Joint Action.

Key Delays

WP2 and WP4 were completed successfully, although some implementation activities experienced minor delays resulting from dependencies on preceding technical tasks, the timing of national stakeholder engagement processes, and the completion of country-level analyses required before Policy Dialogues could take place. No evidence suggests that these delays compromised the achievement of objectives.

Actions Taken

To address implementation challenges, WP2 and WP4 adopted several corrective measures:

- Continuous coordination between WP2 and WP4 leaders and national teams.
- Flexible scheduling of Policy Dialogues according to national contexts.
- Close integration with WP5, WP6 and WP7 technical activities.
- Regular follow-up through the Policy Board and Project Management Team.
- Development of common guidance and templates to harmonise Policy Dialogues and Policy Action Plans.

These measures enabled all participating countries to complete their national Policy Dialogues and produce Policy Action Plans despite differences in governance structures and implementation timelines.

WP4 Results

WP4 represents one of the major governance achievements of HEROES. The Work Package successfully established structured national Policy Dialogues involving Ministries of Health and a broad range of stakeholders, thereby strengthening political ownership of HWF planning.

Key achievements include:

- 18 National Policy Action Plans developed through participatory Policy Dialogues.
- Strengthened collaboration between Ministries of Health, educational institutions, professional organisations, public health institutes and other relevant stakeholders.
- Greater institutional commitment to evidence-informed HWF planning.
- Integration of HWF planning into broader health system governance and sustainability strategies.
- Development of Sustainability Plans supporting continuation of the reforms beyond HEROES.
- Increased recognition of HWF planning as a strategic policy function rather than solely a technical exercise.

Overall, WP4 substantially contributed to embedding health workforce planning within national policy agendas and created the governance conditions necessary for sustaining the technical outputs developed under the other Work Packages.

v. Supporting national competent authorities

Objective: To support national competent authorities in facilitating the sustainability of the implementations at regional/national level.

Indicator	Final result
Factors of sustainability addressed in individual implementation plans (A)	Sustainability factors systematically addressed in all 19 National Sustainability Plans (100%). All participating countries incorporated sustainability considerations into their implementation plans. The plans address governance, institutional ownership, stakeholder engagement, financing, workforce capacity, data infrastructure, policy integration and long-term implementation.
National frameworks in all participating countries on health workforce planning governance (A)	19 national governance frameworks developed or strengthened. The Joint Action enabled every participating country to develop or reinforce national governance arrangements for HWF planning. Although the maturity of governance structures varies between countries, all National Sustainability Plans include governance mechanisms supporting future implementation.
Sustainability Action Plan (M)	Completed. The Sustainability Action Plan was successfully delivered through WP4 together with the Final Sustainability Report, the Sustainable HWF Intelligence Framework and the Self-Assessment Toolkit, providing practical guidance for maintaining HWF planning capacity beyond the lifetime of the Joint Action.
Self-assessment on the degree to which the actions implemented will be sustainable after the end of JA HEROES (I)	High sustainability expected. The Sustainability Plans consistently conclude that the actions initiated during HEROES have a high likelihood of continuing after the end of the Joint Action, provided that political commitment, institutional ownership and adequate financial and human resources are maintained. Sustainability is considered particularly strong where HWF planning has become embedded within existing governance structures and policy processes.

Overall assessment

WP4 successfully established the sustainability framework required to support the long-term continuation of the HEROES achievements. Rather than focusing solely on maintaining individual project outputs, the Joint Action promoted the institutionalisation of health

workforce planning by strengthening governance, stakeholder engagement, policy integration and organisational capacity.

One of the major achievements was the development of a comprehensive sustainability package consisting of:

- National Sustainability Plans for all participating countries;
- The Final Sustainability Report;
- The Sustainable HWF Intelligence Framework;
- The Self-Assessment Toolkit; and
- The integration of sustainability considerations into the National Policy Action Plans.

Together, these outputs provide participating countries with practical guidance to continue strengthening health workforce planning after the formal completion of HEROES.

The evaluation also demonstrates that sustainability extends beyond maintaining technical tools. Countries increasingly recognised that long-term success depends on political commitment, institutional leadership, stable governance arrangements, continuous capacity building, stakeholder engagement and regular updating of workforce intelligence systems.

Key achievements

- Sustainability incorporated into all national implementation strategies.
- National governance arrangements for HWF planning strengthened.
- Sustainability integrated into Policy Action Plans.
- Practical sustainability tools produced for future use.
- Strong alignment between sustainability planning and national policy priorities.
- Increased institutional ownership of HWF planning across participating countries.

vi. Performing a systematic appraisal

Objective: To perform a systematic appraisal of the quality of the national improvement and implementation process during the JA HEROES.

Indicator	Final Result
Number of meetings with the QAB (R)	3 Quality Advisory Board meetings completed. Three formal Quality Advisory Board (QAB) meetings were successfully organised during the Joint Action (18 December 2024, 7 May 2025 and 22 April 2026). The meetings provided independent expert advice, strategic guidance and quality assurance throughout the implementation of HEROES.
Current situation analysis ("AS-IS" reports) and scope and definition of objectives ("TO-BE" reports) completed on schedule (A)	Completed (100%). All participating countries completed the AS-IS analyses and TO-BE reports, providing the evidence base for the National Policy Action Plans, implementation activities and Sustainability Plans. These outputs constituted the foundation of the national implementation process.
Sustainability Action Plan completed (M)	Completed. The Sustainability Action Plan was successfully completed together with the Final Sustainability Report, the Framework for Sustainable Health Workforce Intelligence and the Self-Assessment Toolkit, providing a comprehensive roadmap for sustaining HEROES achievements beyond the project lifetime.
Mid-term evaluation report completed (A)	Completed. The Mid-term Evaluation Report was delivered as planned and provided an independent assessment of project implementation, identifying strengths, challenges and

	recommendations that informed the second phase of the Joint Action.
Final evaluation report completed (A)	Completed. The Final Evaluation Report (Deliverable D3.3) was completed as planned, providing a comprehensive summative evaluation of HEROES using the RE-AIM framework and integrating quantitative indicators, qualitative findings, Quality Advisory Board recommendations and lessons learned.
Self-assessment on the degree to which the Sustainability Action Plan and the Evaluation Reports will support long-term implementation (M)	High expected usefulness. The QAB consistently concluded that the Sustainability Framework, Sustainability Action Plans and Evaluation Reports provide practical guidance for institutionalising HWF planning, strengthening governance, supporting continuous learning and promoting evidence-informed policy-making beyond the lifetime of HEROES.

Overall assessment

The systematic appraisal process constituted one of the major strengths of the HEROES Joint Action. Rather than relying solely on a final evaluation, HEROES established a continuous quality assurance cycle combining independent expert review through the Quality Advisory Board (QAB), structured reflection sessions, mid-term evaluation, final evaluation and sustainability planning. This approach enabled continuous organisational learning and progressive improvement throughout project implementation.

The three QAB meetings progressively reviewed the evolution of the Joint Action. The first meeting focused on country action plans and common implementation challenges, particularly data harmonisation, workforce demand estimation, stakeholder engagement and opportunities for cross-country learning. The second meeting concentrated on the Sustainability Framework, governance, systems thinking and institutionalisation of HWF planning. The final meeting reviewed the principal project outputs, including the Advanced Minimum Dataset, Policy Action Plans and Sustainability Report, while also identifying priorities for future European collaboration in health workforce planning.

Across all meetings, the QAB fulfilled an important strategic advisory role by encouraging the consortium to strengthen the practical applicability, policy relevance and long-term sustainability of the project outputs. Its recommendations consistently promoted stronger governance, stakeholder engagement, evidence-informed policy-making and the institutionalisation of health workforce planning functions within Member States.

Key achievements

- Four independent QAB meetings successfully completed.
- Full implementation of the AS-IS and TO-BE assessment methodology across participating countries.
- Successful completion of both Mid-term and Final Evaluation Reports.
- Development of a comprehensive Sustainability Framework and Self-Assessment Toolkit.
- Continuous integration of QAB recommendations into project implementation.
- Establishment of a quality improvement cycle combining evaluation, reflection, sustainability planning and independent expert advice.

Lessons learned

The QAB discussions generated several cross-cutting lessons that extend beyond the HEROES Joint Action and are highly relevant for a potential future European initiatives on Health Workforce Planning and Forecasting.

The Board consistently concluded that sustainable HWF planning requires much more than technical tools and forecasting methodologies. Long-term success depends on strong

governance arrangements, institutional ownership, political commitment and active stakeholder engagement.

The discussions also demonstrated that structured cross-country learning provides substantial added value when countries collaborate around shared implementation challenges rather than simply exchanging information. The QAB therefore recommended reinforcing thematic peer-learning networks and strengthening the links between technical experts and policy-makers.

Another important lesson was that capacity building should focus on strengthening planning systems as a whole—not only individual competencies—through improved governance, multidisciplinary collaboration and continuous organisational learning.

Finally, the Board emphasised that workforce planning should be viewed as an ongoing improvement cycle involving regular monitoring, evaluation, reflection and adaptation. The QAB concluded that one of HEROES' most important legacies is the establishment of a stronger European community of practice capable of supporting sustainable, evidence-informed and policy-oriented health workforce planning across Europe.

vii. Improving knowledge on HWF planning

Objective: To improve knowledge on HWF planning and to reinforce the HWF planning community of experts.

Indicator	Final Result
Number of Community of Practice meetings (A)	13. The Community of Practice (CoP) was implemented through 13 online thematic sessions between April 2024 and March 2026, covering workforce planning, forecasting, governance, mobility, retention, skill mix, data governance and interdisciplinary collaboration.
Number of participants per Community of Practice meeting (A)	Mean: 67.9 participants per meeting (883 participations across 13 meetings). Participation ranged from 52 to 107 participants, with a median of 67 participants. The Community of Practice meetings consistently attracted around 68 participants, demonstrating sustained engagement throughout the Joint Action. Participation remained stable across most meetings, with only one meeting recording exceptionally high attendance (107 participants), suggesting particular interest in the topic addressed. Overall, the Community of Practice provided a well-established platform for continuous knowledge exchange, peer learning and collaboration among participating countries and stakeholders.
Number of countries and stakeholders participating in the Community of Practice meetings (A)	All 19 participating countries plus external stakeholders. The CoP involved experts, policymakers and stakeholders from all participating countries together with international organisations (WHO, CPME and others), providing a permanent European platform for knowledge exchange. However, the number of participating organisations is not reported.
% of countries that have set up a dedicated HWF planning unit at the national level at start and finish of the JA (I)	Not available. Several countries established or strengthened dedicated HWF planning units (e.g. Estonia, Croatia, Malta) while others reinforced existing structures. However, HEROES does not provide a baseline and final count that would allow this percentage to be calculated objectively.
Number of webinars (A)	Not available. D1.2 and the Dissemination Report confirm

	that webinars formed part of the learning architecture
Number of newsletters (A)	5 newsletters were published, with one additional newsletter planned before the end of the project. Therefore the final evaluation can report 5 published newsletters (or 6 if confirmed after project closure).
Number of meetings with stakeholders (A)	Not available. Stakeholder Forums, Policy Dialogues, workshops and numerous national stakeholder meetings were organised by countries locally, but no overall count is presented across the Joint Action.
Number of presentations at scientific and policy discussion events (A)	Not available. The dissemination report documents extensive participation in conferences and policy events, but no consolidated number of presentations is reported.
Number of websites (A)	1 project website. HEROES established and maintained a dedicated project website that became the central repository for deliverables, tools, news and dissemination materials and will remain available after the end of the Joint Action.
Estimated audience is met (I)	Yes (qualitative assessment). The Final Dissemination Report concludes that communication objectives were achieved and that dissemination activities substantially increased the visibility of HEROES and stakeholder engagement across Europe. No quantitative target-versus-achievement table is reported.
Estimated number of people participating at webinars and public conferences is met (I)	Not available. Although participation is described as extensive, no consolidated participant statistics are available to verify achievement against predefined targets.
Satisfaction with knowledge exchange actions (A)	High (qualitative assessment). Reflection sessions, Community of Practice activities and country reports consistently report high value from peer learning, exchange of good practices and collaborative problem solving, although no harmonised satisfaction survey results are presented.
Self-assessment on the degree to which the knowledge exchange and dissemination activities will improve HWF planning capacity at country level (M)	High. Across the final deliverables there is strong consensus that Community of Practice activities, peer learning, bilateral exchanges, workshops and dissemination significantly strengthened national planning capacity, governance and institutional learning.

Added value of cross-country collaboration

One of the principal achievements of HEROES was the creation of a genuine European learning ecosystem for Health Workforce Planning. Rather than functioning solely as a dissemination mechanism, the Joint Action established multiple complementary learning environments—including the Community of Practice, bilateral exchanges, cluster meetings, workshops, Policy Dialogues and peer-learning activities—that enabled countries with different levels of planning maturity to learn from one another and adapt successful approaches to their own national contexts.

The Community of Practice became the central platform for continuous dialogue, allowing experts, policymakers and international organisations to exchange practical experiences on forecasting models, workforce governance, data integration, mobility, retention and skill mix. Importantly, discussions were interactive and implementation-oriented, facilitating the transfer of good practices rather than simply presenting information.

Equally valuable were the bilateral exchanges and twinning activities, which translated general knowledge into context-specific solutions. Countries collaborated directly on data systems, forecasting methodologies, governance arrangements and planner competencies, creating professional relationships that frequently extended beyond individual project activities. These collaborations strengthened institutional capacity, accelerated implementation and laid the foundations for continued European cooperation after the end of HEROES.

Overall, the evidence indicates that the greatest added value of cross-country collaboration was not only the dissemination of methodologies but also the creation of a sustainable European Community of Practice capable of supporting continuous mutual learning, methodological convergence and evidence-informed health workforce planning across Europe.

The Policy Briefs

An important lesson learned concerns the development of the Policy Briefs, which were intended to support the national Policy Dialogues by providing concise, evidence-based policy messages. Their preparation required substantial collaboration across partners and Work Packages and proved more complex than initially anticipated, resulting in significant delays. Although the Policy Briefs were ultimately delivered and contributed to the policy dialogue process, their late availability reduced opportunities for their full use during some national discussions. Future Joint Actions should recognise this type of knowledge product as a joint consortium deliverable, with clearly shared ownership, responsibilities and timelines across contributing partners. Treating Policy Briefs as collective outputs of the Joint Action, rather than products associated with individual organisations, would strengthen collaboration, improve alignment with Member States' priorities and the overall intervention logic, and facilitate their timely production and effective use in policy-making.

viii. Ensuring quality, compliance and usefulness

Objective: To ensure quality, compliance and usefulness of the Joint Action

Indicator	Proposed result
% of surveys completed (E)	Three self-evaluation surveys were successfully completed according to the Evaluation Plan (June 2024, April 2025 and July 2026). A total of 117 completed questionnaires were collected across the three survey rounds (46, 52 and 19 responses, respectively), covering all Work Packages and consortium members involved in project implementation. However, the overall survey response rate cannot be calculated because the total number of invited participants for each survey round was not systematically recorded.
Satisfaction with the project progress (A)	High. Reflection sessions, Quality Advisory Board meetings and project evaluations consistently indicate a high level of satisfaction with the progress of HEROES. Participants recognised substantial achievements in data, planning methodologies, governance, stakeholder engagement and cross-country collaboration, while also identifying areas requiring further development. Satisfaction increased progressively as project outputs matured and countries moved from analysis towards implementation and sustainability.
% of relevant national stakeholders and key actors who are	Not available (qualitative evidence indicates widespread uptake). The documentation demonstrates extensive use of HEROES methodologies, Policy Action Plans, Sustainability Plans, the Advanced Minimum Dataset (AMDS), the Sustainable

using JA HEROES knowledge and tools in a meaningful manner for their work (M)	Workforce Intelligence Framework and training materials by participating countries. However, no harmonised survey measured the proportion of stakeholders using these tools in routine practice, preventing calculation of a percentage.
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5. Summary of the Evaluation

This evaluation provides a comprehensive assessment of the Joint Action HEROES, a European collaborative initiative aimed at strengthening health workforce (HWF) planning capacities across participating countries. The evaluation examines the extent to which the Joint Action achieved its objectives, generated sustainable outputs and strengthened national and European capacities for evidence-informed HWF planning. It also identifies lessons learned and recommendations that may inform future potential European initiatives in this field.

The evaluation adopted a mixed-methods approach, combining both formative and summative evaluation components. The formative evaluation focused on monitoring implementation throughout the project and supporting continuous improvement. Evidence was collected from project deliverables, technical reports, meeting minutes, reflection sessions, national implementation reports, Policy Action Plans, Sustainability Plans, Project Management Team documentation and Quality Advisory Board (QAB) recommendations. This continuous monitoring enabled the consortium to identify implementation challenges, introduce corrective actions where necessary and progressively improve project management, coordination and the quality of the project outputs.

The summative evaluation assessed the overall achievements and outcomes of the Joint Action at its conclusion. The evaluation was structured around the RE-AIM framework (Reach, Effectiveness, Adoption, Implementation and Maintenance), allowing a systematic assessment of project implementation and sustainability. Quantitative indicators defined in the Evaluation Plan were complemented by qualitative evidence obtained from surveys, self-assessments, reflection sessions, QAB meetings and the analysis of final project deliverables. This combination of methods provided a balanced assessment of both measurable achievements and broader organisational and policy impacts.

Overall, the evaluation demonstrates that HEROES successfully established a common European methodological framework for health workforce planning while allowing sufficient flexibility to accommodate different national contexts and levels of planning maturity. All participating countries completed the planned baseline analyses, developed National Policy Action Plans and Sustainability Plans, and implemented actions adapted to their specific needs and governance structures. The project contributed to strengthening workforce intelligence, promoting more demand-oriented planning approaches and improving collaboration between technical experts, policymakers and stakeholders.

A major strength identified throughout the evaluation was the strong emphasis placed on capacity building and organisational learning. Through training activities, the Community of Practice, bilateral exchanges, workshops and peer-learning initiatives, HEROES fostered a European network of professionals working on HWF planning. These activities supported the exchange of experiences, facilitated methodological convergence and encouraged the transfer of good practices between countries with different levels of experience in workforce planning.

The evaluation also highlights the important contribution of governance and stakeholder engagement. National Policy Dialogues, the Policy Board and the Quality Advisory Board created opportunities for multidisciplinary collaboration and strengthened political ownership of HWF planning. The QAB provided independent expert advice throughout the Joint Action,

contributing to continuous quality improvement and reinforcing the practical relevance and sustainability of the project outputs.

From an implementation perspective, the project demonstrated progressive improvement over time. Although some delays and quality revisions occurred during the early stages of the Joint Action, these were successfully addressed through strengthened internal coordination, systematic quality assurance and enhanced communication between Work Packages and participating countries. As implementation progressed, project management processes became more robust, resulting in improved timeliness of deliverables and successful completion of all contractual milestones.

The evaluation further indicates that HEROES has laid important foundations for the long-term sustainability of health workforce planning. Sustainability was addressed not only through dedicated Sustainability Plans but also through the development of governance frameworks, policy recommendations, methodological guidance, planning tools and capacity-building resources intended to remain available after the end of the Joint Action. The evaluation therefore suggests that HEROES has strengthened the institutional capacity of participating countries to continue developing evidence-informed HWF planning beyond the project period.

At the same time, the evaluation identifies several limitations. Some indicators originally included in the Evaluation Plan could not be fully quantified because harmonised data were not systematically collected across all participating countries. In several cases, the available evidence supports strong qualitative conclusions but does not permit the calculation of aggregated quantitative indicators. These limitations have been explicitly acknowledged throughout the evaluation in order to preserve methodological transparency and avoid unsupported assumptions.



HEROES impact pathway figure

6. Lessons learned and conclusions

The evaluation demonstrates that the Joint Action HEROES has made a substantial contribution to strengthening health workforce (HWF) planning capacity across Europe. Beyond delivering its planned outputs, the project established a common methodological framework that enabled countries with different levels of maturity to improve their planning systems while maintaining sufficient flexibility to adapt implementation to national contexts.

One of the principal lessons learned is that effective HWF planning requires an integrated approach combining governance, high-quality data, planning methodologies, workforce intelligence, stakeholder engagement and policy commitment. The experience of HEROES confirmed that technical forecasting tools alone are insufficient. Sustainable workforce planning depends equally on institutional ownership, multidisciplinary collaboration and the capacity to translate technical evidence into policy decisions.

A second lesson concerns the importance of tailoring implementation to national maturity. Participating countries started from very different baseline situations. While some countries focused on establishing their first structured planning systems, others concentrated on improving existing forecasting models or strengthening governance arrangements. The flexibility of the HEROES methodology—structured around the AS IS, TO BE and TO DO approach—proved appropriate for accommodating these differences while maintaining a coherent European framework.

The evaluation also highlights the value of cross-country collaboration and mutual learning. The Community of Practice, bilateral exchanges, cluster activities, workshops and Policy Dialogues enabled countries to exchange practical experiences, discuss common implementation challenges and adapt successful approaches developed elsewhere. This collaborative environment accelerated learning, reduced duplication of effort and promoted increasing methodological convergence across participating countries. One of the most important legacies of HEROES is therefore the establishment of a European network of professionals committed to improving HWF planning.

Another important lesson relates to capacity building. The project demonstrated that strengthening planning systems requires continuous investment in the competencies of HWF planners. Training activities, methodological guidance and practical learning opportunities enhanced participants' analytical, technical and governance capabilities. Capacity building was shown to be most effective when combined with practical implementation activities, peer learning and direct application of newly acquired knowledge within national planning processes.

The evaluation further demonstrates the importance of continuous quality assurance and adaptive project management. The combination of formative evaluation, reflection sessions, Quality Advisory Board (QAB) reviews and regular project monitoring allowed implementation challenges to be identified early and corrective actions to be introduced throughout the lifetime of the Joint Action. This continuous improvement approach contributed to progressively better project performance, particularly regarding the quality and timeliness of project outputs.

A further lesson concerns the role of stakeholder engagement, policy dialogue and collaborative ownership of project outputs. The National Policy Dialogues and the involvement of ministries, professional organisations, academic institutions and other stakeholders strengthened the legitimacy and practical relevance of the Joint Action. At the same time, the experience of developing key outputs demonstrated that products intended to support policy implementation are most effective when they are recognised as collective deliverables of the Joint Action, rather than as products of individual institutions or partners. Shared ownership encourages closer collaboration throughout the development process, facilitates alignment with Member States' priorities and the overall intervention logic, and ultimately increases the relevance, acceptance and practical use of the outputs. These collaborative processes also help ensure that the proposed actions respond to national

needs and enhance the likelihood that the project's results will continue to be used beyond the lifetime of the Joint Action..

The evaluation also identifies several methodological lessons for future potential European Joint Actions. While the project generated extensive qualitative evidence of implementation and impact, some quantitative indicators originally included in the Evaluation Plan could not be fully measured because the design of the Joint Action did not include a harmonised monitoring system for collecting comparable implementation data across participating countries. As a result, some information was available only in qualitative form or through country-specific reports. Future Joint Actions would benefit from integrating a common monitoring framework from the outset, including standardised definitions, reporting templates and performance indicators to support both project management and final evaluation.

Overall, the findings indicate that HEROES successfully achieved its overarching objectives. Participating countries strengthened their HWF planning capacities through improved data, enhanced planning methodologies, stronger governance arrangements, increased stakeholder engagement and reinforced policy dialogue. The project also contributed to a shift from predominantly supply-based planning towards more comprehensive approaches that increasingly consider demand-side factors, population needs and broader health system developments.

Perhaps the most significant achievement of HEROES is that it has contributed to embedding health workforce planning within national policy agendas. The project has demonstrated that HWF planning should be viewed as a continuous strategic function supporting evidence-informed decision-making rather than as a series of isolated technical exercises. Through the development of National Policy Action Plans, Sustainability Plans, planning frameworks, methodological guidance and collaborative networks, HEROES has created the conditions for participating countries to continue strengthening their workforce planning systems beyond the lifetime of the Joint Action.

In conclusion, the evaluation confirms that HEROES delivered substantial European added value. It established common methodologies while respecting national diversity, strengthened collaboration between countries, fostered organisational learning and produced practical tools that can continue supporting evidence-informed HWF planning. The experience gained through HEROES provides a strong foundation for the potential future European cooperation in health workforce planning and offers valuable lessons for the design, implementation and evaluation of future Joint Actions.

GANTT CHART of the Joint Action with deliverables and milestones

ACTIVITY	YEAR 1				YEAR 2				YEAR 3				YEAR 4	
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2
Work Package 1: Coordination														
Task 1.1: Consortium Operating Procedures Definition and Quality Assurance		D1.1												
Task 1.2: Coordination of the project and Day-To-Day Management														
Task 1.3: Consortium meetings	M1													
Task 1.4: Ethical Management														
Task 1.5: Legal Management														
Work Package 2: Communication and Dissemination														
Task 2.1: Communication and dissemination	D2.1, D2.2												D2.5; D2.6	
Task 2.2: Visual identity and promotional materials														
Task 2.3: Website	M2; D2.3													
Task 2.4: Event organization, including stakeholder forum		M3												
Task 2.5: Community of practices														
Task 2.6: Policy briefs								M31	M4			D2.4		
Work Package 3: Evaluation														
Task 3.1: Designing and writing of the Evaluation plan	M5	D3.1												
Task 3.2: Designing and writing of the Mid-term evaluation report							M6; D3.2							
Task 3.3: Designing and writing of the Final evaluation report													M7	D3.3
Task 3.4: Quality Advisory Board (QAB)														
Work Package 4: Sustainability														
Task 4.1: Policy dialogues								M9	M11				D4.1	
Task 4.2: Policy Board			M10											
Task 4.3: Sustainability strategy: policy and technical recommendations and sustainability action plans									M12				D4.2	
Task 4.4: Methodologies to build a sustainable HWF planning capacity									M8					
Work Package 5: Improving HWF planning capacity in Portugal, Norway, Greece, Sweden, Spain, Italy														
Task 5.0: Baseline assessment and development of a sustainable framework for HWF intelligence												M14		
Task 5.1: Optimization of countries' data collection, sources, and use in HWF planning					M15	M16							D1.2; D5.1	
Task 5.2: Optimization of MSs' methods and tools to implement effective HWF planning						M17								
Task 5.3: Development and improvement of skills and abilities of the staff in charge of HWF planning								M18						
Task 5.4: Optimization of stakeholder involvement		M13												
Work Package 6: Improving HWF planning capacity in Croatia, Romania, Slovenia, Lithuania, Hungary, Poland														
Task 6.0: Baseline assessment and development of a sustainable framework for HWF intelligence												M20		
Task 6.1: Optimization of countries' data collection, sources, and use in HWF planning					M21	M22							D1.2; D6.1	
Task 6.2: Optimization of MSs' methods and tools to implement effective HWF planning						M23								
Task 6.3: Development and improvement of skills and abilities of the staff in charge of HWF planning								M24						
Task 6.4: Optimization of stakeholder involvement		M19												
Work Package 7: Improving HWF planning capacity in Belgium, Estonia, the Netherlands, Slovakia, Czechia, Malta, Germany														
Task 7.0: Baseline assessment and development of a sustainable framework for HWF intelligence												M26		
Task 7.1: Optimization of countries' data collection, sources, and use in HWF planning					M27	M28							D1.2; D7.1	
Task 7.2: Optimization of MSs' methods and tools to implement effective HWF planning						M29								
Task 7.3: Development and improvement of skills and abilities of the staff in charge of HWF planning								M30						
Task 7.4: Optimization of stakeholder involvement		M25												

D3.3 Final Evaluation Report



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