

# Evaluation of the implementation and scalability of the Suicide Observatory in Cork and Kerry Final report

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October 2025

# Acknowledgments

We would like to acknowledge the generous contributions of many people who shared their knowledge, expertise and time for this evaluation. This includes:

- i) interview and survey participants who shared their views and knowledge related to the Suicide Observatory in Cork and Kerry,
- ii) the project Advisory Group for their expert input and feedback on the evaluation design, data collection and interpretation of the findings, including:
  - Dr. Yolande Ferguson, Consultant Psychiatrist, Dublin South Central Mental Health Services
  - Dr. Eleanor Fitzgerald, Mayo North Coroner & President Coroners Society of Ireland
  - Dr. Cróna Gallagher, Coroner for the District of Dublin
  - Noel Hughes, Office Manager, Coroners service
  - Dr. Suzie Lyons, Senior Researcher National Health Information Systems, Health Research Board
  - Dr Greg Martin, Public Health Consultant, National Health Improvement, Health Service Executive
  - Charlie Meehan, Head of Mental Health Services, CHO2
  - Emer Mulligan, HSE Resource Officer for Suicide Prevention (ROSP) CHO 1
  - Dr. Alice Wainwright, Head of Research, Department of Justice.
- iii) people with lived experience of suicide who have contributed to the evaluation either as an advisor, or as study participants. The voice of lived experience is crucial in informing suicide and self-harm prevention and research; and
- iv) the project team at Health Service Executive, National Office for Suicide Prevention (HSE NOSP) for sponsoring and facilitating the evaluation.

We are grateful to the staff at The University of Melbourne, including Tracey Mayhew for the management support.

We also acknowledge the Traditional Owners of the unceded land on which we work, learn and live, the Wurundjeri people of the Kulin Nation, and we pay our respect to Elders past, present and emerging.

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# 1. Executive summary

# 1.1. Background

The Suicide Observatory in Cork and Kerry was established to address the urgent need for timely suicide mortality data in Ireland, as usual processes of data collection and classification can take two years or more. Founded in Cork in 2018 by the National Suicide Research Foundation (NSRF) and University College Cork's School of Public Health (UCC), the Cork Suicide Observatory was operational between January 1, 2019, and May 4, 2022. Its main aim was to generate near real-time data of suspected suicides to monitor emerging trends, inform suicide prevention efforts and support for people bereaved by suicide, and guide appropriate media reporting. The objectives align closely with national and international strategies, including Connecting for Life, National Strategy to Reduce Suicide (Department of Health, 2015), Sharing the Vision - A Mental Health Policy for Everyone (Department of Health, 2020), and the UN Sustainable Development Goals (United Nations, 2015).

The Suicide Observatory gathered detailed demographic and contextual information on suspected suicides, including circumstances of death, history of abuse, and mental health service use. The initiative expanded into County Kerry in 2021, where it remains active. Data collection processes varied slightly by county. In Cork, NSRF-UCC researchers manually accessed records through the Coroner's office, while in Kerry, the Resource Officer for Suicide Prevention (ROSP) collaborated with the Coroner via telephone, with information subsequently shared with the NSRF-UCC researchers.

When Health Research Board (HRB) funding ended in 2022, the Suicide Observatory in Cork operations ceased, though the Suicide Observatory in Kerry is still ongoing. Given the demonstrated value of the model, NSRF-UCC researchers proposed upscaling the Observatory nationally, leading the National Office for Suicide Prevention (NOSP) to commission an independent evaluation. This evaluation, awarded through a competitive tender, was designed to develop evidence-based recommendations for the Observatory's expansion, based on a mixed-methods evaluation involving key stakeholders and oversight from an Advisory Group.

# 1.2. Evaluation approach

#### 1.2.1. Evaluation framework

The evaluation of the Suicide Observatory in Cork and Kerry was guided by the CDC's Updated Guidelines for Evaluating Public Health Surveillance Systems (CDC, 2001), a framework widely applied in assessing the performance of surveillance systems internationally (Calba et al., 2015). These guidelines emphasize integration of health information systems, standardisation of data, electronic data exchange, and alignment of surveillance with emerging public health needs, such as during the COVID-19 pandemic. They also outline essential system attributes, though recommend tailoring the focus to those most relevant to the system under review.

Using this framework, the evaluation examined seven key attributes of the Suicide Observatory: sensitivity, positive predictive value, data quality, timeliness, simplicity, accessibility, and acceptability, alongside its overall usefulness. Table 1 presents brief definitions of these terms. Additionally, scalability was assessed through the Intervention Scalability Assessment Tool (Milat et al., 2019), which considered factors such as reach, fidelity, delivery setting and workforce, implementation capacity, infrastructure, and sustainability. Appendix 1 outlines the attributes and their definitions, associated with each objective.

Table 1. System attributes and evidence (based on CDC's guidelines) applied to the Suicide Observatory in Cork and Kerry

Seven system attributes	Definition	
Sensitivity	The ability of the surveillance system to detect confirmed suicides.	
Positive predictive value	The proportion of suspected/probable suicides are confirmed suicides under surveillance.	
Data quality	The completeness and validity of the data recorded in the surveillance system	
Timeliness	The speed between steps in the surveillance system such as the consideration of the time between the initial case capture and the availability of information for use for public health planning and intervention.	
Simplicity The structure and ease of operation of the surveillance system.		
Accessibility	The availability and ease of use of data and information within the surveillance system to support the understanding of suicide and its prevention.	
Acceptability	The willingness of persons and organizations to participate and/or use the surveillance system.	
The level of use	fulness	
The ability of the surveillance system to contribute to the prevention and management of suicide, including an improvement in stakeholders' understanding of the public health implications of suicide.		

Data collection relied on three equally important sources: an audit of the Suicide Observatory, semistructured interviews with stakeholders, and an online survey. Each source was analysed to determine how well the Observatory met its objectives and demonstrated the identified attributes, before findings were triangulated for synthesis (reported in Chapter 6). The audit began at the evaluation's outset, while interviews were carried out between February and April 2025 to inform the subsequent survey, which was conducted in July 2025.

# 1.2.2. Data analysis and synthesis

Each data source was analysed separately before being triangulated through an iterative process to produce an overall synthesis and understanding of the performance of the Suicide Observatory and its potential for wider implementation. Triangulation enabled validation of the data by cross-verifying findings from multiple sources and testing the consistency of results. The researchers manually triangulated and synthesised the findings, after which they used SparkAI, the University of Melbourne's large language model (<a href="https://www.unimelb.edu.au/ai/home/staff/gen-ai-tools">https://www.unimelb.edu.au/ai/home/staff/gen-ai-tools</a>), to support the editing of the synthesis. Finally, the synthesis was cross-checked against each data source to ensure accuracy and consistency.

#### 1.2.3. Governance and lived experience involvement

The research team worked closely with the Advisory Group throughout the evaluation to ensure the findings were both meaningful and useful. Regular meetings allowed the Advisory Group to monitor progress and support access to data and stakeholders. In addition, a lived experience consultant contributed expert advice on data collection and reporting.

# 1.2.4. Ethics approval

The University of Melbourne Human Research Ethics Committee approved the evaluation application in January 2025, with updates in March and July 2025 (Ethics ID 30739). The University College Cork (UCC) Social Research Ethics Committee granted ethics approval for the evaluation team to access deidentified data of the Cork Suicide Observatory in January 2025.

# 1.3. Summary of findings

# 1.3.1. Operation of the Suicide Observatory

The evaluation of the Suicide Observatory in Cork and Kerry showed that they were designed for near real-time suspected suicide surveillance, with data updated fortnightly through coronial sources. The Suicide Observatory in Cork had more comprehensive data, drawing on both Coroners and the Health Service Executive (HSE) Patient Mortality Register, while the Suicide Observatory in Kerry relied mainly on coronial data. Compared to national systems like the Central Statistics Office (CSO), the observatories provided more timely and practical data, valued by stakeholders for its immediacy and relevance.

The audit of the Suicide Observatory in Cork indicated that the data quality was generally high, with demographic and cause-of-death data over 98% complete and acceptable sensitivity and predictive values. Still, gaps were identified in areas such as substance use and domestic violence, where around half of the data was missing due to availability at the time of data collection. Participants worried about underreporting and inaccuracies, and recommended improvements through using multiple data sources, formal data sharing agreements, and more training of staff involved. Still, they also cautioned that expanding data requirements might reduce quality and increase workload for ROSPs. The collaborative processes underpinning the system, including strong links between coroners and ROSPs, were seen as vital for its success, though reliance on informal relationships was noted as a potential barrier to scaling up nationally.

Stakeholders widely recognised the value of the observatories in identifying at-risk groups, guiding interventions, informing resource allocation, and strengthening suicide prevention efforts, including during COVID-19. Strengths included its near real-time capacity, detailed geographic data, facilitating support for families and communities, and potential for expansion. Weaknesses related to resourcing, dependence on goodwill, lack of integrated police data, and delays in coronial confirmation. Looking ahead, participants saw threats in insecure funding, reliance on a single data source, and uncertainty about government support. They also noted significant opportunities to scale up the model, including national reporting, use of online dashboards, integration of additional data, and stronger stakeholder involvement, all of which could enhance and consolidate the Observatory's crucial role in suicide prevention.

# 1.3.2. Impacts of the Suicide Observatory

The Suicide Observatory may face several barriers to effective suicide surveillance, including General Data Protection Regulation (GDPR) and data-sharing restrictions, confidentiality concerns in small communities, and hesitance of families or police to view deaths as suspected suicides. Legal thresholds for confirming suicide, and variability across coroners' practices could further limit consistency and

access to data. Variability in coroners' capacity to participate, as well as differences in the ability of ROSPs to act on data, were also identified as challenges.

Despite these barriers, stakeholders highlighted strong demand for expansion, willingness among (some) coroners to collaborate, and the expertise already established through the Observatory. National data-sharing agreements, stronger links between coroners and health services, standardised terminology, and integration of multiple data sources were seen as important enablers for scaling up. Participants also recommended tools such as dashboards, and open-source software, to further improve access and streamline processes, while stakeholder meetings could foster engagement and collaboration.

The Observatory was considered highly acceptable and useful among stakeholders, including ROSPs, coroners, and frontline workers. Participants valued its ease of use, ethical safeguards, and contribution to building trust in data handling. It was reported to improve understanding of suicide trends, inform cautious media reporting, guide targeted preventive interventions and responses to families and communities. Many regarded the Observatory as a potential "game changer" for suicide prevention if expanded nationally, provided that adequate resources, staff support, and clear processes for GDPR and Gardai involvement were in place.

# 1.3.3. Scalability of the Suicide Observatory

The evaluation identified strong potential for national scalability of the Suicide Observatory, with its core process of collecting data from coroners proving both consistent and adaptable. Participants emphasised the importance of retaining the Observatory's central purpose while allowing flexibility to include locally relevant data, post-suicide research, and links to other data sources. They also suggested expanding the scope to include self-harm data, for example by linking the Observatory with the national self-harm registry, and providing regular updates and outputs. Most agreed that national rollout is feasible, provided it is supported by staff training, national coordination and leadership, and formal data-sharing agreements to maintain both quality and fidelity.

Embedding the system within suicide prevention policy frameworks and involving a wider range of stakeholders, including ROSPs, Gardai, and local communities, was seen as key to further strengthening acceptance. While some believed upscaling would not require significant additional resources, others highlighted the need for investments in staffing, IT infrastructure, and training to ensure timely responses and effective coordination. A phased approach, beginning with smaller regions, was suggested as a way to manage regional variation in acceptability and capacity.

Key challenges for national expansion were linked to delivery settings, workforce, infrastructure, and sustainability. Participants noted that processes would need to be standardised across regions, with sufficient staff capacity for data collection, analysis, and coordination, supported by a dedicated research team. IT infrastructure was called for along with calls for cloud-based data sharing and lessons from the National Self-Harm Registry. Sustainability was seen as dependent on moving beyond project-based funding toward a stable, long-term model backed by legislation, national leadership, and strong local engagement.

# 1.4. Recommendations

# 1.4.1. Implementation of the Suicide Observatory

#### 1.4.1.1. Improving data flow

- Broaden and standardise data sources across regions to improve comprehensiveness and enable more reliable comparisons.
- Standardise data collection procedures to reduce variability caused by regional differences in coronial practices and police involvement.
- Maintain strict data protection measures to safeguard sensitive information and protect the identities of deceased individuals and their families.
- Strengthen links between Suicide Observatory data and local suicide prevention efforts to increase practical impact.

# 1.4.1.2. Improving quality and sensitivity of the data

- Cross-check suspected suicide data with data on confirmed suicide from the Central Statistics
  Office or from the coroners, when available, to confirm the sensitivity and positive predictive value
  of the Suicide Observatory.
- If the sensitivity and positive predictive value of the Suicide Observatory is <90%, strategies are required to enhance these attributes of the Suicide Observatory (aiming for >90%).
- Address gaps in substance use and domestic violence data by improving access to this information during or after coronial investigations.
- Provide training for staff on data collection and quality control to minimize underreporting or inaccuracies.
- Carefully balance expanding the dataset with maintaining overall data quality and managing the workload of ROSPs to avoid overburdening capacity.

# 1.4.1.3. Improving system processes

- Maintain and strengthen the data verification system.
- Formalise communication and data collection processes to ensure the system can operate effectively beyond individual relationships and informal channels.
- Explore strategies to ensure timely data collection in larger regions, such as Dublin, where scaling may be more challenging.
- Expand data collection to include sociodemographic information (e.g., ethnicity, Irish Traveller status) to provide a more comprehensive understanding of suicides.

#### 1.4.1.4. Improving outcomes and outputs

• Expand data outputs to better support suicide prevention, resource allocation, and bereavement services, and timely information for decision-making.

- Develop national-level reporting tools, such as an online dashboard, to enhance accessibility and usability of data.
- Ensure data availability for research on long-term impacts of suicide, to guide targeted interventions and inform stakeholders about emerging trends.

#### 1.4.1.5. Addressing weaknesses

- Expand the Suicide Observatory to other regions to enable regional comparisons and national trend analysis.
- Secure sustainable funding and resources to reduce reliance on goodwill and motivated individuals.
- Integrate additional data sources, such as police records, to improve comprehensiveness of data.
- Establish agreements for accessing data from coroners and Gardai, rather than relying on personal relationships.
- Work with coroners to identify issues causing delays.

# 1.4.1.6. Addressing obstacles and obtaining opportunities

- Secure stable, long-term funding to reduce operational threats and ensure continuity.
- Establish clear procedures to balance data security with timely access and avoid duplication with other national databases.
- Expand the scope and geographical area of the Suicide Observatory to enhance community awareness and guide targeted interventions.
- Involve local stakeholders more closely in the system to improve engagement and relevance.
- Collect additional sociodemographic and self-harm data (e.g., National Self-Harm Registry) to provide a more comprehensive understanding.
- Implement online dashboards and regular reports to improve timeliness, accessibility, and usability of data.

# 1.4.2. Impacts of the Suicide Observatory

# 1.4.2.1. Addressing barriers

- Develop clear data-sharing agreements, including Coroners and Gardai, to improve access and collaboration.
- Address GDPR and confidentiality concerns, particularly in small communities, while maintaining secure handling of sensitive data.
- Standardise practices across coroners to reduce variability and ensure consistent data collection.
- Implement procedures that enable timely data sharing while mitigating coroners' concerns about potential perceptions of pre-judging investigation findings.
- Enhance ROSP capacity and resources to act effectively on surveillance data.

# 1.4.2.2. Enabling facilitators

- Foster ongoing stakeholder engagement through meetings and collaboration to maintain support.
- Standardise terminology and integrate multiple data sources to improve consistency and comprehensiveness.
- Utilise open-source software to support accessibility and scalability.
- Strengthen national-level connections between coroners, health services, and other key partners to support effective implementation and upscaling.

#### 1.4.2.3. Improving accessibility

- Develop a dashboard or similar platform to provide broader, direct access to Suicide Observatory data for stakeholders.
- Reduce reliance on personal or local relationships for data sharing to ensure more systematic access.

# 1.4.2.4. Increasing acceptability

- Clarify the roles of the Gardai and a data sharing agreement between Gardai and the Suicide Observatory.
- Ensure GDPR compliance and transparent data-handling procedures to maintain stakeholder confidence.

#### 1.4.2.5. Enhancing usefulness

- Provide adequate resources and support for staff (e.g., ROSPs) to maximize the system's impact.
- Continue leveraging Suicide Observatory data to inform local planning, interventions, crisis response, postvention outreach and follow-up, and resource allocation, particularly in preparation of national scale-up.

# 1.4.3. Scalability of the Suicide Observatory and feasibility of its wider implementation

# 1.4.3.1. Improving fidelity and adaption

- Preserve the core purpose and methodology of the Suicide Observatory while allowing flexibility for local adaptation.
- Incorporate locally relevant data, qualitative insights, post-suicide research, and additional data sources.
- Consider including data on self-harm and provide regular (e.g., annual) data updates.
- Ensure national scalability by implementing staff training, adequate support structures, coordination, and formal data-sharing agreements.

# 1.4.3.2. Increasing reach and acceptability

- Engage a broader range of stakeholders, including ROSPs, the Gardai, first responders, health care providers, and local communities, to strengthen reach and acceptability.
- Embed the Suicide Observatory within a national suicide prevention policy framework to enhance its alignment and credibility.
- Consider a phased approach to national upscaling, starting with smaller regions before wider rollout.
- Allocate adequate resources for staff, IT systems, and training to support data collection, sharing, coordination, and research.
- Integrate Suicide Observatory responsibilities into existing roles where possible to optimize efficiency.
- Ensure sufficient capacity to respond promptly to suicide-related incidents in the community.

#### 1.4.3.3. Expanding delivery setting and workforce

- Integrate the system into the daily work of ROSPs and coroners, accounting for regional workforce variability.
- Establish a national team to support upscaling, particularly if data from the National Self-Harm Registry will be included.
- Develop a dedicated research workforce to analyse and interpret data effectively.
- Standardise processes across regions to improve consistency and scalability.
- Ensure sufficient staffing, IT infrastructure, and training for data collection, analysis, administration, and coordination.
- Allocate resources for linking the Observatory with other data sources, such as CSO and National Self-Harm Registry.

# 1.4.3.4. Securing implementation infrastructure

- Upgrade IT systems to support a national rollout, including cloud-based data sharing.
- Build robust implementation infrastructure to enable accurate and timely data collection.
- Consider structural factors, such as health region restructuring, in planning national implementation.
- Learn from existing models, such as the National Self-Harm Registry, to inform system design and cost estimates.

# 1.4.3.5. Ensuring sustainability

• Establish stable, long-term funding supported by national leadership, formal resources, and legislation.

- Address practical challenges in data collection, such as travel requirements.
- Ensure regular technological updates and ongoing staff training to maintain system functionality.
- Promote strong local engagement to support continued use and impact of the Observatory data.
- Leverage learnings from existing systems and the ongoing coronial system review to enhance effectiveness and cost-efficiency.

#### 1.5. Conclusions

The evaluation of the Suicide Observatory in Cork and Kerry found strong support for its upscaling and wider implementation. The evaluation indicated that its processes for collecting near real-time data of suspected suicides were generally effective, valued by stakeholders, and aligned with national suicide prevention strategies. While data quality was strong overall, gaps remained in areas such as substance use and domestic violence. The Suicide Observatory supported timely interventions, identification of at-risk groups, and resource allocation, including during COVID-19, though participants highlighted the need for more frequent reporting, formal data-sharing agreements, and better integration of multiple sources. Strengths included local collaboration, stakeholder buy-in, and near real-time insights. Weaknesses included reliance on personal relationships, under-resourcing, and lack of standardisation of data sharing.

Looking forward, stakeholders saw significant opportunities for national rollout, provided adequate infrastructure, training, and stable funding are secured. They stressed the importance of maintaining the Observatory's core functions while allowing flexibility for local adaptation and integration with other data sources including regarding self-harm. While demand and acceptability were high, challenges included GDPR constraints, confidentiality concerns, and coroner and workforce variations. Participants viewed the Suicide Observatory as highly useful, acceptable, and a potential "game changer" for suicide prevention if scaled nationally. Ensuring sustainability will require moving from project-based funding to a long-term model supported by national leadership, legislation, IT infrastructure, and ongoing engagement with local stakeholders.

# 2. Evaluation of the Suicide Observatory in Cork and Kerry

# 2.1. Scope and purpose of the evaluation

A public health approach to suicide prevention requires timely data of suicide mortality (WHO, 2021). Continuous monitoring and analysis of suicide data is essential to inform suicide prevention efforts. However, the process of data collection, investigation, and classification of external causes of death such as suicide in Ireland, can take two years or more (Benson et al., 2022). To meet the need for timely data, the Suicide Observatory was established in Cork in 2018 by the National Suicide Research Foundation (NSRF), and the School of Public Health, University College Cork (UCC), and was operational between January 1, 2019, and May 4, 2022.

The Observatory collected near real-time data of suspected suicides that occurred in Cork County, including demographic data regarding the deceased, circumstances of the death, history of abuse, and mental health service use (Benson et al., 2022). It aimed to reduce suicide in Cork by identifying emerging clusters, informing suicide prevention efforts in the community, providing a timely response to people affected by suicide, and informing adequate media reporting on suicide. The Suicide Observatory was expanded to the county of Kerry on April 1, 2021, and this data collection is still operational.

The aims of the Suicide Observatory in Cork and Kerry are in line with national and international policies referring to the need for real-time suicide data, including Ireland's National Strategy to Reduce Suicide 2015-2024, Connecting for Life, objective 7.2: "Improve access to timely and high-quality data on suicide" (Department of Health, 2015), suicide prevention priorities included in Sharing the Vision - A Mental Health Policy for Everyone (Department of Health, 2020), and the UN Sustainable Development Goals, objective 3.4: "By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and wellbeing" (United Nations, 2015).

A researcher at NSRF-UCC (Dr Benson) manually collected the data fortnightly by visiting the Coroner's office in Cork. In Kerry, the Resource Officer for Suicide Prevention (ROSP) collects the data though a fortnightly telephone call with the Coroner, and then shares the data with the NSRF-UCC researchers. The cessation of the Health Research Board (HRB) funding in May 2022 discontinued the Suicide Observatory in Cork. Nonetheless, following the successful establishment of the Suicide Observatory in Kerry, April 2021, the researchers submitted a proposal to the National Office for Suicide Prevention (NOSP) to further upscale the Suicide Observatory. NOSP requested an independent evaluation to inform further steps in upscaling and wider implementation of the Suicide Observatory system.

Following a 'Request for Tender' our proposal was selected to formulate evidence-based recommendations regarding upscaling the Suicide Observatory, based on a mixed-methods evaluation involving key stakeholders, and guided by a project Advisory Group.

# 2.2. Structure of the report

This is the only report of this evaluation, presenting all the research activity conducted for the evaluation. Chapter 2 provides background information about the evaluation. Chapters 3-5 outline the design of each part of the evaluation (audit, semi-structured interviews, online survey) and report the methods and results of each data source. Chapter 6 provides a synthesis of the findings regarding the objectives of the evaluation, and Chapter 7 formulates the recommendations regarding upscaling and

wider implementation of the Suicide Observatory. Chapter 8 presents strengths and limitations of the evaluation, followed by the conclusions in Chapter 9.

# 2.3. Evaluation framework

The evaluation drew on the Centers for Disease Control and Prevention (CDC)'s Updated Guidelines for Evaluating Public Health Surveillance Systems (CDC, 2001). This evaluation framework has been widely used to assess the performance and efficiency of surveillance systems (Calba et al., 2015) and has been applied in our previous evaluations of the Australian National Suicide and Self-Harm Monitoring System (Flego et al., 2022), the NSW Suicide Monitoring System (Ftanou et al., 2023), and the Victorian Suicide Register (Sutherland et al., 2018). The CDC guidelines address the following needs: (i) integrating surveillance and health information systems, (ii) establishing data standards, (iii) enabling the electronic exchange of health data, and iv) aligning public health surveillance objectives to better support responses to emerging health threats (e.g., the COVID-19 pandemic). The CDC's guidelines describe key attributes of a well-performing public health surveillance system, while suggesting the importance of focusing on those attributes most relevant to the objectives and type of surveillance system being evaluated.

Our evaluation of the Suicide Observatory in Cork and Kerry assesses the following seven CDC attributes: (i) sensitivity, (ii) positive predictive value, (iii) data quality, (iv) timeliness, (v) simplicity, (vi) accessibility, (vii) acceptability; and along with the overall usefulness of the Suicide Observatory (see Table 1 for brief definitions of these terms). The assessment of the scalability was based on the Intervention Scalability Assessment Tool (Milat et al., 2019), including the domains reach and acceptability, fidelity and adaptation, delivery setting and workforce, implementation and infrastructure, and sustainability. Appendix 1 outlines the attributes and their definitions, associated with each objective, and the methods (audit, semi-structured interviews, survey) used for the attributes and objectives.

Table 1. System attributes and evidence (based on CDC's guidelines) applied to the Suicide Observatory in Cork and Kerry

Seven system	Definition		
attributes			
Sensitivity The ability of the surveillance system to detect confirmed suicides.			
Positive predictive value	The proportion of suspected/probable suicides are confirmed suicides under surveillance.		
Data quality	The completeness and validity of the data recorded in the surveillance system		
Timeliness	The speed between steps in the surveillance system such as the consideration of the time between the initial case capture and the availability of information for use for public health planning and intervention.		
Simplicity The structure and ease of operation of the surveillance system.			
Accessibility	The availability and ease of use of data and information within the surveillance system to support the understanding of suicide and its prevention.		
Acceptability	The willingness of persons and organizations to participate and/or use the surveillance system.		
The level of use	The level of usefulness		
The ability of the surveillance system to contribute to the prevention and management of suicide, including an improvement in stakeholders' understanding of the public health implications of suicide.			

# 2.4. Data sources and approach

The evaluation collected data from three sources:

- Audit of the Suicide Observatory
- Semi-structured interviews
- Online survey

The data sources were considered to be of equal importance, and each data source was analysed to assess the extent to which it provided evidence of the achievements and stated attributes and usefulness of the Suicide Observatory. As a next step, findings were triangulated and synthetised to answer the objectives of the evaluation (see Chapter 6).

The methods we used to collect and analyse data for each source are described in Chapters 3-5, dedicated to reporting on each data source. The initial audit occurred at the start of the evaluation and was updated throughout the duration of the evaluation as new data became available. The interviews with stakeholders were conducted between February and April 2025, allowing the findings to inform the development of the survey, conducted in July 2025.

# 2.5. Data analysis and synthesis

We analysed each data source separately then triangulated the results through an iterative process to provide an overall synthesis and understanding of the findings to answer the evaluation objectives. Triangulation facilitates validation of data through cross-verification from two or more sources and tests the consistency of findings obtained through different methods. We manually triangulated and synthesised the findings, after which we used SparkAI, the University of Melbourne's large language model (<a href="https://www.unimelb.edu.au/ai/home/staff/gen-ai-tools">https://www.unimelb.edu.au/ai/home/staff/gen-ai-tools</a>), to support the editing of the synthesis. Finally, the synthesis was cross-checked against each data source to ensure accuracy and consistency.

# 2.6. Governance and lived experience involvement

The research team worked closely with the Advisory Group at all stages of the evaluation to ensure that the findings would be meaningful and useful. By holding regular meetings, the Advisory Group oversaw the evaluation's progress and facilitated access to data and stakeholders. In addition, a lived experience consultant was involved to provide expert advice on data collection and reporting.

# 2.7. Working remotely

The evaluation was conducted remotely. The research team drew on their experience from previous evaluation projects, including those carried out during COVID-19 lockdowns, and followed protocols for remote working and secure access to (international) data. The researchers also had experience conducting stakeholder interviews and surveys online. Additionally, the lead researcher met key stakeholders in-person in Ireland in November 2024, which further strengthened the collaboration.

# 2.8. Ethics approval

This evaluation was conducted in accordance with the National Statement on Ethical Conduct in Human Research (2023) (National Health and Medical Research Council, 2023). Given that suicide-related research may involve potentially vulnerable participants, or the research may trigger negative emotions in (interview or survey) participants, including professionals, we applied appropriate strategies to mitigate potential risks while considering working remotely. The University of Melbourne Human Research Ethics Committee approved the ethics application for this evaluation in January 2025, with updates in March and July 2025 (Ethics ID 30739).

In addition, the University College Cork (UCC) Social Research Ethics Committee has provided expedited ethics approval for the evaluation team to access deidentified data of the Cork Suicide Observatory in January 2025.

# 3. Data audit

#### 3.1. Methods

The overall evaluation of the Suicide Observatory assessed the following seven attributes: (i) sensitivity, (ii) positive predictive value, (iii) data quality, (iv) timeliness, (v) simplicity, (vi) accessibility, (vii) acceptability; and along with the overall usefulness of the Suicide Observatory (see Table 1, above, for brief definitions of these terms). The audit addressed each of these attributes, except the attribute simplicity.

# 3.1.1. Data collection and analysis

We obtained deidentified individual-level suspected suicide data from the Cork Suicide Observatory and the same level of probable suicide data from the Irish Probable Suicide Death Study (IPSDS) to assess the sensitivity and positive predictive value of the Cork Suicide Observatory. Analysis was completed using StataSE 15. Given the Cork Suicide Observatory contains data of suspected suicide occurring from January 1, 2019, to May 4, 2022, and the IPSDS contains suicide data from 2015 to 2020, we included only suicides that occurred in 2019 and 2020 in our analysis. Only cases that occurred within Cork County were matched using date of birth and sex.

The sensitivity of the Cork Suicide Observatory refers to its ability to detect confirmed suicide cases, with high sensitivity indicating fewer suspected suicides are missed. We assessed the sensitivity of Cork Suicide Observatory using confirmed suicides (coroner-determined) identified by the IPSDS, as deidentified individual-level suicide data from the Central Statistics Office (CSO) were not available. Positive predictive value refers to the proportion of suspected suicides that are subsequently confirmed as suicides. We also obtained aggregate-level suicide data from the CSO to estimate the number of suicides that occurred in Cork County in 2019 and 2020.

We could not estimate the sensitivity and positive predictive value of the Kerry Suicide Observatory because its data coverage period (April 2021 to present) is different from that of the IPSDS (2015–2020).

In terms of data quality of the Cork Suicide Observatory, data completeness was assessed by estimating the proportion of missing data for each variable and validity was assessed using sensitivity and positive predictive value.

# 3.2. Results

# 3.2.1. System features of the Suicide Observatory and other suicide data sources in Ireland

Table 2 provides descriptions and features of the Cork Suicide Observatory and other suicide surveillance systems in Ireland, including the Kerry Suicide Observatory, the Irish Probable Suicide Death Study (IPSDS), and the Central Statistics Office (CSO). The Cork Suicide Observatory was established in 2019 to facilitate real-time data collection with the aim of reducing suicide in Cork. It includes suspected suicides that occurred in Cork County, with data collected up to May 4, 2022 (approximately 3.5 years of data).

The data flow of Cork Suicide Observatory is highly similar to that of the Kerry Suicide Observatory across all evaluated domains, including system type, data collection methods, data timeliness, data

sources, classification and operational criteria, system access, data security and ethical considerations, collected data items, and stakeholder dissemination. In terms of data timeliness, in addition to fortnightly updates on deaths, the Cork Suicide Observatory incorporates coronial verification of media reports on suicide contagion and clustering. Additionally, the Cork Suicide Observatory collects suicide data from both the Coroners of Cork and HSE Patient Mortality Register, whereas the Kerry Suicide Observatory collects data only from the Coroners of Kerry.

Given that the IPSDS and CSO were not developed to collect real-time suicide data, their data flows are different from that of the Cork Suicide Observatory. The IPSDS collected suicide data (closed coronial files) in Ireland from 2015 to 2020. It includes a more comprehensive list of data items, is updated annually, and covers both probable ("on the balance of probabilities" determined by researchers) and confirmed suicides ("beyond reasonable doubt" determined by the coroners). The CSO, established in 1864, is Ireland's official vital statistics system and includes all registered deaths. Death data is transferred to the CSO on a weekly basis, and suicides are classified according to ICD-10 criteria. The CSO maintains extremely high data security standards, and suicide statistics are released annually.

The Cork Suicide Observatory was not in operation at the time of this evaluation. The initial pilot study of the Cork Suicide Observatory was scheduled over two years, and extended until May 2022. When the Health Research Board (HRB) funding ceased in May 2022, the position of a key researcher could not be continued, which led to the discontinuation of the Suicide Observatory in Cork. A proposal was made to the National Office for Suicide Prevention (NOSP) to upscale the Suicide Observatory in Cork, following the successful establishment of the Suicide Observatory in County Kerry in April 2021. However, the NOSP advised to conduct an independent evaluation before making further steps in upscaling and wider implementation of the Suicide Observatory system. Appendix 2 includes the briefing report of the Cork Suicide Observatory pilot study. This report contains the background details of the Suicide Observatory, descriptions of suspected suicide deaths (gender and age, marital status, suicide methods, coronial verdict), benefits of the Observatory and proposed next steps. Additionally, according to Professor Ella Arensman, 25.7% of the people who died by suspected suicide were in the care of the HSE at the time of death (personal communication, August 20, 2025).

Table 2. System descriptions and data features of Cork Suicide Observatory and other key suicide data sources in Ireland.

	Cork Suicide Observatory	Kerry Suicide Observatory	Irish Probable Suicide Death Study (IPSDS)	Central Statistics Office (CSO)
System descriptions				
Year of inception	1 <sup>st</sup> January 2019	2021 (1 <sup>st</sup> April)	2017	1864 Note: The CSO Vital Statistics system includes General Register Office death registration data, dating back to 1864. The current legal basis of operations is the 1952 Vital Statistics Act.
System purpose	To facilitate real time data and reduce suicide in Cork	The aim is to reduce suicide in Kerry	Original: Suicide surveillance system/data source. It was then renamed a 'study', and following a hiatus HRB took over management of the system	Official Vital Statistics System for tabulating and classification of causes of deaths
Resources used to operate the system	Advisory panel: Coroners' representatives, Resource Officers for Suicide Prevention (ROSPs), representatives of mental health and primary care services, An Garda Siochana in Cork County, and a representative from the Central Statistics Office and Centre for Geocomputation, Maynooth University.	Resource Officers for Suicide Prevention (ROSP)	HRB nurse researchers collected the data. HSE NOSP evaluation manager and database manager cleaned, maintained and analysed the dataset.  An independently Chaired (Prof. Steve Platt) Technical Advisory Group (TAG) met quarterly for the full duration of study to support HSE NOSP. Membership included HRB, Coroner, Consultant Psychiatrist, suicide researcher.	General Register Office Registers + Central Statistics Office Vital Statistics Staff

Outcome measured	Suspected suicides	Suspected suicides	National suicide and probable suicides (i.e. Coronerdetermined suicides and research-determined suicides)	Statistics on causes of death
Data coverage				
Year of data	1 <sup>st</sup> Jan 2019 - 4 <sup>th</sup> May 2022	April 1st 2021 – Present	2015-2020	Extensive
Location	County Cork, Ireland	County Kerry, Ireland	National - NOSP	Confidential
Data coverage	Regional	Regional	National	National
Population coverage	581,156	156,458	5 million	National
Data flow				
Type of system	Electronic	Electronic	Electronic	Paper + Electronic
Method of data collection	Telephone and onsite manual input to Excel spreadsheet	Telephone and manual input to Excel spreadsheet	Data collected using the methodology and logistics of the long-established National Drug Related Death Index (NDRDI). Data is collected by nurse researchers through census survey of closed coronial files for the year in question.	Register based system for GRO combined with electronic data transfer + analysis by CSO + statistical inquiry paper form 104 for some inquiries.
Case submission interval/data timeliness	Fortnightly updates of deaths that have occurred within this timeframe. In addition, the Coroners facilitated verification of media reports on suicide contagion/clustering as required, between fortnightly updates.	Fortnightly updates of deaths that have occurred within this timeframe	Annual	Data transferred weekly to CSO
Data sources	The Coroners of Cork and HSE Patient Mortality Register	The Coroners of Kerry	Closed coroners' files and the content therein (i.e. Death report to coroner, autopsy and toxicology reports, inquest files,	General Register Office

			record of verdict and coroner's certificate).  NDRDI collection system	
Terminology, classification, definitions, and operational criteria used to select cases recorded in the system	Data related to instances of "suspected suicide", classified by the coroner based on evidence from various sources, including the police, witnesses, and family accounts. Cases are reviewed once the inquest has concluded.	Data related to instances of "suspected suicide", classified by the coroner based on evidence from various sources, including An Garda Síochána, witnesses, and family accounts.	Probable suicide: includes coroner-determined suicide and research-determined suicides based on Rosenberg criteria (i.e.  Deaths were:  • with evidence that at the time the deceased intended to take own life e.g., deaths due to hanging - unless evidence to suggest accidently, deaths where there is a contemporaneous suicide communication, or other evidence of intent such as expression of intent to take own life  • where multiple risk factors for suicide are present (such as previous suicide attempt, stressful life events, suicide bereavement)  Definition of probable suicide used in the study are deaths that are more likely than not, based on the weight of evidence, to have been a suicide.	Suicides classified according to criteria of International Classification of Deaths ICD-10 Underlying Cause Criteria.

System access	PhD researcher, Head of SoPH- Chief Scientist, Head of Research, HSE ROSP for the Cork region.	HSE ROSP for the Kerry region.	NOSP Researchers – upon request and approval.	Microdata only for authorised researchers under the CSO's Researcher Microdata File (RMF) system.
Data security and ethical considerations	A double-encrypted laptop in Head of SoPH-NSRF offices stores data. Data sharing agreements with both data sources. The Clinical Research Ethics Committee for the Cork Teaching Hospitals grants ethical approval. System development and operation is EU GDPR compliant. Legal approval granted by the legal department for the HSE.	A double-encrypted laptop in HSE ROSP offices stores data. Data sharing agreements with both data sources. The Clinical Research Ethics Committee for the Cork Teaching Hospitals grants ethical approval. System development and operation is EU GDPR compliant. Legal approval granted by the legal department for the HSE.	Double-encrypted laptops of NOSP and NSRF (NSRF laptop of database manager). Ethical approval for extension of the coronial data collection through the NDRDI methodology was obtained from the Ethics Committee of the Irish College of General Practitioners (ICGP) in 2016.	Extremely high levels of data protection, ethics and IT security. Details are confidential.
Collected data items	1.Name/names (encrypted) 2.Age 3.Gender 4.Marital status 5.Address/addresses (including educational institution) 6.Map-co-ordinates of address(es) 7.Occupation 8.Date of death 9. Location of death 10.Cause of death 11. Manner of death 12.Method(s) used 13.Drug/alcohol abuse 14.Domestic abuse 15.In the care of the HSE Mental Health Services	1.Date (data collected) 2.Jurisdiction 3.Name/names 4.Address/addresses (including educational institution) 5.Map-co-ordinates of address(es) 6. Gender 7.Marital status 8.Occupation 10. Date of Birth 11.Age 12.Date of death 13.Location of death 14.Method(s) used 15.Cause of death 16.Manner of death 17.Sebstance abuse 18.Domestic abuse	Anonymised cases with pseudolDs covering:  1.Sociodemogrphics such as sex, age, employment status, occupation, living circumstances, marital status,)  2. Date of death, date of birth.  3. Coronial verdicts, method of death.  4. Clinical information such as history of mental health conditions, prior self-harm, suicide note left, contact with medical services prior to death (dates of last recorded contact), risk factors recorded as contributing to the death (current mental health symptoms, financial concerns,	Age, sex, cause of death, geographical data are available as statistical outputs.

	16.Inpatient/outpatient service user – narrative 17.Covid-19 related factors- narrative  14–17 items were added to the Observatory after Covid-19.	19.In the care of the HSE 20. Inpatient/outpatient of HSE mental health service user in 12 months prior to death 21.Directly impacted by covid-19 22.Notes	victim of bullying, any type of abuse history, bereavement, etc), drug and/or alcohol misuse, toxicology information on substances consumed prior to death), inpatient to mental health services, in prescription of mental health medication, in prescription of medications related to physical health.	
System data analysis	De-identified data transferred to SPSS for statistical analysis. SaTScan analysis conducted on geographical data to analyse the presence of clusters.	Data analysis conducted for preparing short summary to the Kerry SO steering group twice per year (April and January).	Anonymised and de-identified data transferred from Access (from the NDRDI original data collectors) to SPSS (to NOSP) for cleaning, merging and analysis.	Numerous systems used including IRIS for death classification in some cases – CSO also deploys a team of expert causes death classifiers.
Dissemination to stakeholders	Information is shared with the HSE ROSP to inform bereavement support and community prevention activities. Aggregated information is periodically shared with key stakeholders involved in suicide prevention plans in the region on a need-to-know basis.  During the pilot study, the Coroners had requested not to disseminate the Suicide Observatory data widely as this involves pre-inquest data.	Twice a year ROSP shares a summary of information collected, displayed in graph form, to all Kerry SSHO steering group members. This information compares the information gathered over the time the Kerry SSHO has been in operation.	Multiple internal outputs with suicide rates by region, e.g. CHO level, suicides in public places, among defence forces, emerging priority groups.  Scientific papers (in process, submitted or pre-prints) on farmer suicides, suicides among women, suicides among the IPSDS cohort with mental health multimorbidity.  Internal NOSP presentations to DIAG/TAG members, presentations to the Irish Coroner society, Department of Health, Department of Justice.	Quarterly vital statistics reports on date of registered deaths, combined with annual reports on date of occurrence. Both series include cause of death data. CSO also publishes a Suicide Statistics release on an annual basis

# 3.2.2. Performance of Cork Suicide Observatory

# 3.2.2.1. Sensitivity

In total, the Cork Suicide Observatory identified 95 suspected suicides in 2019 and 2020, while the IPSDS recorded 86 confirmed suicides determined by coroners. As shown in Table 3, the Cork Suicide Observatory correctly identified 83.72% (95% CI=74.20%–90.80%) of the IPSDS-confirmed cases. It is important to note that we have based our sensitivity estimate for the Cork Suicide Observatory on IPSDS-confirmed suicides, as suicide data from the Central Statistics Office was not available at the individual level at the time of data collection. Consequently, this estimate may not fully reflect the true sensitivity of the Cork Suicide Observatory.

However, the Central Statistics Office provided aggregate-level data, which included 72 suicides that occurred in Cork County between 2019 and 2020. This number was fewer than that recorded by the Cork Suicide Observatory (n=95) and by the IPSDS (n=86), but equal to the number identified in both Cork Suicide Observatory and IPSDS (n=72; see Table 3). Since we did not have individual-level data from the Central Statistics Office, we were unable to determine whether the 72 suicide cases recorded by the Central Statistics Office corresponded to the same individuals identified in both Cork Suicide Observatory and IPSDS.

Table 3. Sensitivity and positive predictive value of Cork Suicide Observatory

	IPSDS (Data on confirmed/corone	r-determined suicide)
Cork Suicide Observatory (Test)	Present	Absent
Positive	72	23
		(suspected suicides detected in the Observatory but not in the IPSDS [coroner-determined
		suicides])
Negative	14	0
	(coroner-determined suicides detected in the IPSDS but not in the Observatory)	

Note: Two confirmed suicides in IPSDS were removed from the analysis due to missing information on incidence electoral division. Suicide data were based on where the death occurred, in this case, within Cork County.

# 3.2.2.2. Positive predictive value

Table 3 shows that 72 suicides detected by the Cork Suicide Observatory were confirmed suicides based on IPSDS data. The Positive Predictive Value (PPV) of the Observatory was 75.79% (95% CI=74.04%–77.46%). However, as mentioned earlier, this value may not represent the true PPV of the Observatory, since it was based on IPSDS-confirmed suicides rather than official suicide statistics from the Central Statistics Office.

#### 3.2.2.3. Data quality

Data quality refers to the completeness and validity of the data recorded in the Cork Suicide Observatory. For both the Cork and Kerry Suicide Observatories, all suspected suicide deaths are reported to the local coroner in each jurisdiction, and all coroners' records in Cork and Kerry counties are reviewed for cases that meet the criteria for a suspected suicide. The HSE Patient Mortality

Register, which records deaths among health service users, is also used to cross-check cases of suspected suicide in Cork Suicide Observatory.

The core dataset of minimum variables (age at death, date of death, date of birth, sex, cause of death, suicide method, marital status, occupation, death location, data source) about each death was largely complete, with fewer than 2% of cases missing information. However, data relating to the history of abuse (substance and domestic) may not be readily available at the time of data collection for all cases. As a result, missing data for these fields were higher (approximately 50%). This information is expected to be completed when data become available either during or post coronial investigation. All data recipients were advised of this limitation. The sensitivity and positive predictive value of the Cork Suicide Observatory also suggest that the Observatory maintains a highly acceptable level of data quality.

#### 3.2.2.4. Timeliness

System timeliness is measured as the speed between steps in the system, such as the time between the initial case capture and the availability of information for public health planning and intervention. The Cork Suicide Observatory applies a fortnightly case submission interval, based on the capacity of the data custodians to facilitate timely data collection. In exceptional circumstances whereby notification of an unconfirmed media or community report of a potential cluster or contagion occurs, the coroner's office is immediately contacted to verify whether the unsubstantiated report is valid. Aggregated data are reported periodically to relevant stakeholders, in accordance with the Standard Operating Procedure. The Kerry Suicide Observatory also updates their data on a fortnightly basis.

#### 3.2.2.5. Accessibility

Based on Benson et al. (2022), data from the Cork Suicide Observatory is available to the Health Services Executive (HSE) Resource Officers for Suicide Prevention to inform their practice and ensure timely support in bereaved communities. Access to real-time suicide mortality data meets an essential criterion of the Terms of Reference of the Resource Officers for Suicide Prevention. Data are also available upon request to government bodies for the purpose of informing the development of prevention strategies and policies. A data visualization tool is currently in development to enhance data analysis and enable efficient dissemination of de-identified data through an encrypted interactive dashboard, accessible only to key stakeholders.

For the Kerry Suicide Observatory, data are similarly available to the HSE Resource Officers for Suicide Prevention to guide practice and ensure timely support in bereaved communities (Benson et al., 2022).

# 3.2.2.6. Acceptability

For the Cork Suicide Observatory, communication between the lead researcher and the data custodians has been effective. Capacity issues within coroners' offices contributed to some delays in data collection during the pilot phase. These issues have since been addressed by shifting the approach from telephone communication to onsite data collection in certain instances, in order to meet the needs of data custodians (Benson et al., 2022). According to Benson et al. (2022), findings from the observatory's analyses have been effectively used to support the implementation of additional community supports in vulnerable areas.

#### 3.2.2.7. Usefulness

Data from the Cork Suicide Observatory are used for the real-time detection of suspected suicide cases. These data are shared with the Resource Officers for Suicide Prevention to facilitate early response to suicide clusters, including providing support to schools and communities. These data also inform bereavement support and community prevention activities. Aggregated information is periodically shared with key stakeholders involved in suicide prevention plans in the region on a need-to-know basis (Benson et al., 2022).

Real-time data on suspected suicide has been used to inform multiple briefings, as requested by DoH and the NOSP Prevention on deaths by suspected suicide. The data reports of the Suicide Observatory represent the only source of real-time suicide related data in Ireland currently, for example: <a href="SSHO">SSHO</a> briefing 19-04-2021-Final-1-1.pdf

Real-time data on suspected suicide has facilitated a timely response and support for those affected by the HSE Resource Officer for Suicide Prevention (ROSPs), and it has facilitated the activation of local plans to respond to emerging suicide contagion and clusters. For example, the Suicide Observatory data guided the implementation of a community response plan to suicide via providing real-time data on suspected suicide cases and verification of features of the person involved, method(s) and location. Members of the Suicide Observatory team contributed to meetings of the community response plan on a regular basis, approximately every month.

Additionally, real-time data on suspected suicide in relation to locations where people frequently take their lives, has facilitated the implementation of suicide prevention measures aimed at restricting access to means. For example, in the Cork region, 47 Samaritans' signs were put up at locations near waterways where people frequently take their lives. There are first indications of reduced numbers of suicide at multiple locations since the implementation of these signs, compared to baseline figures.

Real-time data on suspected suicide has also been used in multiple instances to validate unverified media reports of contagion. This validation feature has also been effective in fulfilling a request from the media for verification of information, hence preventing the spread of misinformation relating to perceived contagion/clustering. For example: Fake reports of farmer suicides show problem of social media 'news' - Premium

# 4. Semi-structured interviews

#### 4.1. Methods

# 4.1.1. Design and development

To evaluate the implementation and scalability of the Suicide Observatory in Cork and Kerry, we conducted semi-structured interviews between February and April 2025. An interview guide was developed (Kallio et al., 2016), to ensure consistent exploration of key evaluation domains while allowing participants to reflect freely on their experiences.

The guides were tailored for two stakeholder groups: internal contributors (e.g., those involved in design and implementation) and external users (e.g., stakeholders using Suicide Observatory data for prevention, research, or policy).

#### 4.1.2. Content and structure

The interview guides covered themes aligned with the evaluation objectives and framework, including:

- Processes related to implementation, system operations, and alignment with intended objectives
- Simplicity, or the ease of system use and functionality for different stakeholder groups
- Accessibility, including access to data, usability of reports, and barriers to use
- Acceptability, particularly the willingness of stakeholders to engage with the system and the appropriateness of how sensitive data were handled
- Usefulness, capturing how the Suicide Observatory supported data-informed decision-making, prevention strategies, and local practice
- Perceived strengths, weaknesses, barriers, and opportunities for improvement
- Perspectives on scale-up, including views on fidelity, adaptation, and sustainability in broader implementation contexts

This structure supported the collection of detailed, contextually grounded insights from a diverse set of stakeholders, while enabling thematic comparison across roles and settings.

# 4.1.3. Sampling and data collection

Based on recommendations provided by the Advisory Group a total of 27 potential interview participants were purposively selected based on their roles in the design, implementation, or use of the Suicide Observatory. These included Coroners, Resource Officers for Suicide Prevention (ROSP), researchers, people with lived experience of suicide, and stakeholders of the Suicide Observatory.

Out of these 27, 21 individuals (78%) participated in a semi-structured interview, including three Coroners, five ROSP, four researchers, one lived experience representative, and eight stakeholders (with some of them also having lived experience of suicide).

Interviews ranged from 30 to 60 minutes in duration. They were conducted via Zoom and transcribed automatically.

# 4.1.4. Data analysis

Interview data were analysed using a framework approach to thematic analysis (Gale et al., 2013), combining both deductive coding, informed by the pre-defined evaluation attributes derived from the CDC Updated Guidelines for Evaluating Public Health Surveillance Systems (Centers for Disease Control and Prevention, 2001), previous work we have done evaluating suicide surveillance systems (e.g., Flego et al., 2022; Ftanou et al., 2023), the Intervention Scalability Assessment Tool (Milat et al., 2019), and inductive coding to capture unanticipated themes raised by participants. Coding was structured around the evaluation objectives, allowing analysis to remain focused on the core domains while also incorporating contextual nuance.

To assist with the analysis process, de-identified transcripts were uploaded to SparkAl (<a href="https://www.unimelb.edu.au/ai/home/staff/gen-ai-tools">https://www.unimelb.edu.au/ai/home/staff/gen-ai-tools</a>). The use of SparkAl helped the analysis by pulling out quotes that matched each attribute from the coding framework. This Al-driven approach complemented the traditional coding method, ensuring systematic analysis with data aligned to the evaluation objectives, while maintaining consistency and accuracy. The integration of traditional and Al methods supported systematic comparison across stakeholder groups, enabling insights into the consistency, variation, and scalability of Observatory processes and impacts. The structured framework facilitated alignment of potential themes with key evaluation criteria such as data quality, system usability, accessibility, acceptability, and perceived outcomes. This combined approach also provided a strong foundation for assessing future implementation recommendations, including sustainability, adaptation, and broader system integration.

# 4.2. Results

#### 4.2.1. Objective 1: Evaluation of the implementation of the Suicide Observatory

To conduct an independent evaluation of the implementation of the Suicide Observatory in Cork and Kerry against the aims and objectives of the Suicide Observatory, with a focus on process, outcomes and outputs.

#### 4.2.1.1. Flow of data

Participants involved in the Suicide Observatory in Cork and Kerry reported positive experiences about the method of data collection and the type of data that has been collected, either through a telephone call or a visit to the Coroner office, i.e., methods that rely on personal relationships. Other participants explained how they used similar or different methods of data collection, while others voiced some practical concerns or concerns regarding reliability of the data due to the involvement of local police in the data collection or differences between Coroners. Some participants suggested that induction or training could help streamlining data collection across counties. Nonetheless, participants agreed that collection of real time data was needed. They recommended using various data sources, including from healthcare and emergency services, and the linkage between the coroner and the health service people on the ground such as the ROSP. Overall, participants were aware of the sensitive content of the data collected (i.e., personal information), the risk of identification of individuals involved, including the deceased and their relatives, and the need for proper data protection measures.

- "So my preference was to simply make a room available. All the information is there. and we have every print off all the cases for the period in question, and they can look at them and make their own analysis of it." (Participant 6)
- "We have a telephone call every 2 weeks, and during that call, I give the information over the phone so that the data isn't out there in written format anywhere. It's just being given verbally. ... it takes about maybe 10 min, depending on how many cases I have." (Participant 16)

- "And here we would and data protection considerations, because whilst the rules in Europe, at any rate, don't apply to the deceased, there are always a lot of living people involved, as well, too, such as immediate family members, witnesses, and others who were involved in the whatever scenario that gave rise, you know, to the death, be it an accident, suicide, or whatever." (Participant 6)

#### 4.2.1.2. Quality

Participants raised some concerns about the data quality especially regarding substance use/addiction and domestic violence. They thought that these data points may be underreported or inaccurately captured, affecting the overall quality of the dataset. Other participants thought that the data quality could be impacted by the different steps the data go through and different practices across coroners. One participant noted that societal and legal issues such as insurance payments may also affect the data. Some participants suggested that threats to data quality could be mitigated by using different data sources, data sharing agreements. However, participants mentioned that collecting more data might also affect the data quality and might challenge the capacity of the ROSP. Training regarding data collection/handling, and quality control at the Observatory were seen as essential.

- "I think the data is unreliable, is, it has to go from whoever called the death to the guards, to the coroner. So it's gone through lots of interpretation before it gets to a coroner." (Participant 11)
- "And there's still a difficulty with people losing insurance payments and various other having economic implications when there's been a ruling of suicide. So there's a number of societal issues as well as actual legal problems around the coroner's court, which are very outdated and need to be addressed." (Participant 15)
- "To me, the more data we can afford that we get, the better. So you have the real-time data with the police that happens here and now. Then you have the observatory that happens through the coroner every couple of weeks to make the phone calls. To me, that would be a very rich data source" (Participant 20)

#### 4.2.1.3. Processes of the system

Participants reflected on the development process of the Suicide Observatory as a collaborative effort and thought process to establishing the verification system, which is a key process in the Suicide Observatory. Participants framed the work of the Suicide Observatory within the national strategy for suicide prevention. Participants talked about the start of the Suicide Observatory and how it was expanded to another county, demonstrating efforts to maintain consistent data quality standards across different regions by extending the same ethical approval and processes. They highlighted the easiness and regularity of the data collection process and how it can vary based on the coroner's organization, indicating the importance of the relationship between the ROSP and the coroner as the two key persons in the system. Overall, participants appeared to rely on personal relationships and informal channels to receive or communicate information from the Observatory. Participants also shared how they used the data, for example by creating reports to communicate with health services when responding to suicide incidents.

Despite the easiness of the system in Cork and Kerry, other participants doubted if similar timely data collection would work in Dublin. Some participants thought that the current processes do not capture all relevant data (i.e., non-medical data). And one participant referred to the annual data collection for the National Drug-Related Deaths Index (NDRDI), which would collect comprehensive, yet not real-time data on substance use related deaths.

- "So as part of the national strategy for suicide reduction and the context of that is that each of the areas and they are functional areas where health service are provided of what's called a Suicide Prevention Resource Officer. And they in turn have an action plan which is based on our national for the local now they have used it." (Participant 20)
- "Within our health system we have 23 local suicide prevention coordinators. In Cork and Kerry the process for the observatory is that they called the coroner every two weeks to collect the data, so that relies from the coroner agreed to provide it but also that being in their role." (Participant 18)
- "I gather the information, put it into a report quickly as quickly as possible. And then, if it needs to be escalated to a full response where I'm calling on other disciplines in both mental health and primary care." (Participant 8)

#### 4.2.1.4. Outcomes

Many participants described several actual outcomes of the use of the Suicide Observatory data. The data helped to identify particular at-risk groups and locations, which led to specific interventions, for example for older adults, and safeguarding of at-risk locations. The data also allowed to inform stakeholders about suicide trends and incidents. Participant further described how the data was used during the COVID-19 pandemic highlighting its use in informing high-level public health decision-making during a societal crisis, as well as improved decision-making and targeted resource allocation for suicide prevention efforts. Participants also discussed how an extended Suicide Observatory might facilitate further research into long term impacts of suicide on families and individuals, and further inform better suicide prevention.

- "We did a mental health support booklet, and just before Christmas, which went out to all the 'meals on wheels' around Kerry. These are people who don't access our service necessarily, and are probably the hardest older persons to reach in the county, maybe the hardest people full stop. The reason we put that money into that effort to make that resource was because we were seeing so many older persons, on the observatory, dying by suicide, you know." (Participant 1)
- "I suppose the [data on] method and location was useful for the [ROSP]. They saw an increase in deaths to do with water and drowning. So that would have motivated, I suppose, putting signs up in these locations." (Participant 7)
- "It helps with stigma, but also helps with misinformation, like accurate real-time data can be used to counter false, misleading reports that happen." (Participant 20)
- "So during the acute stage of Covid-19, the chief medical officer in Ireland had requested a briefing on thise data to support the public health emergency team to consider the public health measures that were in place and their revision based on the impact on population mental health." (Participant 5)
- "We know that if people got information and support in a holistic way that perhaps those suicides wouldn't have happened, or there'd be a lot fewer of them. And I think it's just heartbreaking, and the only way to get better service and places to have timely data to me, it's so obvious" (Participant 15)

#### 4.2.1.5. Outputs

Participants talked about the outputs produced by the Suicide Observatory, i.e., regular county reports with summary data that can be used in the communication with stakeholders. Some participants wished for more regular outputs to stay informed about trends in their area, and some suggested

additional national outputs, for example through a dashboard, they thought would be useful for their work, or broader, for suicide prevention and bereavement support in Ireland.

- "Twice a year I put together some graphs and charts on the numbers of suicides and just simple breakdowns, gender, method and location. I break the county into a few smaller areas and occupation, kind of, and I do it twice a year." (Participant 1)
- "Obviously, you couldn't bring the names and stuff, but being able to bring kind of a higher level information to the community and say, Look, there's been X amount of deaths in this location, this age range by drowning, hanging, whatever it may be." (Participant 10)
- "There's been, you know, the public health specialists nationally are quite interested in a kind of a dashboard, you know, this type of data, you can log in. So, for an area you can get automated visuals or data reports that are coming from this system." (Participant 4)

#### 4.2.1.6. Strengths

The participants addressed several strengths of the Suicide Observatory. These included its ability to provide near real-time (compared to other data sources) and highly detailed geographical data, which allows for more precise analysis and identification of patterns that might be missed with more aggregated data sources. Other reported strengths included its ability to facilitate clear communication with community stakeholders, and the ability to facilitate quicker and more effective responses to suspected suicides, including providing support to affected families and communities. Other participants highlighted the involvement of motivated individuals, buy-in from key stakeholders, and a sense of ownership, which have contributed to its success in specific counties. Participants also saw the ability to expand the system to other counties while maintaining ethical standards and processes, and the potential for national upscaling as an important strength. Finally, participants also emphasized the relatively simplicity of the system, the collaboration with the coroners, and the potential collaboration with the Gardai for data sharing, as strengths of the Suicide Observatory.

- "In so far as possible, we were able to obtain the information that we set out to obtain and to use it as we had intended it to be used." (Participant 5)
- "I would say it's pretty unique, you know, because of the detail and, although we probably wouldn't be releasing it at the individual level, the fact that we can work with that, for example, means we could work to more or less, as detailed geographically as you want to." (Participant 2)
- "Real-time data, for example, allows for the swift detection of potential clusters. There's no doubt, it's timely, it helps us target resources, it helps us to inform responses that we need to provide if there's any patterns, it helps prevent contagion." (Participant 20)
- "It absolutely has changed my role. It has absolutely made my role easier and better. But above everything, it has meant that we have got supports to family members and communities easier and quicker in the aftermath of a suspected suicide." (Participant 1)
- "I would say, if we offered every other mental health service in the country the observatory, they'd all snap it out of our hands if they could get a chance. The data is invaluable." (Participant 9)

#### 4.2.1.7. Weaknesses

Participants talked about experienced weaknesses or shortcomings of the Suicide Observatory. Some participants regretted that the data of the Suicide Observatory were limited to one county, precluding comparisons with neighbouring counties or national trends. Others thought that a lack of proper resourcing and reliance on goodwill, rather than funded capacity, may have prevented the Suicide

Observatory from reaching its full potential. Participants also noted that different data sources (e.g., police data) were not integrated which may imply that important data were not shared or recorded. Also, an (over)reliance on personal relationships for data collection from coroners and local data sharing with the Gardai, rather than through (national) agreements with police, and supported by clear guidance and training for coroners were seen as potential weaknesses. The long timeliness for finalising coronial data could also affect the Suicide Observatory's ability to provide accurate real-time information for particular counties.

- "We only have a tiny little picture suits of real time data which is brilliant for us. But it's kind of useless on the bigger picture. I don't know if what I'm seeing is representative of Ireland, or if it's just representative of [County]." (Participant 1)
- "I feel that we probably haven't seen as much of the output that are the full potential of it because I don't think it has been properly resourced, you know. So I think it's been developed, being maintained on goodwill and people wanting to see that happen. But that means, I don't think it's reached its potential." (Participant 4)
- "Now, another piece of the puzzle here is really about the Gardai sharing data. It's only down to my own relationships with the Gardai that they're able to share information with me, you know, ad hoc in that sense." (Participant 3)

#### 4.2.1.8. Threats

Participants mentioned several threats to the implementation of the Suicide Observatory, including funding, continuity of data collection, reliance on one data source, local relationships and voluntary collaboration of the Coroners, and tension between data security and the need for timely information for suicide prevention efforts. Participants also discussed threats such as resources required for implementation and sustainability of an upscaled Observatory including for ROSP, Coroners, and researchers.

- "Yeah, I think that's something in the absence of a protocol or a system that is signed off, whether it's between the Gardai and the HSE, or the coroners and the HSE and the Gardai, then we're relying on the goodwill and local relationships." (Participant 4)
- "Absolutely, I definitely think it's a huge gap and definitely a significant need. And yeah, it needs to be properly resourced in that sense that, having data is one thing, but then, having the resources to analyse that data, capture it, map it." (Participant 14)

#### 4.2.1.9. Opportunities

Most participants saw important opportunities resulting from upscaling the Suicide Observatory in terms of informing the community and targeted interventions. Some participants noted potential opportunities in integrating other data systems, though others expressed doubts about the quality of some of these potentially additional data sources. Others reflected on a stronger involvement of local stakeholders for data collection and access to data to respond to suspected suicides in the community, while including additional demographic data was seen as potentially helpful to identify at-risk populations (e.g., Irish Travellers), risk factors for suicide (e.g., substance use), and non-fatal suicidal behaviour to inform targeted interventions. Some participants referred to the development of a dashboard system to facilitate timely access to relevant data, while another participant wished for regular (i.e., 6-monthly) outputs. One participant suggested to conduct an annual update of the data, and another participant saw an opportunity for collaboration or knowledge sharing between the

National Drug-Related Deaths Index (NDRDI) and the Suicide Observatory. Participants who hadn't yet been involved in the Observatory reflected on how it would benefit their work.

- "I do believe we can take an all-island approach to this. But I also believe that we could use it in conjunction with another data source." (Participant 20)
- "I think if local people are involved in collecting their data, then they should have access to it in a kind of a safe and secure way, because that's what it's about. It's about being able to respond quickly, in a matter of days, to an emerging contagion concern or sharing information across different areas if needed." (Participant 4)
- "I think some disadvantage of the observatory is that it doesn't talk about not fatal suicidal behaviour or suicide attempts, and then an advantage I think is the fact that the resource officer for suicide prevention talks directly to the coroner so they can really address very detailed information if the Garda is willing to provide." (Participant 18)
- "So I really would love to see the observatory. It would be a game changer. And if it's a consideration that they're gonna extend the pilot to varying regions, I will put my hand up to do a pilot here. I would love it, and it would be excellent." (Participant 10)

# 4.2.2. Objective 2: Differences in the Suicide Observatory in Cork and Kerry

To compare and contrast the differences in the Suicide Observatory in Cork and Kerry.

# 4.2.2.1. Processes, outcomes and outputs

While the overall aims of the Suicide Observatory in Cork and Kerry were identical, participants noted differences in how data collection was set up between the two counties. In one county, the departure of a key researcher led to discontinuation of the data collection. In the other county the ROSP engages directly with the Coroner for data collection. Participants highlighted how resource constraints in the research organization led to adaptations in the implementation model, with the ROSP taking on a more direct role in data collection in Kerry, while maintaining its core purpose, demonstrating both the need for adaptation and the challenges in maintaining fidelity to the original model across different implementations.

- "So, I contact the coroner, and this has worked really well for a few reasons. [Name] left her post in the NSRF after she completed her PhD. So, they didn't replace her for a period. So, Cork, is it fair to say, fell apart during that, and they haven't collected data in 2 years, or something or more. Whereas that didn't happen in Kerry, because I was collecting the information." (Participant 1)
- "The Kerry Observatory, for instance, which is post pilot, for instance, that's still going. Absolutely. That's what I mean by the observatory still working. But in the context of we, I have no mechanism of the terms of agreement that we originally signed, such as, do you remember that legal system initially, where I would go directly to the UCC [university college], [PhD student] and [Director]." (Participant 3)

# 4.2.3. Objective 3: Impacts of the Suicide Observatory

To review the impacts of the Suicide Observatory in relation to suicide surveillance, intervention and prevention activities.

#### 4.2.3.1. Barriers

The participants discussed several barriers regarding suicide surveillance and applying the data for intervention and prevention. Participants noted a barrier in sharing detailed information due to the risk of identifying individuals in a small community, which may limit the extent to which data can be disseminated and used for prevention efforts. They also reported that families as well as police officers may hesitate to view a death as suicide, which could impact the accuracy and completeness of the data. The legal standard for proof of suicide (i.e., beyond reasonable doubt) was also seen as potentially affecting the data, while lack of adequate training of police in suicide prevention and bereavement support was mentioned as a barrier for interventions. Participants further noted that only a limited number of people have access to the data due to encryption and ethical constraints, which could hinder its broader use and analysis. Several participants referred to a lack of a data sharing agreement with the Gardai, in general and specifically for Dublin, which due to the size of the population and multiple coroners may require specific attention for data surveillance and sharing. Other participants noted a significant barrier to implementing the system when the collaboration of the coroners might be perceived as prejudging the outcome of death investigations. Also, coroners are established as individual offices who decide themselves whether they will collaborate with a Suicide Observatory, an important consideration for national upscaling. Also, the capacity, especially from the ROSP to deal with and act on the information was mentioned as a potential barrier.

- "We have to be very careful about what we say, because it could be very easily to identify people with such small numbers, you know." (Participant 1)
- "The issue that we're dealing with is that families may not accept that it's a suicide, and I suppose the sensitivity around kind of managing that." Participant 7
- "The Gardai don't currently have any training on how to deal with a suicide, of dealing with suicide bereavement and the impacts. It's done for new recruits, but it is not done for existing recruits. So you have got a workforce where 80% of them have had no training in dealing with a crisis situation, using the correct language, pointing to the right services." (Participant 15)
- "We have a coroner society, very active society that have an annual conference and also various meetings throughout the year, either educational or you know ... This view is across the board, but the concern would have been even predating me, ... that we have a process, obviously, in investigating a death, and we, I suppose, would have concerns about being seen to prejudge the outcome of that process." (Participant 12)
- "I think that's definitely a challenge, from the health services point of view, the resource officers on the ground, their overall capacity, not just their capacity, but I guess if they get information from coroners and the way they got to manage it, what they actually do with them, then that's probably the next thing." (Participant 21)

#### 4.2.3.2. Facilitators

The participants addressed several facilitators regarding suicide surveillance, intervention and prevention. Participants reported that they have experienced a strong demand for the Suicide Observatory system especially among ROSPs, which could drive its adoption and use. A strong willingness from Coroners to further collaborate with the system was also reported. Further, the expertise and leadership already developed from the Suicide Observatory was seen as reassuring for a potential successful upscaling. Holding meetings with stakeholders was perceived as contributing to their engagement and collaboration with the system.

Allowing other entities (like the police) to also share data directly was mentioned as a potential facilitator for further implementation. One participant suggested that agreement on terminology could facilitate acceptance of a data collection and data sharing system, while another participant advocated for the use of open-source software as it could help avoid issues related to software licensing, costs, and long-term sustainability of a data system. Participants also thought that integrating different data sources, national data sharing agreements, and the linkage between coroners and health services [ROSP] would facilitate the Observatory's effectiveness and successful upscaling.

- "I invited [ROSP], my [County] counterpart to come to my implementation committee. We have an overarching implementation committee that guides the implementation of the Connecting For Life strategy, of which reducing access to means is one of the goals. [ROSP] did a presentation on the observatory, and my implementation committee were like, we need this, we have to have this, it would be fantastic for this area." (Participant 10)
- "I know that the NSRF have stringent protocols in place for data, and the data is used in an appropriate way handing it on as far as I'm aware." (Participant 20)
- "Sorry. Just another thing. This is wherever possible to use open-source software and things, because that can just be an extra problem, you know, changes in the supply, or changes in the design of the software, extra or ongoing charges and things which you can avoid by trying to stick with open source things." (Participant 2)
- "The linkage between the coroner and the health service people on the ground, the resource officers, whoever that might be, I think that's really really welcome." (Participant 21)

#### 4.2.3.3. Usefulness

Participants strongly agreed on the usefulness of the Suicide Observatory. Those with direct experience of the Observatory felt that it has not only improved their understanding of suicide in their region and their ability to do their job, but has also led to tangible benefits in terms of providing timely support to families and communities affected by suicide. Participants also provided examples how they have used the data in working with the media, strategic decisions about local resource allocation and intervention planning, and informing high-level public health decision-making during a crisis. Participants who hadn't been directly involved in the Observatory also thought that having an Observatory would have a strong positive impact ("game changer") on their work, for example regarding efficiently responding to suicide incidents. Several participants also reflected on the usefulness in the context of the potential upscaling of the Suicide Observatory with sufficient resources for data collection and analysis, whilst listening to the needs of people on the ground, like the ROSP.

- "It's so important that we are absolutely linked into the best possible information that we can get. So we know the nuances that might happen in a family or a community that are of concern." (Participant 3)
- "We had seen something similar, but we asked [journalist] what information she had, and she told us the information she had, ... But that article never got written, and because we pointed out to her, we didn't tell her what was the actual case, but we said, there are mistakes, you don't have the right information. It's not accurate." (Participant 1)
- "Well, it's been really informative to the work in the area that has been piloted in. To understand the trends, to understand the actions that are required following suicide, the actionable recommendations that influence suicide programs locally but also helping mental health professionals at a local level understand the trends and therefore understand the needs of that particular area." (Participant 20)

#### 4.2.3.4. Acceptability

Overall participants felt that there was strong acceptability for the Suicide Observatory, either for themselves or the stakeholders, including ROSP, coroners and frontline workers, with whom they have been collaborating. Participants also reported a strong acceptability for families bereaved by a death by suicide. The easiness of operating or being involved in the system as well as being able to use the data were important in the participants' view on the acceptability. A few participants reflected on a need to clarify the liaison with the Gardai. Another participant reflected on the need to look at what data should be collected, while another participant stated that compliance with the General Data Protection Regulation (GDPR) would be important. Yet, another participant emphasized their confidence in way the Observatory handled the data.

- "I advised the family at the inquest that there was an observatory collecting data with a view to hopefully trying to put some sort of understanding of where this is coming from, or where we can help people before it gets to the stage of self-harming, and they were so pleased to hear that something was being done to gather this information." (Participant 16)
- "Yeah, I think so. We had good feedback as I said, we only had the opportunity to extend it to cover the whole of [region]. When I was working on it, we had a lot of interest from other counties, and we had provisional meetings with them, and there was a lot of interest and support from management in the Health Service for it." (Participant 5)
- "I know that my implementation committee really strongly want the observatory in this area, and have offered to write to NOSP seeking it as well." (Participant 10)
- "From what I know ... have no concerns with that at all, and you know, the observatory are very trusted and that's great so there's a high level for me anyway of confidence and what they're doing there." (Participant 21)

#### 4.2.3.5. Accessibility

Participants involved in the observatory described how they have been making the data accessible for others (e.g., stakeholders, decision makers) in their region. Participants also emphasized the need for local data to be accessible for stakeholders while balancing it with appropriate permissions and privacy considerations. Participants noted that current practices in data sharing and support delivery are often based on local relationships. Having access to local data would improve planning and accessibility to support services in affected communities. Some participants regretted that they could not use it as they did not have access to the Suicide Observatory. Some participants referred to the development of a dashboard system which would improve accessibility of the data for stakeholders.

- "And you know what they might want, and they certainly express enthusiasm, is if you can get a
  map, for example, just showing where some of these hotspots are emerging, things like that. That
  would be the kind of processed data that they probably want to see." (Participant 2)
- "I think that's really important that it's accessible at that kind of local level. And I think that needs to be teased out in terms of those kind of permissions. As I said, it all comes back to that piece around kind of bereavement, and maybe information sharing." (Participant 4)
- "So the real time, probable suicide data, is already relevant in the current format. But the use, and then the impact of the observatory will increase if in each region, together with the resource officer, a group, not a very large group, but a group of immediate stakeholders could have access to the data almost on an ongoing basis, at least, maybe monthly." (Participant 17)

- "I've had very little contact with the observatory on the basis of being able to gather information, and that to me is a huge flaw in the system, even though we've identified it. The issue for me is that I know it's there, but I can't touch it." (Participant 3)

#### 4.2.4. Objective 4: Scalability of the Suicide Observatory

To review the scalability and feasibility of the wider implementation of the Suicide Observatory at national level.

#### 4.2.4.1. Fidelity and adaptation

Participants described how the core process of collecting data from coroners remained intact (fidelity), but the system has adapted to changes in the coroner structure and individual coroners' working styles. These issues would be important when upscaling nationally. Some participants suggested maintaining the core purpose of the observatory while adapting the data collection to include more specific, locally relevant information, post-suicide research, or qualitative insights to increase the impact of the Observatory. Another participant suggested to frame it around possible self-harm, and include yearly data updates, while another one suggested that upscaling should involve connecting different data sources and projects. Overall, participants thought that the experiences and learnings from the Suicide Observatory in Cork and Kerry would provide a strong basis for national upscaling.

- "I would like to see it be really tight, you know, name, age, address, family members, location of death, manner of death, linkages with mental health service, but also field linkages with community services." (Participant 10)
- "I'd love to see more on post suicide, I mean, I think the prevention it's a, I look at this suicide research." (Participant 11)
- "I'd like to see it expanded to include more qualitative insights, qualitative insights, you know, like personal narratives interviews." (Participant 20)
- "I think it's probably better to frame it around possible self-harm. Is this a category that could possibly be self-harm? And then maybe review that at the end of the maybe 12 months, where there's a little bit more information." (Participant 16)
- "So at the end of the day I would be hoping that we can take the learning from Cork and Kerry. If that's the best system to replicate around the country, then I'm all for that, if there's a system that can be replicated along in it, if that plus something else is needed, then go for it, or if it's something that's entirely focused on, maybe the Gardai, and with some input from the coroners, then whatever shape it takes, I think." (Participant 14)

#### 4.2.4.2. Reach and acceptability

Most participants thought that the already strong reach and acceptability of the Suicide Observatory could be further enhanced by considering the needs and perspectives of the ROSPs, but also by including others such as the Gardai, and increased community engagement, for broader acceptability of the system among different (local) stakeholders. Participants also perceived high acceptability among ROSP and mental health professionals for broader reach of the system through upscaling it across the country. One participant emphasized that upscaling needs to be aligned with a suicide prevention policy framework, while the system's methodology and procedures were generally seen as acceptable. Nonetheless, one participant thought that there might be varying levels of acceptability and need for the Suicide Observatory across different regions, and some thought that a stepped approach to upscaling starting with the smaller regions would be easier than a national roll out.

- "And in order to do like all those things. It's like feeding everything in, so that the resource officers know what's going on. But the Gardia, whoever it is, also provide support into that community, and then for us to feed back out to make sure we're offering supports." (Participant 14)
- "I think if you talk to resource officers across the country, they're crying out for this type of system because they're working in the dark a little bit, and they're very much relying on kind of local connections and capturing their own kind of data." (Participant 4)
- "It's so obvious, like there can't be a counter argument to it. There is nothing that could be said to say that good timely local data or national data is to the detriment of human beings when you're trying to put in a good suicide reduction policy." (Participant 15)

#### 4.2.4.3. Delivery setting and workforce

While many of the original data is still recorded in paper files, participants considered the delivery setting to be an online live data system. As the current workforce relies on trust and personal relationships, participants also discussed the current and desired workforce for upscaling. They thought that ROSP and coroners might be able to integrate it into their daily work. Nonetheless, a variability in coroner workforces, especially between Dublin and other counties across Ireland, was seen as possibly impacting the scalability of the Suicide Observatory. Participants also noted a need for a national team, and wondered about the workforce capacity if the Suicide Observatory would be expanded to capture attempted suicide/self-harm. They also considered the need for dedicated research resources to analyse and interpret the data effectively.

- "I definitely think, a live data system. We've moved to a live data system with our registry in recent years. So data can be entered immediately to a browser and it's uploaded directly." (Participant 4)
- "Apart from the national coordinating team which would require, 3 full-time staff members, maybe 2, maybe 2 and a half, but not more than 3. But in addition to that, all the officers are there, right, because the mechanism and the procedure can be integrated in their daily work." (Participant 17)
- "And also then what are we doing to capture all that information and ideally pick it up from the attempted suicides? The detained onto the Mental Health Act to build up as much a picture as possible, and even to capture that and map it against the information on this sort of presentations of self-harm." (Participant 14)
- "So I'm hoping that, if we're going to expand this, that we would need to have some clerical and admin support for that. Because that would take the resource officer away from doing what they're really employed to do and let somebody else do the data, do you know what I mean?" (Participant 20)
- "It's not just having the data that we have to work with and rely on our own kind of time. But we need fully resource, I guess, to really do as much as we can to analyse that data locally. And maybe that is an NSRF kind of that. You know, we need that research resource as part of it, as well." (Participant 14)

#### 4.2.4.4. Implementation infrastructure

Participants reflected on the infrastructure needed for upscaling, highlighting the need for robust implementation infrastructure to ensure the collection of accurate and meaningful data, suggesting that current infrastructure might be insufficient. One participant confirmed that cost estimates for national upscaling had been prepared for the National Office for Suicide Prevention. A few participants commented that the infrastructure for a comprehensive suicide surveillance system might have to cater for data on non-fatal suicide attempts, including data from various sources such as the police

force. Another participant referred to the restructuring of health regions (to six regions) which could impact the implementation of the Suicide Observatory at a national level.

- "We have, and I think you could possibly, I'm not sure if you can find it. So at the request of the National Office for Suicide Prevention, we have prepared estimates, we have." (Participant 17)
- "I'd love to see one big national surveillance system that draws on all these data sources, and I think some disadvantage of the observatory is that it doesn't talk about not fatal suicide attempts."
   (Participant 18)
- "We now have moved into six regions here in Ireland. And we want a more integrative way of providing service. Everybody wants that. It's the panacea, isn't it?" (Participant 20)

#### 4.2.4.5. Sustainability

Participants highlighted how the funding model may affect the ongoing operation and sustainability of the Suicide Observatory, i.e., a project-based funding approach may not be ideal for maintaining a continuous surveillance system. Rather than relying on goodwill and individuals ("champions") within organisations, participants suggested more formal support and resources are needed, along with national leadership. Participants also thought that the Suicide Observatory system could be sustainable from a cost-benefit perspective. While some participants (i.e., coroners) noted the easiness of data sharing, others commented that it's not always obvious if traveling to the coroners' office is needed for data collection. Another participant wondered if the current ongoing review of the coronial system could contribute to sustainability and effectiveness of a suicide observatory system, while another participant referred to the self-harm data system at the National Suicide Research Foundation as an example. Overall, participants stated that local enthusiasm for implementation is needed.

- "Well, I would say it's a little bit of an issue, broadly, with a lot of research, you know, council funded research, that tend to be projects. There's an amount of money released for the duration of the project. And the big problem, I think, it's very hard to argue for sustainable funding, which is obviously what you need for something like this." (Participant 2)
- "Oh, hugely, because, like anything, it's got to be at national level, because otherwise the funding won't trickle down and the universities won't prioritize it. You've got to have someone with a big stick at the top going, this is important." (Participant 11)
- "In total, that wouldn't exceed €350,000. So yeah. It's then based on the feasibility achievements, implementing the initial pilot observatory. One could have still an economist having a look at it, or health economist, but I think the benefits weigh out the costs." (Participant 17)
- "I mean, there could just be that like this self-harm data system has data officers who are part of the National Suicide Research Foundation, so it could be something like that as opposed to relying on the health system." (Participant 18)

### 5. Stakeholder survey

#### 5.1. Methods

#### 5.1.1. Survey design and development

As part of the evaluation a stakeholder survey was administered in July 2025 to capture broad perspectives on the system's performance, perceived value, and potential for national scale-up. The cross-sectional survey was designed to complement findings from the data audit and stakeholder interviews, allowing wider input from professionals involved in suicide prevention.

The survey was informed by the evaluation framework set out in the tender, especially the Intervention Scalability Assessment Tool (Milat et al., 2019). It addressed the key evaluation objectives, with domains covering:

- Awareness and engagement with the Suicide Observatory
- Perceived effectiveness and impact on practice
- Strengths, limitations, and areas for improvement
- Feasibility and sustainability of national expansion
- Strategic alignment with policy
- Anticipated barriers and enablers to scale-up
- Views on required infrastructure, workforce, and resources

The instrument combined closed and open-ended questions to allow for both quantifiable responses and nuanced commentary. Conditional logic was applied to ensure that participants were only presented with questions relevant to their knowledge and involvement. The draft survey was reviewed by the Advisory Group and refined based on their feedback before distribution.

#### 5.1.2. Content and structure

The final survey consisted of eight sections, reflecting the Intervention Scalability Assessment Tool (Milat et al., 2019).

- Participant background: sector, location, and prior engagement with the Observatory
- 2. Understanding of the Suicide Observatory and its political and strategic context: perceptions of system effectiveness and strategic alignment
- 3. Costs and benefits: views on the value of upscaling the Observatory
- 4. Feasibility: perceived barriers and facilitators to national scale-up
- 5. Experience with other surveillance systems: to capture lessons from other initiatives
- 6. Key domains for scalability: including reach and acceptability, fidelity and adaptation, delivery setting and workforce, implementation and infrastructure, and sustainability
- 7. Scale up recommendations: endorsement and rationale
- 8. Final comments: open space for feedback not captured elsewhere

#### 5.1.3. Sampling and data collection

The survey targeted a purposive sample of 70 key stakeholders across the country, including Coroners (n=39), Resource Officers for Suicide Prevention (ROSP, n=20), HSE health services (n=10), and lived experience and suicide bereavement support services (n=1). Potential participants were identified in consultation with the Advisory Group, and 27 participants (39%) responded to the survey questions. Participants included 13 ROSP, 5 Coroners, 2 health professionals, 2 HSE NOSP, and 5 unspecified participants.

Participants were invited via email, which included a personalised link to Qualtrics - an online secure cloud-based platform - to access the participant information including a cover letter explaining the purpose of the study. Participants who then consented to the study were able to access the full online survey on Qualtrics. Participation was voluntary and anonymous. Participants were given a defined timeframe to complete the survey, with three reminder emails issued to maximise response rates.

#### 5.1.4. Data analysis

Quantitative responses were analysed using descriptive statistics, with response counts and proportions presented by stakeholder group where appropriate. Qualitative data from open-ended questions were analysed thematically using deductive coding, using the domains of the Intervention Scalability Assessment Tool (Gale et al., 2013; Milat et al., 2019), and mapped against the evaluation framework to identify patterns, contextual factors, and areas of divergence.

#### 5.2. Results

#### 5.2.1. Involvement in the Observatory (all participants)

The level of involvement in the Observatory varied across the professional categories. One ROSP replied that they had been involved for more than 3 years, two between 1 and 3 years, and eight had not been involved directly. One coroner had been involved for more than 3 years, three others had not been involved directly, and one did not specify the length of time they had been involved. One HSE health professional had been involved for less than 1 year, and another had not been involved directly. One HSE NOSP reported having been involved for more than 3 years, while another one had not been involved directly.

Regarding the respondents' interest in the Suicide Observatory, 12 reported a general interest in the use of data for prevention and postvention efforts (of which one received presentations on the observatory from the ROSPs involved and one received non-identifiable data via ROSP as the deceased was from the county the respondent covered), four are data users, one is a data provider, one is learning from the Cork and Kerry observatories with a view to seeing if it will be expanded to other areas, four have not engaged with the Suicide Observatory at all, and five did not unspecify.

Regarding their role or interest in the Suicide Observatory, five ROSP specified their interest in having access to access to timely suicide data while the remaining eight ROSP broadly expressed their interest (e.g., "an interested follower of the initiative and how it operates"). Of the two Coroners, one provided data to the Suicide Observatory, and one is part of several committees involved in suicide (two did not specify). Of the HSEs in NOSP, one was interested in data outputs/findings, and one was interested in replicating the model to improve postvention responses through access to real time data. The health

professionals believed it was vital to have real time information to inform HSE responses, and to improve suicide surveillance and prevention.

#### 5.2.2. Understanding the political and strategic context of the Observatory (all participants)

#### 5.2.2.1. Understanding the Observatory

#### "What are the main issues or problems the Cork & Kerry Suicide Observatory is addressing?"

All participants' responses related to the Suicide Observatory providing access to near real-time suicide data, so that resources and timely support can be offered to people affected by a suicide. Many participants also highlighted the important role of the Observatory in identifying and monitoring national and regional trends, as the release of official suicide data takes much more time, for example regarding suicide clusters.

- "It provides near-real time information about suicide to enable interventions (where there may be clusters) and timely bereavement support to families and affected individuals."
- "Real-time data is provided to service providers so they can respond to local needs when there has been a death by suicide."
- "It is addressing a gap by providing access to data on suspected suicides in a timely manner from parties with a key first responder role e.g. Coroner, so that supports can be offered at individual/family level, as well as monitoring trends, e.g., suicide clusters or implementing preventative measures by having access to data on deaths in public places."
- "The Observatory provides data and research that is up to date and that has been validated. This helps my ROSP work in that I can direct resources and support where it is required."

Participants further emphasized that the data from the Suicide Observatory is crucial as it informs the allocation of resources, postvention, and implementation of awareness raising and preventative measures for population groups and locations with elevated risk for suicide. Some participants highlighted the benefit of actual data sharing either for research or preventative purposes.

- "The fundamental need for information in relation to deaths by suicide, without knowing about the deaths, we cannot implement initiatives or resources to support those who have been bereaved or target areas where there may be an issue in relation to clusters or contagion."
- "Lack of data on deaths by suspected suicide which allows for effective postvention supports, and awareness of trends in suicide and self harming in each area."
- "The Suicide Observatory could help identify cases of preventable suicide and develop programmes for schools etc. which would give those not at risk a better understanding of persons at risk."
- "It is allowing data to be shared between those engaged in suicide prevention and those that investigate such deaths (data owners)."
- "It allows for accurate information to be shared with the HSE and provides them with the ability to counter misinformation in relation to (probable) suicides in a given area."

#### "To what extent do you believe the Suicide Observatory is effectively addressing these issues?"

Most participants (10 or 56%), especially ROSP, responded 'somewhat effectively'. The remaining eight participants (44%), especially ROSP, also responded 'very effectively'.

	Very	Somewhat	Don't
	effectively	effectively	know
Resource officer for suicide prevention	6	7	-
Coroner	1	1	3
Health professionals	1	-	1
HSEs in NOSP	-	2	-
Total	8	10	4

#### 5.2.2.2. Political and strategic context

## "What existing national policies or strategic initiatives might support the Suicide Observatory and the scale-up of the observatory?"

Most participants referred to "Connecting for Life", the current national strategy to reduce suicide (Department of Health, 2015) as well as the forthcoming national suicide prevention policy. Participants also referred to multiple other HSE policy documents in the field of suicide prevention, mental and public health, and the strategic operations of NSRF.

- "The review of the national Connecting for Life strategy currently underway and the development of the next national suicide reduction policy will have a significant impact on the potential for the SSHO to be scaled up nationally. The work and future direction of work for HSE Public Health may also have an impact as there is work underway based on seed funding secured through the SPARK initiative to create and pilot test a surveillance system for probable suicide cases in the Dublin North East Health Region. The work and strategic direction of NSRF and HRB may also support the future direction of the Observatory."
- "The next national suicide prevention strategy would need to cite a need for such an observatory in each region and would specifically need to identify the funding source for this, the specific resources needed to operate such a model and identify the agencies required to operate and partner on this initiative. Each regional suicide prevention plan should also provide further detail on how it should operate in each area."
- "Connecting for Life National Suicide Reduction Strategy and local Suicide Prevention Action Plans in Cork and Kerry. HSE Developing a Community Response Plan to Suicide. HSE Preventing Suicide in Public Places: A Best Practice Toolkit. HSE Public Health Strategy (2025-2030) in development."
- "The forthcoming suicide reduction strategy for Ireland is very likely to have a section on data and research. YOUNG IRELAND National Policy Framework for Children and Young People 2023-2028 action 26 is focused on suicide prevention. National Mental Health Research Strategy, Sláintecare and Sharing the Vision, Pathways to Wellbeing, the National Mental Health Promotion Plan."

Several participants also explicitly referred to a data sharing agreement between HSE (Department of Health) and Gardai (Department of Justice), which could include a county-based roll-out. A few

participants also mentioned standardizing the coronial system as potentially improving the Suicide Observatory data at a national level.

- "The sign of the data sharing protocol between the HSE NOSP and Garda (pending for at least two years). The next policy on suicide reduction could embed a provision for the roll out of a suicide observatory on a county basis with key stakeholder commitment secured at national level."
- "National initiatives to review and standardise the Coroner system would improve quality and consistency of the observatory and any expansion. National efforts to move to a probable suicide model for coroners would improve the observatory and our attempts to reduce suicide levels."

### "How well do you think the Suicide Observatory aligns with national suicide prevention policies or strategies?"

Most participants (16 or 84%), especially ROSPs, responded 'very well aligned'. Two ROSPs and one HSE in the NOSP responded 'somewhat aligned'.

	Very well	Somewhat	Don't
	aligned	aligned	know
Resource officer for suicide prevention	11	2	-
Coroner	2	-	3
Health professionals	2	-	-
HSEs in NOSP	1	1	-
Total	16	3	3

### "What level of government and stakeholder support do you think exists for scaling up the Suicide Observatory?"

Several participants stated they were unsure about the level of support, especially from government. However, many participants thought that there was a high level of support from national and local stakeholders in the suicide prevention and bereavement field, and from specific professional groups (such as ROSP, NOSP, Coroners, and Gardai). Governmental leadership for scaling up was called for.

- "Unsure. I believe the value of the Suicide Observatory is recognised at government level but not sure of the extent at which this is embedded as a priority action in key policies within the various departments e.g., justice, health (including public health)."
- "Unsure of governmental support position. There is a good level of stakeholder support for the observatory, particularly in the postvention and bereavement arenas."
- "There is great awareness among stakeholders of the importance of such a project and the desire for it to be delivered across all areas. There cannot be a geographical area jackpot where it depends on where you live."
- "Presentations on this initiative were carried out in my region and there was widespread support from all stakeholders present. The HSE Chief Officer for the region subsequently wrote and requested that such a model be establish in this region."

- "Varying levels. ROSPs and NOSP are really investing in scale up. I am sure of national support among coroners for scale up. I believe AGS are very invested but may be limited due to competing demands and resources. More government directive and drive is needed."
- "Dept. of Health and Dept. of Justice need to drive scaling up from the top, down to HSE, An Garda Siochana, Coroners and other agencies."

### "Are you aware of any potential political or regulatory challenges to scaling up the Suicide Observatory nationally?"

Most participants mentioned challenges regarding data sharing and storage, including GDPR regulation, and a lack of a data sharing agreement between An Garda Siochana and HSE NOSP, which could lead to two national suspected suicide collection systems instead of one. One participant thought that poor communication between government agencies and professional groups involved in a national upscaling could pose an important challenge. Some participants also referred to challenges regarding sharing data prior to the determination of the cause of death to facilitate support for people bereaved by suicide. They thought that Coroners would not like being seen to potentially pre-judge the outcome of the inquests, and there was also a concern about resources for Coroners to be involved in a sustainable way. One participant noted a broader challenge at societal level. The burden of proof for a death by suicide is high, implying that many suicides may not be recorded, leaving many families unsupported, but also negatively impacting budgets allocated for suicide prevention and postvention.

- "Regulatory: GDPR and how to share data among key government agencies. Also how to gather and store information on family and friends of people who have died by suspected suicide legally and ethically, so that all support options can be offered, or taken up if they agree. Challenges around sharing 'softer' information prior to a determination of cause of death through the inquest/other support structures process. Politically: Getting buy-in from the key agencies. Sourcing sustainable funding for larger-scale roll out on an ongoing basis."
- "Poor communication between State Agencies and Coroners. GDPR issues on the use of the data being provided and how it could be utilised."
- "Challenges with data sharing and the delays with signing the National Protocol for sharing information on deaths by suspected suicide between An Garda Siochana and HSE NOSP. Local engagement with Coroners can be difficult but a national system where they are obliged to share the information would overcome this. Otherwise, having the information shared through An Garda Siochana as opposed to the Coroners may overcome this issue. In addition, based on informal local arrangements [in ...], the local Garda Liaison staff member provides information to family members in the weeks after the death, so they are aware of local suicide bereavement supports available."
- "Costs (both financial and time) to roll out the observatory may be an issue. This is particularly the case where there is existing pressure on coroners due to their case loads."
- "Deaths by probable suicide are underestimated nationally, the burden of proof for a death by suicide is high. Therefore, a critical cohort impacted by a suspected suicide potentially do not receive information advice and support in the aftermath of the death that may need be essential in reducing further the number of people who die by suspected. ... The lack of resources (compared to road traffic accidents) to provide for mental health emergency departments and suicide reduction initiatives could be a barrier; and the lack of political will to address this issue may be due to lack of real time data to highlight the extent of the deaths by suspected suicide."

#### "Would any additional evidence be needed to justify the scaling up of the Suicide Observatory?"

Most participants identified available evidence of the observatory's utility and impact in real situations, in local regions, which would justify its upscaling to other regions and/or nationally. Other participants suggested additional options for using the data, for example, alignment with protocol for data sharing with the Gardai, and evaluation of assessment of local resource allocation.

- "Impact, benefits, costs involved, sustainability considerations from existing site i.e. Kerry, and Cork in the past. Evidence to show how this work aligns with the proposed National Data Protocol between the HSE and An Garda Síochána."
- "I think there is huge scope for the greater utilisation of data that the observatory gathers. I think that this ought to be explored to highlight the scope of what the Suicide Observatory and the data contained, to the benefit of those using it (coroners and ROSP, etc.). E.g. Small Area Data from the census and observatory data could be used to highlight potential clusters in specific areas, heat maps could be created to visually show where deaths are occurring to highlight areas of concern."
- "A review of more localised data in relation to self-harm and suicide to demonstrate if services and resources are being directed where required, and comparison to other data related to other social determinants of health research."

#### 5.2.3. Costs and benefits of upscaling (all participants)

#### "How important do you think it is to scale the Suicide Observatory to a national level?"

Most participants (18 or 90%), especially ROSPs, responded 'very important'. One ROSP and one HSE in NOSP responded 'somewhat important'.

	Very	Somewhat	Don't
	important	important	know
Resource officer for suicide prevention	12	-	-
Coroner	3	1	1
Health professionals	2	-	-
HSEs in NOSP	1	1	-
Total	18	2	1

Participants who had replied 'very important' provide further comments, mostly related to the advantages of national coverage and having access to near real-time data the observatory provides to respond appropriately to instances of suicide. A lack of such data was seen as hindering the development of plans and protocols for suicide prevention and postvention. According to the participants, a national data collection, contrary to in only one county, would strengthen the evidence base and efficiency for suicide prevention nationally. One participant highlighted that national data may contribute to increasing political will for suicide prevention.

"We are without reliable, timely data for my region. This gap hinders our ability to provide appropriate responses and services in a timely fashion. It also hinders ability to produce evidence based for business cases to address service gaps or develop new suicide prevention response or targeted mental health promotion initiatives. For example, the development of our Community Response to Suicide Protocol is currently paused due to a lack of timely reliable data."

- "Currently we only have real-time data on Kerry (population just over 150,000). This means that there are about 7 million people in the country not within the area covered by the SO. We don't know if things identified through the SO are unique to Kerry or representative of the whole country."
- "Without consistent national model of surveillance, we will be unable to respond to people, families and communities impacted by suicide. We cannot respond to suicide bereavement adequately, develop new interventions based on need and trends efficiently, or meet targets to reduce suicide rates. We are working in the dark."
- "This would provide the data needed to increase political will to address suicidal behaviour. It would also inform effective postvention responding and increase the depth and breadth of current responding thus reducing the risk of further lives lost to suicide."

## "What do you believe would be the key benefits of scaling up the Suicide Observatory to cover Ireland nationally?"

Most participants noted that the data would provide an evidence base for timely, faster, and more efficient responses to suicide incidents in the community, as well as responding to (social) media reporting of suicide. It would also inform the development and evaluation of suicide prevention and postvention plans, and identification of population groups or locations that may require pro-active responses, to mitigate the risk of contagion or clusters. Participants thought national data may also help to raise awareness across the country, to monitor and analyse trends, and provide more consistency for service providers and users. One participant thought that it could also contribute to improved communication between agencies. Another participant suggested expanding the Observatory system to include suicidal behaviour.

- "Timely, reliable data that provide an evidence base for timely service responses, the establishment of preventive measures, cost reducing responses (because they would be based on evidence from the Observatory), a measurable indicator of the effectiveness of national strategy and local suicide prevention plans. Additionally, it would enable public services to response appropriately and with an evidence base to media queries, PQs and tackle falsehoods on social media. Such a timely response could arguably address the risk of contagion."
- "Response times to Critical Incidents to reduce. Greater level of data available to Resource Officers for Suicide Prevention to inform their suicide reduction efforts, e.g., ability to target emerging priority groups/areas of concern, become aware of all probable suicide incidents in their area."
- "Early identification of clusters/trends. Ability to challenge media/social media/communities where misinformation is being spread."
- "Gathering a whole country data set which would allow the monitoring of trends right across Ireland, as well as providing greater consistency from a service provider and service user perspective... Longitudinal data would also be gathered, to inform further strategic planning/service and support delivery."
- "A national Observatory may improve communication and inter-agency work between State Agencies, at a local level for Connecting for Life implementation groups."
- "I would also like to see or built upon to look at suicidal behaviour."

### "What do you believe would be the most significant cost implications of scaling up the Suicide Observatory?"

Most participants thought that upscaling would imply (justifiable) costs related to staff and IT for data collection and sharing. Staff costs would include data collection, analysis, administration and coordination. Some participants suggested that staff costs could be limited if tasks such as data collection and sharing were to become part of the job description of key people such as ROSP and Coroners. Other participants noted a potential cost for staff training. One participant referred to costs and resources needed to respond in a timely manner to suicide incidents in the community.

- "Personnel resources as in staff time, would be the most significant costs associated with scaling up, but the cost benefit ratio provides justification."
- "I believe that the Suicide Observatory would need new data analysts should it be scaled up and that these positions would be a key factor in costs."
- "Capacity of roles for those collating the information. May need additional roles to oversee and collate the information."
- "The work of sharing the data between either Coroners or Gardai and ROSPs should not incur a significant cost but the systems and technology and personnel to manage and analyse the data would have costs attached to them."
- "Establishing and sustaining it: Putting systems in place to support the process e.g., providing training (to ensure consistency and quality assurance) and having dedicated personnel leading and delivering. If it is an 'add on' to an already busy role then long-term sustainable delivery may be a challenge."
- "If this becomes of the job description for the coroners and ROSPs then I can't imagine there would be much of a cost to this."
- "Resources for effective postvention responding would be required once real time data is available particularly with regard to be reavement supports and across prevention and intervention responding e.g. extension of SCAN/SHIP initiatives and effective public health messages."
- "Funding needs to be sourced across Government Depts., not just Dept. of Health."

### "What resources (e.g., funding, staff, technology) do you believe would be essential to successfully scale up the Suicide Observatory?"

Many participants referred to staffing (including data collection, analysis/research, administration, and coordination) and IT infrastructure. Participants noted a need for dedicated (i.e., protected) staff time, as well as training of ROSP, Coroners, ... . Participants wondered about resources for data linkage with other sources such as CSO and the self-harm registry, or for expanding the Observatory to include self-harm. Many participants called for adequate long-term funding, leadership and legislation, so that a sustainable system can be established. Still, one participant stated that already a lot of resources are available and little additional costs would be required.

- "A full-time team (including ICT and data science expertise) would be needed. A sustainable source of funding would be needed."
- "Administrative support required to operate the model. Appropriate training and support for staff."

- "Staff with ringfenced time to do this work or additional staff with that responsibility. A national fit for purpose coronial database with quality and comprehensive data entry which requires quite a lot of administrative support and ongoing technical support."
- "Potential scope to broaden the data being gathered/cross referenced against other available data would be crucial (e.g. data from the CSO and, self-harm registry, etc.)."
- "Training for coroners so they are all giving the same information to the local ROSP. Training for ROSPs so they are all collecting, storing and sharing information in the same manner. Possibly one person nationally to support collection, storage and sharing of information. One central location where all information from each region is stored so as a national picture can be gathered."
- "Funding for coroner training, change of practice, ensuring coroner vacancies are filled. Review of ROSPs to ensure enough staff in each area to take on extra postvention, use of information locally to develop new initiatives, community interventions, research etc."
- "I think it would need leadership, political will and there would need to be long term funding available to scale this up which would also require government buy in. Therefore, legislation would also need to be provided."
- "Whole of government support. Dedicated funding and staff. Effective support systems, IT and training. Continuous review and evaluation processes to build and learn from the data gathered. Funding to address identified gaps in services arising from this work."
- "I believe the resources are within current capacity, and there is low additional monetary outlay involved."

#### 5.2.4. Feasibility of scaling up (all participants)

#### "How feasible do you think it is to scale the Suicide Observatory to a national level?"

Most participants (15 or 71%), especially ROSPs, responded that it is 'very feasible' to scale the Suicide Observatory to a national level. The remaining six participants (29%), most of whom were ROSPs, responded 'somewhat feasible'.

	Very feasible	Somewhat feasible
Resource officer for suicide prevention	9	3
Coroner	4	-
Health professionals	1	1
HSEs in NOSP	1	1
Unknown	-	1
Total	15	6

#### "What do you think are the primary facilitators for scaling up the Suicide Observatory?"

Most participants referred to the support and collaboration of national (e.g., NOSP) and regional organisations and agencies as a key facilitator for upscaling, with many participants emphasizing the strong willingness of many stakeholders to collaborate, and in the community to improve suicide prevention efforts based on real-time data. Participants referred to the example of the current Suicide

Observatory as a source of inspiration and the experience of the many people already involved. Participants also identified a 'whole of government' approach, being included as a priority in the new suicide prevention policy, and adequate funding as important facilitators.

- "National Government and NOSP support. A research partner such as NSRF. Commitment from key stakeholders such as Coroners and/or An Garda Siochana as well as local ROSPs. Clear data sharing agreements. Solid surveillance/mapping system. Funding!"
- "Whole of Government support. Departments of Health and Justice, HSE, An Garda Síocána, Coroners, first responders. Those involved in suicide research to build evidence to support initiative."
- "Willingness from a broad spectrum of stakeholders to support the scaling up. Policies and strategies that support greater research and data in this area."
- "Willingness of the coronial system in the collaboration and this may be achieved through their own structures and education on the initiative."
- "There is a lot of good will and an excellent example of a working observatory."
- "Experienced persons already carrying out this work/ research."
- "A clear desire in communities to improve responses and have access to real time data. ROSP buy
  in at local level and existing relationships with various partners."
- "Requirement to have the action embedded as a priority across key government departments and policies, that would filter down into a priority action at local level"
- "The scaling up needs to be facilitated across a range of Government Depts and State Agencies similar to Connecting for Life Strategy."

#### "What do you think are the primary barriers to scaling up the Suicide Observatory?"

Many participants referred to lack of funding and political commitment as major barriers to scaling up the Suicide Observatory. Participants also noted a lack of IT infrastructure, administrative support, interdepartmental collaboration and GDPR-related challenges. Other participants referred to a lack of an overall agreement or support from the Coroners, challenges regarding the establishment of data sharing agreements between stakeholders, and regional inconsistencies in the relationships between NOSP, HSE mental health, AGS, and Coroners. Some mentioned a lack of resources for Coroners to be involved, while others thought collaborating with the Suicide Observatory could be included in their job description.

- "National commitment? Funding"
- "Administrative support and lack of integrated and consistent data collection nationwide."
- "Buy-in. Interdepartmental collaboration. GDPR challenges in terms of information sharing. Sustainable funding source. Fear regarding sustainability, e.g., Cork project is not currently operating."
- "Limitations in staff time. A reduction in the number of Resource Officers for Suicide Prevention. Lack of funding, particularly to support the recruitment of new roles in data analytics. Where the

Observatory is based (e.g. in UCC/NSRF, the HSE or elsewhere). Data sharing agreements between a wide range of stakeholders may be difficult to achieve at a national level."

- "Widespread agreement and support from Coroners. A consistent approach from NOSP, HSE MH across the country"
- "If the coroners agree the process should be relatively simple. However, getting all coroners to agree may be difficult if it is not part of the job description. If this is the case then presenting to all coroners on the findings of this evaluation along with the experience from the coroner in Kerry will hopefully get a large number of other coroners onboard and in time, maybe all."
- "Inconsistencies in relationship with AGS and coroners and local HSE management"
- "Lack of personnel resources within the Coronial system, lack of awareness within this system of the initiative."

## "Are you aware of any legal impediments to providing or using the required data on suspected suicide that is included in the Suicide Observatory?"

Most participants referred to GDPR regulations and data sharing agreements as legal impediments to providing or using the required data on suspected suicide from the Suicide Observatory, though several reported feeling unsure how to understand GDPR regulations for data collection, sharing and storage regarding data of the deceased versus others (e.g., family members, friends, colleagues). Some participants also noted the statutory role of the Coroner in determining the cause of death (e.g., suicide).

- "There is a lack of clarity around this from a GPDR perspective and any insights into this would be greatly welcomed, i.e., sharing between government departments, and wider interagency sharing of information, what information can be stored (both people who have died and family/workplace/sports club etc. member details), in what format and for how long."
- "Only if information is gathered relating to people who are impacted by a death. GDPR is not applicable when someone has died. Also, there is a requirement to be respectful of data pertaining to patients who have died in the care of the HSE."
- "Potential for revealing individuals who may not wish to be identified"
- "National Data Sharing Protocols are required so that local agencies can communicate and share data."
- "The Coroner is empowered by statute to make the finding that an individual has died by suicide and we cannot be seen to prejudge that outcome when the investigation is incomplete. The use of the data must not usurp the Coroner's statutory duty."
- "There may be issues relating to the fact that the inquest has not taken place, and therefore terming the death a suicide, or suspected suicide would be an issue. It raises questions regarding a response in the community to a death that has not been legally declared."

#### 5.2.5. Existing alternative suicide surveillance systems (all participants)

"Have you been involved in any attempts to implement a suicide observatory or near real time data collection system in your area (outside of the Suicide Observatory in Cork and Kerry)?"

Most participants (15 or 71%), especially ROSPs, replied that they had not been involved in any attempt to implement a suicide observatory or near real time data collection system in their area. The remaining six participants (29%), most of whom were ROSP, replied that they had.

	,	Yes	No
Resource officer for suicide prevention		4	8
Coroner		-	4
Health professionals		1	1
HSEs in NOSP		1	1
Unknown		-	1
Total		6	15

"In your view, how have current or past systems attempted to address the problem of lacking real-time data on suicide?"

Most participants referred to efforts to strengthening local relationship between stakeholders, such as Coroners, Gardai, and health services. Participants also mentioned the pending sign off of a national data sharing agreement. One participant highlighted that a lack of real-time data hinders monitoring of, and responding to suspected suicides.

- "Building relationships with Coroners and members of An Garda Síochána"
- "Through local arrangements with AGS and the Local Public Health Department"
- "Local arrangement with the Garda and ROSP. Access to pulse data to guide postvention responding that has been put on hold since November 2024 while awaiting the sign off of the national protocol"
- "There is an ongoing effort to establish a data sharing agreement with the Garda that will enable Public Health and NOSP to access the PULSE data in real time".
- "Systems have attempted to address the issues of lack of real time data ineffectively; it is very difficult to monitor possible suicide deaths without an appropriate protocol involving key stakeholders. Currently we rely on unreliable anecdotal reports, which are random and difficult to research."

#### "Were/are you involved in designing and implementing the project?"

Most of the participants who had been involved in any attempts to implement a suicide observatory or near real time data collection system in their area (outside of the Suicide Observatory in Cork and Kerry) (4 or 67%), especially ROSP, responded that they were involved in designing and implementing the project. Two other ROSP responded that they were not.

	Yes	No
Resource officer for suicide prevention	2	2
Coroner	-	-
Health professionals	1	-
HSEs in NOSP	1	-
Total	4	2

#### "What data source/s are you using?"

The participants who had responded 'yes', indicated that they use various sources.

- "Getting information from Connecting for Life stakeholders"
- "Information gathered by ROSPs"
- "PULSE (if we can get it). National Ambulance Service / Fire Service incident data. Suicide Registry (in development)"

#### "What are your hopes and/or expectations for your near real-time surveillance systems?"

Those who had been involved in any attempts to implement a suicide observatory or near real time data collection system in their area (outside of the Suicide Observatory in Cork and Kerry) formulated hopes and expectations regarding gaining a better understanding of sociodemographic and risk factors for suicide and suicidal behaviour. They hoped that the data would be easily accessible, for example through a dashboard system. Participants thought being able to access the data would allow for better responding to suicide incidents and trends, supporting suicide bereaved individuals and families, and evidence-based decision making in suicide prevention.

- "More knowledge in relation to attempted suicides and deaths by suicide, areas where these incidents are happening, the circumstances, the connections they had within the community, methods, times, sex of the person, age, employment status, nationality"
- "I want the data to be visually accessible (using dashboards) so that stakeholders get a birds-eye-view of what is happening in their areas, disaggregated by age, gender, ethnicity, etc. and with visibility of change over time."
- "To better understand trends, gather accurate information, be more responsive to clusters, areas
  of concern and the threat of suicide contagion, build relationships with other stakeholders,
  including HSE Public Health"
- "Timely data gives us more opportunities to support families and communities"
- "Real-time data will facilitate early data-driven decision-making in suicide prevention"

#### "Do you have any concerns or worries regarding such a system?"

Those who had been involved in any attempts to implement a suicide observatory or near real time data collection system in their area (outside of the Suicide Observatory in Cork and Kerry), noted a concern regarding an upscaled Suicide Observatory, including accuracy and access to the data, and lack of human or IT resources.

- "Accuracy of information in the absence of clear and verifiable sources."
- "Lack of resources / human or IT."
- "No not if a national protocol is signed off thereby alleviating fears around breaching GDPR"
- "Access to data is the biggest concern."

#### "Are you aware of any opposition to the system?

All participants who had been involved in any attempts to implement a suicide observatory or near real time data collection system in their area (outside of the Suicide Observatory in Cork and Kerry), responded they were not aware of any opposition to the system.

	Yes	No
Resource officer for suicide prevention	-	4
Coroner	-	-
Health professionals	-	1
HSEs in NOSP	-	1
Total	-	6

#### "Are resources available to ensure sustainability of the system?"

Of those who had been involved in any attempts to implement a suicide observatory or near real time data collection system in their area (outside of the Suicide Observatory in Cork and Kerry), one ROSP responded 'yes', one responded 'Some, but limited', and one responded "I hope so'. One HSE in NOSP responded 'unsure - it will depend if provision is made for the same under the next suicide reduction policy'. One health professional responded 'no'.

#### "Have you directly interacted with the Suicide Observatory?"

Most participants (13 or 62%), especially ROSPs, responded that they had not directly interacted with the Suicide Observatory. Eight participants (38%) responded 'yes', including five ROSPs, two Coroners and one health professional. Those who responded 'no' were directed to the final section of the survey (section 8, final comments). Those who responded 'yes', continued to the next questions below.

	Yes	No
Resource officer for suicide prevention	5	7
Coroner	2	2
Health professionals	1	1
HSEs in NOSP	-	2
Unknown	-	1
Total	8	13

#### 5.2.6. Key domains for scalability (for those familiar with the Observatory)

#### 5.2.6.1. Reach and acceptability

### "How acceptable do you think the Suicide Observatory would be to stakeholders across different regions?"

In this context, acceptable refers to how well stakeholders across different regions would perceive, support, and be willing to engage with the system. Most participants (5 or 71%), especially ROSPs, responded 'very acceptable'. Two other ROSPs responded 'somewhat acceptable'.

	Very	Somewhat	Don't
	acceptable	acceptable	know
Resource officer for suicide prevention	3	2	-
Coroner	1	-	1
Health professionals	1	-	-
HSEs in NOSP	-	-	-
Total	5	2	1

Participants who replied that the Suicide Observatory would be 'very acceptable' thought that it would be well received as it would provide crucial data and improve suicide prevention efforts. Participants disagreed whether this would require a lot of extra resources.

- "This will be well received."
- "The new policy in development on suicide reduction in Ireland has highlighted that the gathering of timely data is crucial. However, some individuals/agencies could fear the impact of this development."
- "I think when shown what has been achieved in Kerry most people will agree to the benefits and have a positive response. I do think some might (as happened in Cork) claim the extra workload will require them to be provided with extra resources, but as someone who has been involved in the process for over four years, I am skeptical of this."
- "Once the Observatory is properly resourced, it will not be an undue imposition to obtain the data on a real time basis from the coroners."
- "A real time data system will improve response time, reduce distress to the bereaved and improve effective suicide prevention."

Participants who replied that it would be 'somewhat acceptable' provided the following comments:

- "Coroners would be a potential barrier."
- "I believe that stakeholders are not aware of the current Observatory. This would need to happen."

#### 5.2.6.2. Fidelity and adaptation

"Do you believe the current processes and protocols of the Suicide Observatory can be adapted to work at a national scale while maintaining quality and fidelity?"

In this context, fidelity means the degree to which the processes and protocols of the suicide observatory are implemented consistently and as intended when scaling up to a national level. Most participants (5 or 83%), especially ROSPs, responded 'yes'.

	Yes	No	Don't know
Resource officer for suicide prevention	4	-	1
Coroner	1	-	1
Health professionals	-	1	-
HSEs in NOSP	-	-	-
Total	5	1	2

Those who responded 'yes', provided comments specifying that it would depend on staff training and support structures, national coordination, and data sharing agreements.

- Yes, with good training and support structures, e.g., learning from other processes that are working well here and in other countries.
- Please see my early comment regarding training for coroners and ROSP's and also my comment about there being one person nationally to support coroners and ROSP's regarding the collection, storage and sharing of this data.
- We just need agreement from the Coroners / NOSP / ROSPS / HSE.
- If the protocols and initiative have robust governance.

#### 5.2.6.3. Delivery setting and workforce

## "What challenges do you foresee with the workforce or delivery setting when scaling up the Suicide Observatory?"

The most prominent challenge perceived by participants was "Difficulty in standardising processes across regions", listed by four ROSPs, one health professional, and one Coroner. The second most stated challenge was "Regional variations in workforce or workforce capacity", listed by four ROSPs, and one health professional. "Lack of trained personnel" was mentioned by one ROSP, and one Coroner.

The participants provided the following additional comments:

- "As Kerry has shown how successful this process can be (sadly Cork was not as successful), then the ROSP and the coroner in Kerry and the NSRF should be asked to support the upscaling and help develop the training for coroners and ROSP's. Also, the NSRF and ROSP in Kerry could be very helpful in overseeing the collection, storage and sharing of data on a national level."

- "What happens if a ROSP position in vacant, or a coroner will not respond to invitation to be involved?"
- "Coroners are county based. Some HSE areas are changing to IHAs."
- "There would need to be a Standard Operating Procedures for those involved. Buy in from senior management necessary."

#### 5.2.6.4. Implementation and infrastructure

"Do you believe the current infrastructure (e.g., data collection systems, IT support) is sufficient to support a national rollout of the Suicide Observatory?"

Out of eight replies, most participants, including three ROSPs and two coroners responded 'no'. No participant responded 'yes'.

	Yes	No	Don't know
Resource officer for suicide prevention	-	3	2
Coroner	-	2	-
Health professionals	-	-	1
HSEs in NOSP	-	-	-
Total	-	5	3

"What specific gaps in infrastructure do you believe would need to be addressed for a successful national rollout of the Suicide Observatory?"

Most participants referred to IT infrastructure and support as specific gaps in infrastructure, which would need to be addressed for a successful national rollout of the Suicide Observatory. Some participants formulated suggestions, for example regarding cloud data sharing, or referred to the NSRF's National Self-Harm Registry as an example.

- "A nominated IT person/team to support."
- "An online cloud data sharing system where all ROSP's can feed information into and one person has national oversight would possibly be the smoothest way to operate."
- "This way NOSP would have all regional information and be able to merge this to have national information. Learnings could be taken from the NSRF's National Self-Harm Registry."
- "Probably a system like what the NSRF uses to gather the self-harm data."

#### 5.2.6.5. Sustainability

"In your view, what would be required to sustain the Suicide Observatory in the long term if it were implemented nationally?"

Participants reported stable funding, regular updates to the technology/platform, and ongoing training for staff, more or less as equally important for a long term sustainability of the Suicide Observatory. "Stable funding" was listed by three ROSPs, two coroner, and one health professional. "Regular

updates to the technology/platform" was listed by four ROSPs, one coroner, and one health professional. Finally, "ongoing training for staff" was listed by three ROSPs, one coroner, and one health professional.

#### 5.2.7. Scale up recommendations (for those familiar with the Observatory)

#### "Would you recommend the Suicide Observatory for national scale-up?"

Seven participants, most of whom were ROSPs, responded that they would recommend the Suicide Observatory for national scale-up. No one responded 'no'.

	Yes	No	Don't know
Resource officer for suicide prevention	5	-	-
Coroner	1	-	1
Health professionals	1	-	-
HSEs in NOSP	-	-	-
Total	7	-	1

Participants further clarified their responses:

- "I think that if it is possible to scale the observatory, then it should be.
- "Quicker and more appropriate responses and supports for those bereaved by probable suicide. More timely suicide prevention actions being able. Identification of national trends."
- "Work to prevent and respond to suicide is severely impacted by the lack of national roll out of the observatory model of information sharing."
- "At this stage the Observatory is sufficiently long in being to evaluate its findings and potential. A national observatory would allow for national strategies in reducing the incidence of suicide."

#### 5.2.8. Final comments (all participants)

#### "Do you have any final comments or suggestions regarding the scale-up of the Suicide Observatory?"

In the final comments, participants expressed further support for upscaling the Suicide Observatory as access to near real-time time would allow timely response to suicide incidents and suicide preventive interventions, and evidence-based policy decision making, especially in regions without such Observatory. Participants also formulated a few suggestions to be considered in the upscaling, such as including data on attempted suicide.

- "Without timely and accurate information about suicide in Ireland we cannot reduce the number of lives lost or loved ones bereaved."
- "No except that I think that it's not a case of whether the system should be implemented or not, it's a case of when can it be implemented"
- "I have significant interest in the outcome of this research as we are without reliable, timely data for my region. This gap hinders our ability to provide appropriate responses and services in a timely

fashion. It also hinders ability to produce an evidence base for business cases to address service gaps or develop new suicide prevention responses or targeted mental health promotion initiatives. For example, the development of our Community Response to Suicide Protocol is currently paused due to a lack of timely reliable data."

- "Real-time information is crucial to working in suicide prevention/reduction. It gives policy makers the data that they need to make informed decisions and aids the targeting of communities who most need supports. I very much hope that this or a similar real-time system can be developed so that those engaged in suicide reduction work can have access to a crucial tool to our work; accurate information which is largely missing from most areas currently."
- "In addition to facilitating access to real time data on deaths by suspected suicide, AGS collate data on the Pulse system on people who have attempted suicide and on people who have been detained under the Mental Health Act as a result of risk of suicide. This information would also be of significant value to ROSPs in supporting local response efforts. So, a system which could provide access to real time data on not just deaths by suspected suicide but also those who have attempted suicide and been detained under the MH Act would be of significant value to our work."

### 6. Summary of findings

#### 6.1. Objective 1: Evaluation of the implementation of the Suicide Observatory

To conduct an independent evaluation of the implementation of the Suicide Observatory in Cork and Kerry against the aims and objectives of the Suicide Observatory, with a focus on process, outcomes and outputs.

#### 6.1.1. Flow of data

The audit found that the data flow processes of the Suicide Observatory in Cork and Kerry were highly similar across several domains, though Cork (no longer operational) had more comprehensive data sources, including Coroners of Cork and the Health Service Executive (HSE) Patient Mortality Register. The Suicide Observatory in Cork and Kerry were designed for real-time suicide surveillance with fortnightly updates of suspected deaths that occurred within the timeframe, whereas the Irish Probable Suicide Death Study (IPSDS) and Central Statistics Office (CSO) were not. The IPSDS provided annual data from 2015–2020, distinguishing between probable and confirmed suicides. The CSO maintains official death statistics, published annually.

Interview participants revealed generally positive experiences with the observatories' data collection methods, which mainly rely on direct contact with Coroners. Participants appreciated the type and timeliness of data collection, though some expressed concerns about consistency and reliability, particularly due to police involvement and regional differences in coronial practices. Participants also highlighted the sensitive nature of the data and the need for strict data protection to safeguard the identities of deceased individuals and their families.

#### 6.1.2. Quality and sensitivity of the data

Data quality in the Cork Suicide Observatory was assessed through the completeness and validity of records, with suspected suicides reported to local coroners and cross-checked against the HSE Patient Mortality Register. The core dataset (including demographic details, cause and method of death, and source) was >98% complete, though ~50% of information on substance use and domestic violence was missing due to limited availability at the time of data collection. These gaps are expected to be filled during or after coronial investigations, and data recipients were advised of this limitation. Overall, the Cork Observatory demonstrated high sensitivity (83.7%) and positive predictive value (75.8%), indicating acceptable data quality. The sensitivity and positive predictive value of the Kerry Suicide Observatory could not be assessed due to differences in the data coverage period.

Interview participants expressed concerns about underreporting or inaccuracies, especially regarding substance use and domestic violence, potentially at least partly due to variations across coroners and societal/legal issues (e.g., insurance claims). They suggested that data quality could be strengthened by incorporating multiple sources, formal data-sharing agreements, and enhanced training on data collection and quality control. However, some cautioned that expanding data collection might reduce overall quality and place extra strain on the Resource Officers for Suicide Prevention (ROSPs) capacity.

#### 6.1.3. Processes of the system

Interview participants viewed the Suicide Observatory in Cork and Kerry as a collaborative effort highlighting the importance of its verification system, consistency in ethical processes across counties, and strong relationships between ROSPs and coroners. Participants thought that the observatories were in line with the national strategy to reduce suicide 2015-2024 (Department of Health, 2015). More specifically, goal 7 of "Connecting for Life" aims "to improve surveillance, evaluation and high quality research relating to suicidal behaviour", and relies on "access to timely and high quality data on suicide and self-harm" (Department of Health, 2015). Participants described data collection as generally straightforward and useful for reporting to health services, though reliant on personal relationships and informal communication. While effective in Cork and Kerry, some questioned whether timely data collection would work in larger areas like Dublin and noted gaps in capturing non-medical data.

#### 6.1.4. Outcomes and outputs

Interview and survey participants appreciated that data from the Suicide Observatory in Cork and Kery have identified at-risk groups and locations, guided targeted interventions, informed stakeholders about suicide trends, and supported public health decision-making during COVID-19. The data also improved resource allocation, supported county-level reporting, and was seen as a foundation for future research on long-term suicide impacts. While participants valued current outputs, many wished for more frequent updates and national-level reporting, such as a dashboard, to better support suicide prevention and bereavement efforts.

#### 6.1.5. Strengths and weaknesses

Both interview and survey participants identified several strengths of the observatories, including its capacity to provide near real-time detailed geographical data that supports analysis and quicker responses to suspected suicides. Participants also valued its role in facilitating communication with stakeholders, supporting affected families and communities, and enabling targeted local interventions. Other strengths included motivated individuals driving the system, collaboration with coroners, strong stakeholder buy-in, ease of use, ethical expansion to other counties with potential for national rollout, and possible future collaboration with the Gardai.

Important weaknesses of the observatories included its current restriction to Cork and Kerry County, which limits comparisons with other regions and national trends. Participants noted under-resourcing and reliance on goodwill rather than sustainable funding as barriers to its growth, and highlighted gaps in data due to non-integrated data sources like police records. Relying on personal relationships for accessing coroner and Gardai data, rather than formal agreements, was also seen as a potential weakness for upscaling. Delays in finalizing coronial data were considered a challenge for maintaining accurate real-time reporting.

#### 6.1.6. Threats and opportunities

Interview and survey participants identified several threats to the operation of the Suicide Observatories, including insecure funding, current reliance on a single data source, dependence on local relationships and voluntary coroner collaboration, tension between data security and the need

for timely access, and a risk of duplicate national suicide databases, albeit other databases do not provide near-real time data. They also pointed to challenges in ensuring the resources needed for continuity and scaling up the system to support ROSPs, coroners, and researchers. The level of government support for scaling up was seen as uncertain.

Most participants noted that the observatories already align closely with national suicide prevention policies, including the current strategy Connecting for Life and forthcoming policies, as well as other HSE and National Suicide Research Foundation initiatives. Participants also saw significant opportunities in expanding it to improve community awareness, guide targeted interventions, and integrate additional data sources, though some questioned the quality of these. They highlighted the value of involving local stakeholders more closely, collecting extra demographic and self-harm related data, and using tools like dashboards or regular reports (e.g., biannual or annual data outputs) to improve timeliness and accessibility.

#### 6.2. Objective 2: Differences in the Suicide Observatory in Cork and Kerry

To compare and contrast the differences in the Suicide Observatory in Cork and Kerry.

The findings of the data audit of the Suicide Observatory in Cork and Kerry have been reported in chapter 3 (Audit results) and summarised above. As the data flow processes of the Observatory in Cork and Kerry were highly similar, no further comparative analysis has been conducted.

#### 6.3. Objective 3: Impacts of the Suicide Observatory

To review the impacts of the Suicide Observatory in relation to suicide surveillance, intervention and prevention activities.

#### 6.3.1. Barriers

Interview and survey participants identified several barriers to suicide surveillance and the use of data for prevention, including General Data Protection Regulation (GDPR) and data-sharing constraints, concerns about confidentiality in small communities, reluctance by families and police to view a death as a suspected suicide, and the high legal threshold for proof of suicide. Other challenges included limited access to the observatory data, absence of formal data-sharing agreements with the Gardai, and coroners' autonomy (and Department of Justice in Dublin) in deciding whether to collaborate. Additional barriers included coroners' potential hesitance to participate in the Suicide Observatory due to a possibility that it might be perceived as pre-judging coronial inquiries, varying working styles and capacity across coroners, and varying ROSP capacity to act on the information collected.

#### 6.3.2. Facilitators

Facilitators included strong demand for upscaling the Suicide Observatory among ROSPs, willingness from coroners to collaborate, and the expertise and leadership already established through the Observatory. Stakeholder meetings were seen as fostering engagement, and direct data sharing from police was suggested to streamline processes. Standardised terminology, open-source software, and integration of multiple data sources were identified as potential enablers. Participants also underlined

the importance of national-level data-sharing agreements and stronger connections between coroners and health services to support effective implementation and upscaling.

#### 6.3.3. Accessibility

Interview participants discussed efforts to make Suicide Observatory data accessible to stakeholders and decision-makers while balancing privacy and permissions. They highlighted that current data sharing often relies on local relationships and that broader access to local data could improve planning and service provision in affected communities. Some regretted not having direct access to the system and suggested that developing a dashboard could enhance accessibility for stakeholders.

#### 6.3.4. Acceptability

Interview participants strongly agreed about the acceptability of the Suicide Observatory among various groups, including ROSPs, coroners, frontline workers, and bereaved families. They emphasised the system's ease of use and the confidence it inspires in data handling, though some noted the need for clarity around Gardai involvement, GDPR compliance, and decisions about what data should be collected.

#### 6.3.5. Usefulness

Interview participants strongly recognised the usefulness of the Suicide Observatory, reporting that it improved understanding of suicide in their regions and helped provide timely support to affected families and communities. Examples of its application included engaging with the media and informing cautious suicide-related reporting, guiding local resource allocation, shaping interventions, and supporting crisis decision-making. Even those without direct experience considered it a potential "game changer," particularly if scaled up nationally with adequate resources and attention to needs of staff (e.g., ROSP) involved.

#### 6.4. Objective 4: Scalability of the Suicide Observatory

To review the scalability and feasibility of the wider implementation of the Suicide Observatory at national level.

#### 6.4.1. Fidelity and adaptation

Interview and survey participants noted that while the core process of collecting data from coroners has remained consistent, the system has successfully adapted to structural and individual differences, a consideration crucial for national upscaling. They emphasised the importance of maintaining the Observatory's core purpose while allowing flexibility to incorporate locally relevant data, qualitative insights, post-suicide research, and links to other data sources and projects. Suggestions also included considering data of possible self-harm and providing annual data updates on suspected suicides. Overall, most participants believed the current processes could be scaled nationally with maintained quality and fidelity, provided that appropriate staff training, support structures, national coordination, and data sharing agreements are in place.

#### 6.4.2. Reach and acceptability

Interview and survey participants agreed that the Suicide Observatory already has strong reach and acceptability, which could be further strengthened by involving a wider range of stakeholders such as ROSPs, the Gardai, and local communities. They emphasised the importance of embedding the Observatory within a suicide prevention policy framework and noted that while its methods and procedures are broadly acceptable, acceptability may vary across regions. Some suggested a phased approach to upscaling, starting with smaller regions before moving to a national rollout.

Most participants believed the Suicide Observatory would be well received nationally, as it offers valuable data to support suicide prevention. While some doubted that significant additional resources would be required, others acknowledged that justifiable costs for staff and IT systems to support data collection, sharing, coordination, and research, would be needed. Suggestions included integrating these responsibilities into existing roles, such as ROSPs and coroners, and investing in staff training. Participants also highlighted the importance of ensuring sufficient resources to enable timely responses to suicide incidents in the community.

#### 6.4.3. Delivery setting and workforce

Interview and survey participants thought that the Suicide Observatory could evolve into an online live data system, although the original data is still mainly recorded on paper. They suggested that ROSPs and coroners could integrate the system into their daily work, but noted regional variability in coroner workforces, particularly between Dublin and other counties, which may affect scalability. A national team was seen as necessary to support upscaling, especially if the system were to include self-harm. Participants also highlighted the importance of dedicated research workforce to analyse and interpret data effectively.

Further challenges identified were standardising processes across regions and addressing workforce variations and capacity. Staffing needs included data collection, analysis, administration, and coordination, as well as IT infrastructure and training for ROSPs and coroners. Participants also raised the importance of resources for linking with other data sources such as the CSO and the National Self-Harm Registry.

#### 6.4.4. Implementation infrastructure

Most participants agreed that the current infrastructure, particularly IT systems and support, would be insufficient for a national rollout of the Suicide Observatory. Participants suggested using cloud-based data sharing and learning from the National Self-Harm Registry. They highlighted the need for robust implementation infrastructure, accurate data collection, and including self-harm data from multiple sources, while also noting factors such as health region restructuring and cost estimates already prepared for national upscaling.

#### 6.4.5. Sustainability

Participants emphasised that the sustainability of the Suicide Observatory depends on moving beyond project-based funding to a more stable, long-term model supported by national leadership, formal resources, and legislation. While some noted that data sharing with coroners can be straightforward, others pointed out practical challenges such as the need to travel for data collection. Suggestions for

strengthening sustainability included learning from existing systems like the National Self-Harm Registry, potential learnings from the ongoing coronial system review, and ensuring cost-effectiveness. Overall, participants agreed that stable funding, regular technological updates, ongoing staff training, and strong local engagement are all crucial for maintaining and upscaling the Observatory.

#### 7. Recommendations

#### 7.1. Implementation of the Suicide Observatory

#### 7.1.1. Improving data flow

- Broaden and standardise data sources across regions to improve comprehensiveness and enable more reliable comparisons.
- Standardise data collection procedures to reduce variability caused by regional differences in coronial practices and police involvement.
- Maintain strict data protection measures to safeguard sensitive information and protect the identities of deceased individuals and their families.
- Strengthen links between Suicide Observatory data and local suicide prevention efforts to increase practical impact.

#### 7.1.2. Improving quality and sensitivity of the data

- Cross-check suspected suicide data with data on confirmed suicide from the Central Statistics
  Office or from the coroners, when available, to confirm the sensitivity and positive predictive value
  of the Suicide Observatory.
- If the sensitivity and positive predictive value of the Suicide Observatory is <90%, strategies are required to enhance these attributes of the Suicide Observatory (aiming for >90%).
- Address gaps in substance use and domestic violence data by improving access to this information during or after coronial investigations.
- Provide training for staff on data collection and quality control to minimize underreporting or inaccuracies.
- Carefully balance expanding the dataset with maintaining overall data quality and managing the workload of ROSPs to avoid overburdening capacity.

#### 7.1.3. Improving system processes

- Maintain and strengthen the data verification system.
- Formalise communication and data collection processes to ensure the system can operate effectively beyond individual relationships and informal channels.
- Explore strategies to ensure timely data collection in larger regions, such as Dublin, where scaling may be more challenging.
- Expand data collection to include sociodemographic information (e.g., ethnicity, Irish Traveller status) to provide a more comprehensive understanding of suicides.

#### 7.1.4. Improving outcomes and outputs

- Expand data outputs to better support suicide prevention, resource allocation, and bereavement services, and timely information for decision-making.
- Develop national-level reporting tools, such as an online dashboard, to enhance accessibility and usability of data.
- Ensure data availability for research on long-term impacts of suicide, to guide targeted interventions and inform stakeholders about emerging trends.

#### 7.1.5. Addressing weaknesses

- Expand the Suicide Observatory to other regions to enable regional comparisons and national trend analysis.
- Secure sustainable funding and resources to reduce reliance on goodwill and motivated individuals.
- Integrate additional data sources, such as police records, to improve comprehensiveness of data.
- Establish agreements for accessing data from coroners and Gardai, rather than relying on personal relationships.
- Work with coroners to identify issues causing delays.

#### 7.1.6. Addressing obstacles and obtaining opportunities

- Secure stable, long-term funding to reduce operational threats and ensure continuity.
- Establish clear procedures to balance data security with timely access and avoid duplication with other national databases.
- Expand the scope and geographical area of the Suicide Observatory to enhance community awareness and guide targeted interventions.
- Involve local stakeholders more closely in the system to improve engagement and relevance.
- Collect additional sociodemographic and self-harm data (e.g., National Self-Harm Registry) to provide a more comprehensive understanding.
- Implement online dashboards and regular reports to improve timeliness, accessibility, and usability of data.

#### 7.2. Impacts of the Suicide Observatory

#### 7.2.1. Addressing barriers

- Develop clear data-sharing agreements, including Coroners and Gardai, to improve access and collaboration.
- Address GDPR and confidentiality concerns, particularly in small communities, while maintaining secure handling of sensitive data.

- Standardise practices across coroners to reduce variability and ensure consistent data collection.
- Implement procedures that enable timely data sharing while mitigating coroners' concerns about potential perceptions of pre-judging investigation findings.
- Enhance ROSP capacity and resources to act effectively on surveillance data.

#### 7.2.2. Enabling facilitators

- Foster ongoing stakeholder engagement through meetings and collaboration to maintain support.
- Standardise terminology and integrate multiple data sources to improve consistency and comprehensiveness.
- Utilise open-source software to support accessibility and scalability.
- Strengthen national-level connections between coroners, health services, and other key partners to support effective implementation and upscaling.

#### 7.2.3. Improving accessibility

- Develop a dashboard or similar platform to provide broader, direct access to Suicide Observatory data for stakeholders.
- Reduce reliance on personal or local relationships for data sharing to ensure more systematic access.

#### 7.2.4. Increasing acceptability

- Clarify the roles of the Gardai and a data sharing agreement between Gardai and the Suicide Observatory.
- Ensure GDPR compliance and transparent data-handling procedures to maintain stakeholder confidence.

#### 7.2.5. Enhancing usefulness

- Provide adequate resources and support for staff (e.g., ROSPs) to maximize the system's impact.
- Continue leveraging Suicide Observatory data to inform local planning, interventions, crisis
  response, postvention outreach and follow-up, and resource allocation, particularly in preparation
  of national scale-up.

# 7.3. Scalability of the Suicide Observatory and feasibility of its wider implementation

#### 7.3.1. Improving fidelity and adaption

• Preserve the core purpose and methodology of the Suicide Observatory while allowing flexibility for local adaptation.

- Incorporate locally relevant data, qualitative insights, post-suicide research, and additional data sources.
- Consider including data on self-harm and provide regular (e.g., annual) data updates.
- Ensure national scalability by implementing staff training, adequate support structures, coordination, and formal data-sharing agreements.

#### 7.3.2. Increasing reach and acceptability

- Engage a broader range of stakeholders, including ROSPs, the Gardai, first responders, health care providers, and local communities, to strengthen reach and acceptability.
- Embed the Suicide Observatory within a national suicide prevention policy framework to enhance its alignment and credibility.
- Consider a phased approach to national upscaling, starting with smaller regions before wider rollout.
- Allocate adequate resources for staff, IT systems, and training to support data collection, sharing, coordination, and research.
- Integrate Suicide Observatory responsibilities into existing roles where possible to optimize efficiency.
- Ensure sufficient capacity to respond promptly to suicide-related incidents in the community.

#### 7.3.3. Expanding delivery setting and workforce

- Integrate the system into the daily work of ROSPs and coroners, accounting for regional workforce variability.
- Establish a national team to support upscaling, particularly if self-harm data is included.
- Develop a dedicated research workforce to analyse and interpret data effectively.
- Standardise processes across regions to improve consistency and scalability.
- Ensure sufficient staffing, IT infrastructure, and training for data collection, analysis, administration, and coordination.
- Allocate resources for linking the Observatory with other data sources, such as CSO and national self-harm registry.

#### 7.3.4. Securing implementation infrastructure

- Upgrade IT systems to support a national rollout, including cloud-based data sharing.
- Build robust implementation infrastructure to enable accurate and timely data collection.
- Consider structural factors, such as health region restructuring, in planning national implementation.

• Learn from existing models, such as the National Self-Harm Registry, to inform system design and cost estimates.

#### 7.3.5. Ensuring sustainability

- Establish stable, long-term funding supported by national leadership, formal resources, and legislation.
- Address practical challenges in data collection, such as travel requirements.
- Ensure regular technological updates and ongoing staff training to maintain system functionality.
- Promote strong local engagement to support continued use and impact of the Observatory data.
- Leverage learnings from existing systems and the ongoing coronial system review to enhance effectiveness and cost-efficiency.

# 8. Strengths and limitations

The evaluation collected data from multiple sources (Suicide Observatory, stakeholders including ROSP, Coroners, health professionals, and researchers), and adopted a mixed methods approach (audit, semi-structured interviews, survey). Triangulation of the data and synthesising of the findings led to clear recommendations that can be used for further decisions and planning of the upscaling of the Suicide Observatory.

Despite the strengths of the evaluation, a few limitations must be noted. First, while conducting the audit of the Suicide Observatory we could not estimate the sensitivity and positive predictive value (PPV) for the Kerry Suicide Observatory due to its data coverage period (April 2021 to present) is different from that of the IPSDS (2015—2020). For this reason, we were also not able to assess the data quality of the Kerry Suicide Observatory for comparison with the Cork Suicide Observatory. Second, we used IPSDS-confirmed suicide data to estimate the sensitivity and PPV of the Cork Suicide Observatory. Suicide data from the Central Statistics Office, rather than IPSDS-confirmed suicide, should be used for these estimations. For this reason, the estimated sensitivity and PPV of the Cork Suicide Observatory may not be accurate.

Third, we recruited purposive samples of participants for the interviews and online survey amongst stakeholders who have been involved in the Suicide Observatory in Cork and Kerry, and the broader suicide prevention field in Ireland, following advice from the project Advisory Group. Nonetheless, the evaluation relied on voluntary participants, some stakeholder groups may have been underrepresented, and the findings may not reflect the views of non-participants.

## 9. Conclusions

The evaluation of the Suicide Observatory in Cork and Kerry found strong support for its upscaling and wider implementation. The evaluation indicated that its processes for collecting near real-time data of suspected suicides were generally effective, valued by stakeholders, and aligned with national suicide prevention strategies. While data quality was strong overall, gaps remained in areas such as substance use and domestic violence. The Suicide Observatory supported timely interventions, identification of at-risk groups, and resource allocation, including during COVID-19, though participants highlighted the need for more frequent reporting, formal data-sharing agreements, and better integration of multiple sources. Strengths included local collaboration, stakeholder buy-in, and near real-time insights. Weaknesses included reliance on personal relationships, under-resourcing, and lack of standardisation of data sharing.

Looking forward, stakeholders saw significant opportunities for national rollout, provided adequate infrastructure, training, and stable funding are secured. They stressed the importance of maintaining the Observatory's core functions while allowing flexibility for local adaptation and integration with other data sources including regarding self-harm. While demand and acceptability were high, challenges included GDPR constraints, confidentiality concerns, and coroner and workforce variations. Participants viewed the Suicide Observatory as highly useful, acceptable, and a potential "game changer" for suicide prevention if scaled nationally. Ensuring sustainability will require moving from project-based funding to a long-term model supported by national leadership, legislation, IT infrastructure, and ongoing engagement with local stakeholders.

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## Appendix 1: Definitions of attributes for each objective of the evaluation

The evaluation addresses five objectives, each defined by specific attributes, using three methods: (1) data audit, (2) interviews, and (3) survey.

These objectives, attributes, and their definitions, will guide the interview transcript analysis conducted with the assistance of SparkAl. Notably data sensitivity and data quality will be assessed solely through the data audit and not via interviews or the survey.

Table 1.1: Evaluation objectives

Objective	Outline of objective
Objective 1	To conduct an independent evaluation of the implementation of the Suicide Observatory in Cork and Kerry against the aims and objectives of the
	Suicide Observatory, with a focus on process, outcomes and outputs.
Objective 2	Compare and contrast the differences in the Suicide Observatory in Cork and Kerry.
Objective 3	To review the impacts of the Suicide Observatory in relation to suicide surveillance, intervention and prevention activities.
Objective 4	To review the scalability of the Suicide Observatory and feasibility of the wider implementation of the Suicide Observatory at national level.
Objective 5	To prepare a report including the aims, methodology, findings regarding outcomes of the evaluation and scalability assessment, and recommendations.

Table 1.2: Evaluation objectives, attributes of objectives, definitions of attributes and evaluation data collection method

Objective	Attribute	Definition of attribute	Evaluation
			method
Objective 1	Flow of data	Data flow refers to the systematic movement and processing of suicide-related data within	Data audit
		the Cork and Kerry Suicide Observatory, from initial collection and collation through to	Interviews
To conduct an independent		analysis, reporting, and dissemination. Evaluating data flow includes assessing the	
evaluation of the		efficiency, accuracy, completeness, and timeliness of these steps, ensuring data effectively	
implementation of the		support suicide prevention practices and policy actions.	
Suicide Observatory in Cork			
and Kerry against the aims		Examples of data flow activities could include:	
and objectives of the Suicide		Collection and collation: How data are initially gathered from sources (e.g., coroners,	
Observatory, with a focus on		healthcare records).	

process, outcomes and outputs.		<ul> <li>Analysis: Processes involved in reviewing, validating, interpreting, and deriving meaningful insights from collected data.</li> <li>Reporting and dissemination: How analysed data are shared with stakeholders, including frequency, clarity, accessibility, and usefulness.</li> <li>Timeliness: Speed and regularity with which data moves through each stage, from initial collection to stakeholder dissemination.</li> </ul>	
	Sensitivity of data	<ul> <li>The ability of the Suicide Observatory's data sources to accurately and comprehensively identify suicide cases. It is assessed by comparing Observatory records against authoritative external data sources (e.g., Central Statistics Office [CSO], Irish Probable Suicide Death Study) to determine the extent to which all true cases are captured.</li> <li>Identification accuracy: How effectively the Observatory's sources correctly capture confirmed suicide cases.</li> <li>Completeness: Whether any suicide cases reported in external datasets (CSO, Irish Probable Suicide Death Study) are missing from Observatory records.</li> <li>Comparative validation: Cross-checking Observatory data against authoritative external sources to assess alignment and identify discrepancies.</li> <li>Reliability over time: Examining whether the data consistently maintain accuracy and completeness, particularly across critical periods (e.g., pre- vs. post-Covid-19).</li> </ul>	Data audit
	Quality	<ul> <li>The accuracy, reliability, completeness, and validity of key variables within the datasets collected by the Suicide Observatory. It involves evaluating how effectively the data represent the intended real-world phenomena (suicide events), verified through comparisons with external authoritative sources (e.g., Irish Probable Suicide Death Study, Central Statistics Office), and assessing the consistency and reliability of the data over specific time periods (e.g., pre- and post-Covid-19).</li> <li>Completeness: The extent to which required data fields are consistently populated without missing values.</li> <li>Validity: Whether recorded data accurately reflect real-world suicide events, verified through cross-referencing with external, trusted data sources.</li> <li>Consistency and reliability over time: Examination of data stability and trends, particularly comparing data from before and after significant periods (such as Covid-19), to ensure continued accuracy and reliability.</li> </ul>	Data audit Interviews

Processes of the system	The structured sequence of activities within the surveillance system that facilitates the transformation of collected suicide-related data into actionable preventive interventions. This encompasses the collection, analysis, interpretation, and dissemination of data, ensuring that insights inform timely and effective community and media responses aimed at suicide prevention.  Examples of processes of the system might include:  Collecting and managing suicide-related data Analysing and interpreting patterns or trends Sharing findings with key stakeholders Triggering coordinated community or media responses Monitoring outcomes and refining actions	Interviews
Outcomes	The observable and measurable changes resulting from the operation of the Suicide Observatory, including changes in practice, decision-making, policy implementation, and stakeholder actions directly influenced by the Observatory's data, insights, or activities.  Examples of outcomes of the observatory might include:  • Practice: How the Suicide Observatory data influenced Resource Officers for Suicide Prevention (SROs) to adjust their local responses, actions, or priorities in suicide prevention.  • Policy Influence: Contribution of Observatory insights to the area-level implementation of Connecting for Life, guiding specific regional strategies or targeted interventions.  • Media: Changes in how local media report on suicide or mental health, guided by timely data from the Observatory.	Interviews
Outputs	The direct, tangible products generated by the Suicide Observatory's activities. These products typically involve the structured collection, analysis, reporting, and dissemination of suicide-related data and findings.  Examples of outcomes of the observatory might include:  Reports  Communication materials  Stakeholder meetings to discuss findings	Interviews

Strengths	Internal features of the Suicide Observatory system that enhance its ability to generate and	Interviews
	apply suicide-related data effectively for prevention. These may include structural assets, competencies, partnerships, or design features that support its goals.	
	competencies, partnerships, or design readures that support its goals.	
	Examples of strengths might include	
	Strong stakeholder engagement	
	Clear data protocols	
	High credibility with local communities	
Weaknesses	Internal limitations or challenges within the Observatory system that reduce its	Interviews
	effectiveness or efficiency in translating data into preventive action. These are areas where	
	improvements are needed.	
	Example of weaknesses might include:	
	Inconsistent data collection	
	Limited dissemination capacity	
	Gaps in staff training	
Threats	External challenges or risks that could undermine the Observatory's ability to function or	Interviews
	scale its influence. These may include political, social, economic, or institutional obstacles	
	beyond the system's control.	
	Examples of threats might include:	
	Stakeholder resistance to data sharing	
	Public mistrust or misinterpretation of data	
	Community unsupportive due to suicide stigma	
	Reduced funding or policy de-prioritisation	
Opportunities	External factors or emerging developments that the Suicide Observatory can leverage to	Interviews
	improve or expand its impact. These may include policy shifts, new partnerships, funding	
	sources, or public interest.	
	Examples of opportunities might include:	
	National focus on suicide prevention	
	Advancements in digital surveillance tools	
	Opportunities for cross-sector collaboration	

Objective 2  Compare and contrast the differences in the Suicide Observatory in Cork and Kerry.	Processes, outcomes and outputs.	Compare and contrast the differences between Cork and Kerry – in terms of process, outcomes and outputs.	
Objective 3	Processes	This is covered in objective 1	
To review the impacts of the Suicide Observatory in relation to suicide surveillance, intervention and prevention activities.	Barriers	Factors that hinder the effective translation of surveillance data into timely and appropriate suicide prevention interventions, including community and media responses. These may arise at any stage of the surveillance-to-action process and can be structural, operational, political, cultural, or informational in nature.  Examples of barriers might include:  Delayed or incomplete data Poor communication pathways Lack of protocols or coordination Resource or workforce constraints Stigma or fear around suicide Media reluctance or misinformation	Interviews
	Facilitators	Factors that support or enhance the timely and effective use of suicide surveillance data to inform preventive interventions, including those aimed at community and media responses. Facilitators contribute to a smooth transition from data collection to action, improving the system's responsiveness, relevance, and impact.  Examples of facilitators might include:  Timely, high-quality data Strong interagency partnerships Clear protocols for action Skilled, well-resourced staff Supportive media engagement Political and community buy-in	Interviews

	Usefulness	A public health surveillance system is useful if it aids in preventing and controlling adverse health events, enhances understanding of their public health impact, identifies overlooked but important events, and provides data for performance measures and health indicators used in assessments and accountability.  Examples of usefulness could include:  Data informs local suicide prevention responses (e.g. HSE/SRO actions)  Identifies temporal or geographic clusters	Interviews Survey
	Acceptability	<ul> <li>Supports policy decisions (e.g. Connecting for Life)</li> <li>Enables community-level insights not captured in national systems</li> <li>Acceptability reflects the willingness of persons and organizations to participate in the surveillance system.</li> </ul>	Interviews Survey
		<ul> <li>Examples of acceptability could include:</li> <li>Coroners and healthcare professionals willingly share data</li> <li>SROs regularly engage with and act on observatory findings</li> <li>Partner organisations/ stakeholders cooperate with data-informed interventions</li> </ul>	
	Accessibility	Accessibility refers to the availability and ease of use of data and information within the System to support the understanding of suicide and self-harm and its prevention.  Examples of accessibility could include:  Local SROs receive timely data updates  Geospatial data visualisations support rapid understanding  Information is shared in digestible formats for use by stakeholders	Interviews
Objective 4  To review the scalability of the Suicide Observatory and feasibility of the wider implementation of the Suicide Observatory at national level.	Fidelity and adaptation	<ul> <li>Proposed changes to the intervention required for scale-up</li> <li>Fidelity refers to the extent to which an intervention is delivered as originally intended.</li> <li>Adaptation refers to the changes made to the intervention to improve fit with different settings or populations.</li> <li>Both concepts are treated as necessary to balance in scale-up decisions, ensuring interventions remain effective while being feasible and acceptable in real-world settings.</li> </ul>	Interviews Survey

	Examples of fidelity and adaptation might include     Core protocol for fortnightly data collection from coroners remains stable (fidelity)     Adaptations include broader stakeholder involvement or modified dissemination methods to suit local contexts	
Reach and acceptability	The likely reach and acceptability of the intervention for the target population.  This domain helps assess whether the intervention will engage the intended audience and whether it will be acceptable to them in practice. This is a key consideration for successful scale-up.  Examples of reach and acceptability might include:  Geographic coverage includes Cork and Kerry; potential for expansion  Acceptability evident through local stakeholders' continued use of observatory outputs in real-world decision-making	Interview Survey
Delivery setting and workforce	Define the setting within which the intervention is delivered as well as the delivery workforce.  This domain encourages consideration of where the intervention will be implemented and who will be responsible for its delivery. Both key components when assessing whether an intervention can be feasibly scaled.  Examples of delivery setting and workforce might include:  Delivered in collaboration with NSRF, HSE, and local suicide prevention infrastructure  Workforce includes academic researchers, SROs, and public health staff trained in surveillance and response	Survey
Implementation infrastructure	Implementation infrastructure is required for scale-up  This domain prompts consideration of the systems, supports, and organisational capacity necessary to deliver the intervention effectively at scale. This includes infrastructure such as management systems, IT systems, monitoring mechanisms, and logistical supports.	Survey

	<ul> <li>Examples of implementation infrastructure might include:</li> <li>Supported by NSRF systems for data storage, processing, and analysis</li> <li>Mechanisms in place for coordination with coroners and HSE</li> <li>Regular feedback loops between data providers and intervention leads</li> </ul>	
Sustainability	Longer-term outcomes of the scale-up and how, once scaled up, the intervention could be made sustainable over the medium to longer term  this includes consideration of how the intervention will be supported post scale-up. Particularly financially and whether mechanisms are in place to sustain it beyond initial implementation.  Examples of sustainability might include:  Ongoing, secured funding streams (e.g. from government or health agencies)  Integration into routine health system functions or service delivery  Policy or legislative support for long-term operation  Designated roles or teams responsible for ongoing implementation  Built-in mechanisms for continuous training and workforce development  Established partnerships that commit to continued data use and response  Periodic review processes to ensure relevance and impact	Survey

# Appendix 2: Briefing report: The Suicide Observatory Pilot Study in County Cork





# **Briefing Report**

The Suicide Observatory Pilot Study in County Cork

Prof Ella Arensman Dr Paul Corcoran Sofia Bettella

January 2025

## Briefing Report - The Suicide Observatory Pilot Study in County Cork

The pilot study of the Suicide Observatory in County Cork was conducted from 1<sup>st</sup> January 2019 until 4<sup>th</sup> May 2022, with the aim to examine the feasibility and benefits for suicide prevention. The pilot Suicide Observatory in County Cork originated from the Suicide Support and Information System, which was initially funded by the National Office for Suicide Prevention. The pilot Suicide Observatory was funded by the Health Research Board, Ireland.

The public health prevention model of suicide prevention begins with and relies heavily on surveillance data (WHO, 2014; 2021). Monitoring a public health phenomenon such as suicide requires continuous, systematic data collection, analysis and interpretation, as well as efficient dissemination of outputs to those involved in prevention efforts. However, the process of verification, registration and classification of external causes of death, including suicides in Ireland can involve a time span of more than two years due to the requirement of a coroner's inquest and the involvement of An Garda Siochana (Police Force in Ireland), pathologists and other health service staff, in addition to Vital Statistics Registrars. Having access to a real-time suicide surveillance system, the outputs of which can be measured against Central Statistics Office data once published, will assist in early identification of emerging suicide clusters and suicide data, a timely response to people affected by suicide, and verification of anecdotal evidence and public statements on suicide that are disseminated via media outlets, including social media.

The Observatory fulfils both national and international objectives based on the need for real-time suicide mortality data, including Ireland's National Strategy to Reduce Suicide 2015-2024 Connecting for Life, objective 7.2: "Improve access to timely and high-quality data on suicide" (DoH, 2015) and suicide prevention priorities included in Sharing the Vision – A Mental Health Policy for Everyone (DoH, 2020), the NSRF's World Health Organisation Collaborating Centre work programme agreement to facilitate real-time suicide data and the United Nations Sustainable Development Goal 3, target 2.4 to reduce by one third premature mortality from noncommunicable diseases through prevention, treatment and promotion of mental health and well-being by 2030, of which suicide mortality rate is an indicator (UN, 2015).

The methods and procedures of the Observatory meet international best-practice criteria for real-time surveillance of suicide mortality data and align with existing systems such as the Thames Valley Real-Time Surveillance System Buckinghamshire, Berkshire & Oxfordshire, United Kingdom; the interim Queensland Suicide Register, Queensland, Australia; the Victorian Suicide Register, Victoria, Australia, and the Coronial Suspected Suicide Data Sharing Service, New Zealand (Benson et al, 2022; Benson et al, 2023).

Given the legal responsibility of a coroner to independently investigate the cause of all sudden and unexplained deaths, the coroners for each jurisdiction across Ireland are regarded as the most reliable source to access information relating to deaths of unnatural causes in a timely manner. In the absence of an overarching central live database of all deaths under coronial investigation, it is necessary to conduct active surveillance to gain access to data of this nature. This type of surveillance, deemed to be the most accurate and timely approach, involves proactively contacting the data source to seek the required data.

While there have been calls for real-time suicide surveillance data in the past, the demand for such data has increased significantly during the COVID-19 pandemic (Holmes et al, 2020; Niederkrotenthaler et al, 2020). The pandemic and associated public health measures has had major implications for the mental health of the population. Real-time suicide mortality data is vital to facilitate timely, targeted, public health responses during and after a public health emergency.

In addition, the implementation of the updated "Standardised suicide bereavement resource guide with accurate, relevant, up-to-date and consistent information for individuals and families that have lost a loved one to suicide or suspected suicide", will require access to real-time suicide mortality data for the ROSPs to effectively implement these guidelines. A further resource: "Developing a Community Response to Suicide: A resource to guide those developing and implementing an inter-agency Community Response Plan for incidents of suspected suicide, particularly where there is a risk of clusters and/or contagion", will also require access to real-time suicide data by the ROSPs.

#### Methods

The National Suicide Observatory pilot study recorded data on all deaths in County Cork in which the circumstances of the death are consistent with a probable suicide, based on operational screening criteria (Rosenberg et al, 1988; Arensman et al, 2012; Appendix 1).

The core concept of the pilot study involved the real-time access to data on probable suicide cases from coroners in County Cork via updates on a fortnightly basis, obtained by the Researcher via telephone consultation with the coroners or via onsite access to coronial files and manual data entry to an encrypted Microsoft Excel file in the coroner's offices. The Observatory pilot study database includes 16 data items that capture demographic information relating to the deceased, circumstances around the death and mental health service use (Appendix 2). Data on probable suicides were uploaded to a secure cloud in UCC.

The work of the pilot Suicide Observatory was overseen by an Advisory Panel, including coroners' representatives, Resource Officers for Suicide Prevention (ROSPs), representatives of mental health and primary care services and An Garda Siochana in Cork County. The Advisory Panel agreed on the Standard Operating Procedures for the pilot Suicide Observatory.

At the request of the coroners, it was agreed that the data and outcomes of the pilot Suicide Observatory based on the pilot study, would be used only for internal purposes, and would not be published, considering that real-time data involved pre-inquest data on probable suicide cases.

#### Ethical approval and data protection

The pilot Suicide Observatory complies with the General Data Protection Regulation 2018, the Irish Data Protection Act of 1988 and the Irish Data Protection (Amendment) Act of 2003. All efforts have been made to ensure that the identity of those individuals on whom data will be recorded remains confidential. Ethical approval has been granted for the Observatory in Counties Cork and Kerry by the Clinical Research Ethics Committee (CREC) of the Cork University Teaching Hospitals (Ref: ECM 5 (1) 29/03/18 & ECM 3 (x) 12/01/2021, and CREC Review Reference Number: ECM 4 (v) 10/12/2024.

### Accessing real-time data on cases of probable suicide

Cases of probable suicide involve cases of premature deaths, in advance of the coroner's inquest and meeting international screening criteria (Appendix 1). For this reason, the coroners for each jurisdiction play a pivotal role in identifying cases which meet the criteria for inclusion in this Observatory and for providing the minimal information available at the early stage of investigation. The proposed standardised procedure of data collection during the pilot study was for the researcher to conduct phone calls with the Coroners in County Cork on a fortnightly basis, with flexibility exercised in areas of high population density for more frequent contact, to obtain minimal data (16 data items, Appendix 2) on cases of probable suicide that had occurred within the previous 14 days. Telephone communication was deemed the most secure method of contact to collect data from the data sources as it ensures data is protected and avoids potential interception of emails containing sensitive information.

### **Exceptional circumstances**

During the pilot Observatory in County Cork, the Observatory team received requests to verify potential suicide contagion or clustering before the fortnightly phone call between the fortnightly data collection interval with the coroners. In those situations, a member of the team contacted the designated coroner to verify the reported cases in advance of the fortnightly database update.

#### Results

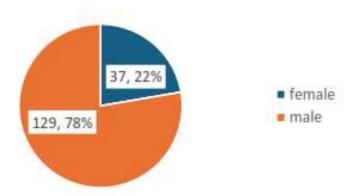
During the Suicide Observatory pilot study in County Cork, a total of 166 cases of probable suicide were recorded. The number of recorded cases per year included 53 in 2019, 42 in 2020 and 57 in 2021. Between 1<sup>st</sup> January and 4<sup>th</sup> May 2022, 14 cases were recorded.

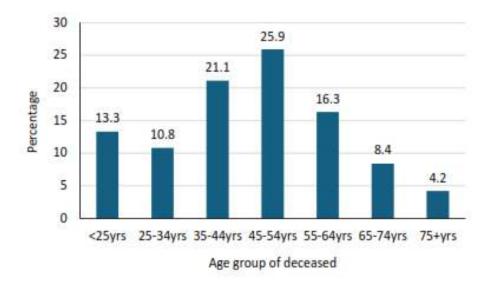
Comparing the numbers for the three years, it is not possible to determine a trend while the numbers are relatively low, and the timeframe is only 3 years.

In terms of missing data, this ranged from 13.8% for occupation to 15% for marital status. During the course of the pilot study, in 2021, a number of additional data items were added (following an ethics amendment), including drug/alcohol abuse, domestic violence, in the care of the HSE Mental Health Services, inpatient/outpatient service user and Covid-19 related factors. Therefore, the frequencies for these data items are relatively low.

#### Gender and age

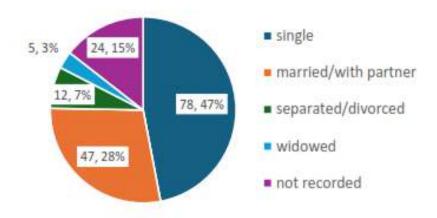
The majority of the deceased were male (78%) and 22% were female. With regard to age of the deceased, the range was 12 to 84 years. Those in the age group 45-54 years and 35-44 years were overrepresented, with a relatively high proportion of older people, in the age group 55-64 (16.3%) and young people, under the age of 25 years (13.3%).





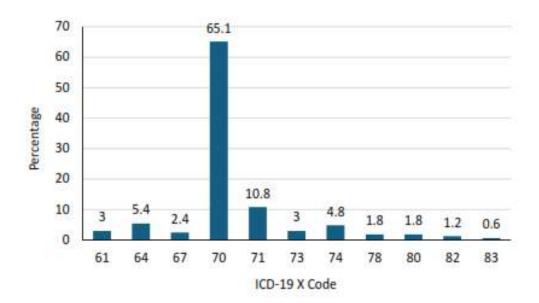
#### Marital status

The majority of cases were single (47%), followed by married/with partner (28%). Seven percent were separated or divorced, and 3% were widowed.



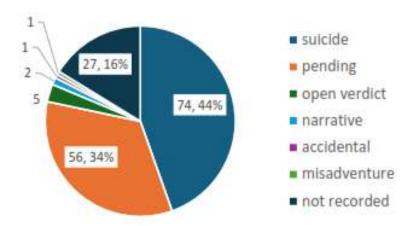
## Methods of suicide

The methods of suicide were collected and categorised following the International Statistical Classification of Diseases and Related Health Problems. Hanging, strangulation, and suffocation (ICD-19 X Code 70) were the most prevalent methods, accounting for 65.1% of cases, marking them as the most widespread method. Drowning and submersion (ICD-19 X Code 71) follow at 10.8%, representing a significant but notably less common choice. Self-poisoning by unspecified drugs, medicaments, and biological substances (ICD-19 X Code 64) accounted for 5.4% of all cases. Appendix 3 offers a breakdown of the remaining ICD-19 X Codes referred to in this subsection.



#### Coronial verdict

The majority of coronial verdicts, 44%, were explicitly classified as suicide. However, for a significant proportion, 34%, verdicts remained pending, as definitive conclusions had not yet been reached for either legal or procedural aspects at the time of recording. Similarly, for 16% of cases there was no recorded verdict, indicating either insufficient information or unresolved circumstances during the time of the pilot study.



#### Benefits of the pilot Suicide Observatory and proposed next steps

The Observatory was developed with the main aim to obtain minimal data on probable suicide cases as identified by the coroners on a real-time basis and prior to conclusion of the coronial inquest, with specific benefits as demonstrated by the pilot study in County Cork:

- Real-time suicide data provided by the Observatory has facilitated a timely response and support for those affected, initiated by the HSE Resource Officers for Suicide Prevention (ROSPs), and it has facilitated the activation of local plans to respond to emerging suicide contagion and clusters.
- Real-time suicide data in relation to locations where people frequently take their lives has
  facilitated the implementation of suicide prevention measures aimed at restricting access to
  means.
- Real-time suicide data has been used in multiple instances to validate unverified media reports of contagion. This validation feature has also been effective in fulfilling a request from the media for verification of information, hence preventing the spread of misinformation relating to perceived contagion/clustering.
- Real-time suicide data has been used to inform multiple briefings, as requested by the
  Department of Health and the National Office for Suicide Prevention on deaths by probable
  suicide (Arensman et al, 2021), in particular meeting an increasing number of requests from a
  wide range of stakeholders during and after the COVID-19 pandemic. The data reports of the
  Observatory represent the only source of real-time suicide related data in Ireland currently.

Following the establishment of the Observatory in County Cork and subsequent implementation in County Kerry in April 2021, we propose to implement the Observatory system in accordance with the Standard Operating Procedures (SOPs) in other counties in Ireland in collaboration with the ROSPs over a two-year period (phase 1), followed by sustaining the Observatory in all counties (phase 2).

In accordance with the pilot study in County Cork and the implementation of the Observatory system in County Kerry, we would propose upscaling and implementing the Observatory involving the ROSPs in all areas in Ireland, in accordance with the SOPs prepared by the Observatory Team in Cork.

In planning the upscaling and wider implementation of the Suicide Observatory in Ireland, consideration should be given to a number of potential contingencies as well as facilitating/mitigating factors. Whilst the data collection as part of the Observatory is dependent on the collaboration with the coroners, it is important to anticipate challenges in accessing real-time data from Coroners in some counties. However, the pilot Suicide Observatory has demonstrated that the majority of the Coroners in counties Cork and Kerry have welcomed the collaboration with the Observatory team and they have endorsed the multiple benefits of the Observatory, such as early identification of emerging suicide contagion and suicide clusters, verification of misinformation in relation to suicide cases reported in the media or via social media channels, and facilitation of timely response plans and supports for people bereaved by suicide.

In addition, during the process of implementing the Observatory system in County Kerry, the Coroners and other stakeholders prioritised participating in the Observatory while they wanted a common and standardised real-time suicide surveillance system within their CHO area. The Observatory team will work with relevant stakeholders and the Coroners to try to ensure that the Coroners are supported to cooperate with the proposed Observatory. Included stakeholders are the National Cross-Sectoral

Steering Group for Connecting for Life, National Office for Suicide Prevention, Department of Health, Slaintecare, Department of Justice, An Garda Siochana etc.

In recent months, representatives of the coroners and other stakeholders in six additional counties have proactively approached the Observatory Team in Cork with the request to implement the Observatory in their respective counties, including Cavan, Monaghan, Donegal, Kildare, Dublin North City and Wicklow.

Upscaling and implementing the Suicide Observatory more widely involves the requirement for the ROSPs to cooperate with the Observatory. However, it is worth noting that the involvement with ROSPs in Cork and Kerry plus the potential importance of the Observatory to the effective implementation of the CRP (developed closely with ROSPs) would suggest that the Observatory will significantly assist the ROSPs to complete their work in a more timely and effective manner. Wider implementation of the Suicide Observatory is likely to increase the interest and involvement of the ROSPs in all counties. This will be facilitated by numerous examples of the use of real-time suicide data to improve a timely response to people bereaved by suicide, verification of misinformation on suicide in the media, enhanced prevention measures to restrict access to lethal means, etc., that will be shared with the ROSPs during the training workshops. For ROSPs who experience any challenges during initial implementation phase, the Suicide Observatory will be able to provide additional support in a timely manner.

#### Acknowledgements:

Dr Ruth Benson, Mr Frank O'Connell, Dr Michael Kennedy, Dr Paul Corcoran, Eileen Williamson, Adjunct Professor Eve Griffin, Karen Mulcahy, Martin Ryan, Donagh Hennebry, Professor Philip Dodd, Professor Jan Rigby, Professor Christopher Brunsdon, Professor Eugene Cassidy, Sofia Bettella. This work was supported by the Irish Health Research Board (grant number IRRL-2015-1586).

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#### **Appendices**

### Appendix 1: International screening criteria for the determination of probable suicide

The purpose of these criteria is to improve the validity and reliability of suicide determination by standardising the type of information that is collected and incorporated into determining the manner of the death (Rosenberg et al, 1988; Arensman et al, 2012; 2013).

The operational criteria for the determination of suicide are as follows:

#### A. Explicit expression of intent to die:

- 1. Verbal statement
- 2. Handwritten note, unambiguous
- 3. Recorded statement, e.g., audio tape, written note, video tape, email, text, and social media.

#### B. Implicit or indirect evidence of intent to die:

- 1. Expressions of farewell, desire to die or acknowledgement of impending death
- 2. Expressions of hopelessness
- 3. Expressions of great emotional or physical pain or distress
- Expressions by the decedent that the decedent recognised high potential lethality of means of death
- Efforts or actions to prepare for death, inappropriate to or unexpected in the context of his or her life.
- 6. Efforts or actions to procure or learn about means of death or rehearse fatal behaviour
- 7. Precautions to avoid rescue
- 8. History of previous suicide threat or self-harm
- 9. History of stressful events or significant losses
- 10. History of serious depression or mental disorder, including substance abuse.

## Appendix 2: Data items of the pilot Suicide Observatory

Name/names (encrypted)	
Age	
Gender	
Marital status	
Address/addresses (including educational institution)	
Map-co-ordinates of address(es)	
Occupation	
Date of death	
Location of death	
Cause of death	
Method(s) used	
Drug /alcohol abuse	
Domestic abuse	
In the care of the HSE Mental Health Services	
Inpatient/outpatient service user – narrative	
Covid-19 related factors – narrative	

## Appendix 3: ICD-19 X Code legend

X61	Intentional self poisoning by and exposure to antiepileptic, sedative hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified
X64	Intentional self poisoning by and exposure to other and unspecified drugs, medicaments and biological substances
X67	Intentional self poisoning by and exposure to carbon monoxide and other gases and vapours
X70	Intentional self harm by hanging, strangulation and suffocation
X71	Intentional self harm by drowning and submersion
X73	Intentional self harm by rifle, shotgun and larger firearm discharge
X74	Intentional self harm by other and unspecified firearm discharge
X78	Intentional self harm by sharp object
X80	Intentional self harm by jumping from a high place
X82	Intentional self harm by crashing of motor vehicle
X83	Intentional self harm by other specified means

Full list can be accessed at the following link: https://icd.who.int/browse10/2019/en

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