FIGURE 8
CONSULTANCY SERVICES LTD

Evaluation of the Digital Lifelines Scotland (DLS) Programme

FINAL REPORT

Prepared for the Digital Health & Care Innovation Centre

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS **1**

WHO THIS REPORT IS FOR, AND OTHER SUPPLEMENTARY REPORTS **1**

LANGUAGE CONSIDERATIONS **1**

CITATION **1**

LIST OF ABBREVIATIONS **2**

CHAPTER 1: INTRODUCTION **3**

1.1 Background 3

1.2 The Scottish Government's National Mission on Drugs 3

1.3 Programme partners and roles 4

1.4 Contextualising DLS within global and national digital inclusion practice 5

1.5 Study aims and objectives 5

1.6 Study scope 6

1.7 Evaluation design 6

1.8 Structure of the report 8

CHAPTER 2: THE DLS THEORY OF CHANGE AND EVALUATION LOGIC MODEL **9**

2.1 DLS theory of change 9

2.2 DLS evaluation logic model 10

CHAPTER 3: THE DLS PERFORMANCE STORY – STARTING POINTS **12**

3.1 Introduction to DLS 12

3.2 Digital exclusion and addressing acute risk of drug use 13

3.3 Addressing digital inclusion for people who use drugs means improving drug-related, and wider health and social outcomes 13

3.4 The potential for DLS to contribute to knowledge, understanding, and addressing of drug-related harms (in a Scottish context) 14

3.5 What DLS set out to do 15

CHAPTER 4: THE DLS PERFORMANCE STORY – IDENTIFYING WHETHER THE DLS PROGRAMME WAS DELIVERED AS PLANNED (PROGRAMME AND PROJECT-LEVEL INPUTS) **19**

4.1 Inputs: laying the foundations 19

4.2 Programme establishment 19

4.3 Funding provision 19

4.4 Delivery of projects 20

4.5 Governance 21
4.6 Appeals to documentation for a complete picture 22
4.7 Weaving towards outputs and outcomes 22
4.8 Concluding reflections on inputs 23
CHAPTER 5: THE DLS PERFORMANCE STORY – IDENTIFYING WHETHER THE DLS PROGRAMME WAS DELIVERED AS PLANNED (PROGRAMME AND PROJECT LEVEL OUTPUTS) 24
5.1 DLS team and partners 24
5.2 Digital inclusion 26
5.3 Digital products and services 28
5.4 Digital integration 30
CHAPTER 6: THE DLS PERFORMANCE STORY – WHAT OBVIOUS OUTCOMES CAN BE ATTRIBUTED TO DLS (DRUG-RELATED AND WIDER) 31
6.1 Introduction 31
6.2 Evaluation evidence sources 31
6.3 Outcome 1: Improved service reach and accessibility 34
6.4 Outcome 2: Increasing digital literacy 36
6.5 Outcome 3: Improving wellbeing 38
6.6 Outcome 4: Enhanced inter-service coordination and communication 39
6.7 Outcome 5: Improved support networks 41
6.8 Outcome 6: Immediate risk reduction 43
6.9 Outcome 7: Perceived reductions in stigma 45
6.10 Additional outcomes 46
CHAPTER 7: CONCLUSIONS – THE CONTRIBUTION OF DLS TOWARDS LONG-TERM CHANGES AND IMPACT 49
7.1 Introduction 49
7.2 Sustainability of benefits 51
7.3 Systemic changes 51
7.4 Community impact 51
7.5 Moving beyond opportunistic grants towards sustained digital inclusion 52
7.6 From supplementary support to integral strategy: indicators of embedded digital inclusion 52
7.7 DLS impacting digital inclusion and the championing of digital solutions amongst drug services 52

7.8 DLS' contribution to reducing social inequalities 53
7.9 Concluding remarks 53
CHAPTER 8: OUR RECOMMENDATIONS 55
8.1 Introduction 55
8.2 Recommendations and actions for change 55
8.3 ORGANISATIONS: Embedding digital inclusion into systems and policy 56
8.4 PRACTITIONERS: Supporting digital inclusion in service delivery 57
8.5 INDIVIDUALS: Empowering individuals to take control of their digital future 58
8.6 STRATEGIC LEADS: Accelerating digital products and platforms 59
REFERENCES 61

LIST OF TABLES AND FIGURES

Table 1. List of abbreviations and acronyms 2
Table 2. Core DLS programme partners and roles 4
Table 3. Summary of study methods, recruitment, sampling and activity completed 7
Figure 1. Initial programme theory of change (developed by DLS) and subsequent evaluation theory of change (co-designed by Figure 8 with key DLS personnel and stakeholders) 9
Figure 2. DLS simplified evaluation logic model 11
Figure 3. Timeline of Scotland's recent drug policy 15
Figure 4. DLS programme outputs infographic 24
Table 4. DLS products and services – evaluation learning points 28
Table 5. Evidence strength matrix 33

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We would also like to thank the DLS programme team and the core members of the key delivery partners from SCVO and the Simon Community Scotland for their constant help and support throughout the evaluation process. Without their timely assistance in providing access to staff, volunteers, digital champions, as well as providing access to the extensive set of evidence documents gathered by themselves and all delivery services, the evaluation would have been much more challenging.

Finally, we would also like to express our gratitude to our Project Advisory Group for their support and advice throughout the evaluation.

Who this report is for, and other supplementary reports

This version of our report is the full and **Final Report** of the evaluation of Phase 2 of the DLS programme. It is supplemented by our **Supporting Evidence Report** which provides all our supporting evidence for the main report in a series of appendices. There is also a standalone **Evaluation Summary**.

Additionally, we have written a shorter **Supplementary Briefing Report** which is aimed at policymakers, commissioners, and funders at both local and national levels. This report will be made available via the DLS website in due course.

Language considerations

The world of drug use treatment is full of jargon and abbreviations. We have chosen to use 'people-first' language which emphasises the individuality, equality, and dignity of people rather than defining people primarily by a problem or issue. We want to emphasise the importance of language in helping to challenge and reduce the pervasive stigma that is still attached to being a person who uses drugs.

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List of abbreviations

The following table describes various abbreviations and acronyms used throughout this report. The page on which each one is defined or first used is also given.

Table 1. List of abbreviations and acronyms

Abbreviation /Acronym	Description	Comments	Page
CA	Contribution Analysis	Contribution Analysis is amongst a group of evaluation methodologies that combine realist and theoretical elements to evaluate more complex systems of change that involve various direct and indirect actors and actions.	6
DDTF	Drug Deaths Taskforce	The Scottish Government established a Drug Deaths Taskforce in 2019 to support the delivery of the national 'Rights, Respect and Recovery' strategy.	14
DLS	Digital Lifelines Scotland	The Digital Lifelines Scotland programme, launched in 2021 and hosted by the Digital Health & Care Innovation Centre (DHI), seeks to increase digital inclusion and to design new digital solutions with, and for, people with multiple and complex needs at increased risk of drug related harm.	3
MAT	Medication Assisted Treatment Standards	The Drug Deaths Taskforce prioritised the introduction of standards for Medication Assisted Treatment [MAT] to help reduce deaths, and other harms, and to promote recovery.	4

CHAPTER 1: Introduction

1.1 Background

The Digital Lifelines Scotland [DLS] programme was launched in 2021 and has received a total of £3.2m funding from Scottish Government to March 2025. The Digital Health & Care Innovation Centre (DHI) is the overall lead for the programme in collaboration with delivery partners (see **Section 1.3** below).

DLS sought to increase digital inclusion and to design new digital solutions with, and for, people with multiple and complex needs at increased risk of drug related harm. It aimed to improve the health outcomes for people who use drugs, reducing the risk of harm and death, specifically to ensure that:

- **PEOPLE** have greater access to the confidence, skills, and motivation alongside devices and connectivity that form digital solutions that keep them safe and that enable them to become and remain connected to family, friends and relevant services that support them.
- **THE SERVICES** that support these people have the digital means to develop and strengthen the support they provide, and staff that are skilful in using and developing digital solutions to enable those they support.
- **THE SECTOR** is connected and collaborating, developing joined-up services and exploring digital solutions together.

From April 2021 to March 2023, the **evaluation of Phase 1** of the DLS programme tested how digital access, connectivity, and training could enhance engagement, improve wellbeing, and reduce harm for people with multiple and complex needs. Two early adopter waves distributed devices, data packages, and support to over 965 individuals, establishing digital champions (a trained staff member or volunteer who helps individuals who engage with services to access and use digital devices) to sustain engagement.

Within the products and services workstream, ODART (Overdose Detection and Alert Response Technologies) systematically explored real-time monitoring and overdose prevention tools, whilst the digital inclusion workstream addressed practical barriers such as digital literacy gaps and data security concerns. Findings revealed that reliable connectivity strengthened relationships with harm reduction services and peers, yet sustainability challenges remained, including ongoing costs for devices and data.

These Phase 1 insights informed Phase 2 of DLS (April 2023–March 2025), which integrates digital support more comprehensively into existing service infrastructures. The overarching evaluation maps these Phase 1 inputs to long-term outcomes in the evaluation logic model (see Chapter 2), providing a holistic view of how digital inclusion supports better engagement and harm reduction outcomes across Scotland.

1.2 The Scottish Government's National Mission on Drugs

The national mission employs a whole-systems strategy built on six key outcomes to reduce drug-related harms and improve lives across Scotland:

1. **Fewer people develop problem drug use** – prevention through early intervention and addressing demand and supply.
2. **Risk is reduced for people who use harmful drugs** – expanded harm reduction with naloxone, safer consumption facilities, heroin assisted treatment and digital overdose alerts.
3. **Access to treatment and recovery for those most at risk** – high-quality, recovery-focused care via Medication Assisted Treatment [MAT] standards.
4. **High-quality treatment and recovery services** – ambitious targets for opioid substitution therapy and residential rehabilitation, supported by significant investment.
5. **Improved quality of life** – enhanced wellbeing through integrated support addressing housing, mental health, and social isolation.
6. **Support for children, families and communities** – a family-inclusive, holistic approach for those affected by drug use.

The DLS programme aligns with this national mission, using digital inclusion to improve inter-service communication, enable access to vital online resources and recovery support, and drive sustainable, long-term change. This alignment sets the policy context for the programme and informs the sections on programme partners and inputs.

1.3 Programme partners and roles

There have been a number of key partners to the DLS programme since its inception. For simplicity and clarity purposes, these partners (and their primary role in the programme) are detailed in the table below.

Table 2. Core DLS programme partners and roles

Organisation name	Primary role within the DLS programme
Digital Health & Care Innovation Centre (DHI)	DLS programme lead
Scottish Council for Voluntary Organisations (SCVO)	Core DLS partner
Simon Community Scotland (SCS)	Core DLS partner
Drugs Research Network Scotland (DRNS)	Phase 1 Evaluator and DLS Research Partner

In addition to the key partners noted above, there have been 34 organisations across Scotland funded through the DLS programme to deliver projects across six rounds of funding (Early Adopters 1, Early Adopters 2, Early Adopters 3, Follow-on Fund, Small Grants 2022, and Small Grants 2023). A full list of the funded organisations and the funding received is provided in the **Supporting Evidence Report** at **Appendix I**.

1.4 Contextualising DLS within global and national digital inclusion practice

Digital inclusion is widely recognised as a key enabler of health, wellbeing, education, and civic participation. Across the globe, governments and civil society organisations have implemented diverse strategies to tackle digital exclusion, targeting various structural inequalities such as poverty, educational disparities, and rural marginalisation.

A rapid review of international literature has been included within our supplementary **Briefing** Paper for policy makers, funders, and commissioners. It concludes by identifying Scotland as taking one of the leading, and more progressive, policy roles within the UK's journey towards digital inclusion for all.

The *Connecting Scotland* programme, launched during the COVID-19 pandemic, aimed to reach individuals most at risk of exclusion by providing internet-enabled devices, mobile data, and tailored skills support. Its priority groups included people on low incomes, those shielding due to health conditions, care leavers, and socially isolated older adults (Connecting Scotland, 2023). The programme exemplified how rapid, nationally coordinated interventions can be delivered through trusted local actors. In parallel, the *Technology Enabled Care (TEC)* programme within Digital Health and Care in Scottish Government has supported digital inclusion in health and social care settings across Scotland.

For details of the full rapid review of literature, please see the separate **Briefing Report** for policy makers, funders, and commissioners (part of the portfolio of DLS evaluation reports).

1.5 Study aims and objectives

The primary aim of this evaluation study was to assess the level of contribution that the implementation of Phase 2 (the delivery and implementation phase) of the DLS programme (2023-2025) has made to measurable and observable digital inclusion and acute risk reduction outcomes amongst vulnerable populations.

Additionally, it has sought to identify any relevant changes to the health and social care sector more broadly.

In achieving these aims, the study has focused on the following objectives:

- **Refining and evaluating this contribution against a theory of change:** Assessing how the programme's activities align with its intended pathways to impact.
- **Providing a synthesis of workstream output reports and other evaluations of DLS:** Integrating findings from internal evaluations and impact monitoring to build a comprehensive understanding of the programme's effectiveness.
- **Analysing wider literature, other Scottish data sets, and jurisdictional evaluations (notably from other regions):** Contextualising the programme within broader research and comparative evaluations to identify relevant patterns and insights.
- **Undertaking additional specific primary data collection to account for other possible contributions and explanations:** Gathering new data to explore aspects of the programme's impact that may not be covered in existing sources.

1.6 Study scope

It is important to note that this report combines findings across the entire population targeted by the DLS programme. Consequently, it includes considerations for people with experience of problem drug use, and those with intersecting experiences of homelessness, criminal justice involvement, and individuals transitioning from residential settings (i.e., hospitals, in-patient stabilisation/rehabilitation, prison). Where appropriate, the report delves further into these definitions and examines the potential impacts on each group in more detail.

Additionally, whilst internal monitoring and evaluation, and primary data collected by the evaluator provides valuable insights, this evaluation is supported by extensive documentary evidence, across the programme and individual levels, and is referred to as appropriate. This comprehensive approach ensures a thorough examination of the programme's inputs, activities, and outputs, offering a nuanced understanding of its contributions to digital inclusion and consequent health and social outcomes for high-risk groups in Scotland.

1.7 Evaluation design

1.7.1 Study methods

This section summarises the evaluation methodology of Contribution Analysis [CA]. It is an evaluation methodology that is increasingly being adopted by the Scottish Government regarding evaluation of a range of public health policies, and particularly those concerning alcohol and other drug use. CA is amongst a group of evaluation methodologies that combine practical insights and theory to evaluate more complex systems of change. These systems often involve multiple people and actions, both directly and indirectly, and CA helps determine how and why a system contributes to observed outcomes (Livingston et al., 2020).

The origins of CA lie in the work of Mayne (Mayne, 2001 & 2011), who developed it as an analytical tool for situations where designing an 'experiment' or using experimental approaches to test cause and effect by relying on a counterfactual case were either impractical or impossible. Accordingly, it is argued that it is an approach to evaluation particularly suitable to explore complex, multi-level programmes of work where a direct cause-effect issue (or attribution problem) are rarely possible. CA researchers explore existing knowledge and gather quantitative and qualitative 'evaluative evidence' from a range of sources to tell the 'performance story' about how a particular policy, programme, or service activity is contributing to particular outcomes in the short, medium, and long terms. Whilst asserting that these stages should be creatively modified by those adopting CA, Mayne (2011) outlined a six-stage CA model as follows:

1. Set out the cause-effect issue (or attribution problem) to be addressed.
2. Develop the postulated theory of change and risks to it.
3. Gather the existing evidence on the theory of change.
4. Assemble and assess the 'performance story', and challenges to it.
5. Seek out the additional evidence as required to populate the theory of change.
6. Revise and strengthen the performance story and check for validity from study participants.

These stages are sequential, but not wholly linear, i.e. they can be co-occurring and inform each other.

CA, therefore, begins with an account of the cause-effect to be explored where the focus is on the 'plausibility' of the relationship being suggested given the size and reach of the activity in question. Thereafter CA is based on a theory of change. That is to say a broad 'big picture' theory which focuses on how particular outcomes might be achieved. In addition, some applications consider more micro-level 'logic models' for particular activities, showing a results chain which links inputs and outputs with outcomes.

1.7.2 Recruitment, sampling and activity completed

A summary of study methods, recruitment, sampling and activity completed is presented in the table below. Fieldwork activities took place between October 2024 and February 2025.

Table 3. Summary of study methods, recruitment, sampling and activity completed

Method	Description/justification	Number
Review of all DLS programme and project documentation/ evidence	Enabled mapping of programme activity against the logic model. Provided comprehensive context and implementation insight across all sites to inform contribution analysis.	• N/A
Participation in monitoring calls	Gave evaluators access to real-time delivery updates and service-level reflections, helping to identify emerging themes and site-specific adaptations.	• N=**6**
Key stakeholder interviews	Chosen for depth over breadth to capture early strategic and operational perspectives, clarify assumptions, and inform the development of the theory of change.	• N=**5**
Theory of change and logic model working group	Used to build consensus around evaluation outcomes. Involving both programme and delivery partners helped ensure contextual relevance and practical utility.	• **Three** 90 minute sessions were held with four key stakeholders (**2 x DLS programme team and 2 x DLS delivery partners**)
Co-production consultations	Delivered with participants and digital champions to co-design meaningful outcome measures. Workshops supported inclusive practice and enhanced tool feasibility and acceptability.	• Two sessions were conducted with a total of **14** DLS participants and digital champions.
DLS participant focus groups	Focus groups were selected over individual interviews to foster peer dialogue and comfort, which was important for participants with shared lived	• Five focus groups took place with a total of **37**

Method	Description/justification	Number
	experience. This method enabled rich exploration of how digital inclusion intersected with recovery, risk, and service access, and helped validate findings from other sources.	individuals/digital champions.
Surveys	DLS participant and professionals' surveys covered all outcomes defined by the theory of change. These provided additional evidence and drew light on risk reduction, stigma, and joint working, not covered by other evidence gathering approaches.	• DLS participant survey (n=**31**) • Early Adopters survey (n=**5**) • Professionals survey (n=**18**)
Text message 'real-time' weekly DLS participant survey	Short-form weekly questions offered a novel and accessible way to capture timely feedback from participants across four delivery sites. Designed to overcome engagement barriers in traditional formats, it provided a mix of brief qualitative and quantitative data to complement other tools.	• N=**9**
Sustainability interviews	Targeted interviews with senior delivery personnel provided insight into the longer-term influence of DLS on digital strategy, workforce confidence and service design. This method was selected to elicit high-level reflections not easily captured through routine monitoring.	• N=**5**

1.7.3 Ethics

Ethics approval for the project was received from Wrexham University Research Ethics Committee (ID1026, dated 26/02/2024).

1.8 Structure of the report

The report is divided into three key parts:

- The first (**Chapter 2**) provides an overview of the development of the evaluation theory of change and logic model, utilising a CA framework.
- The second (**Chapters 3 to 6**) presents the 'performance story' of the DLS programme and is split into four sections – programme starting points, inputs, outputs, and outcomes.
- The third (**Chapters 7 to 8**) provides a discussion of the evaluators study conclusions and includes a set of recommendations for consideration by a range of practice, policy and lived and living experience stakeholders.

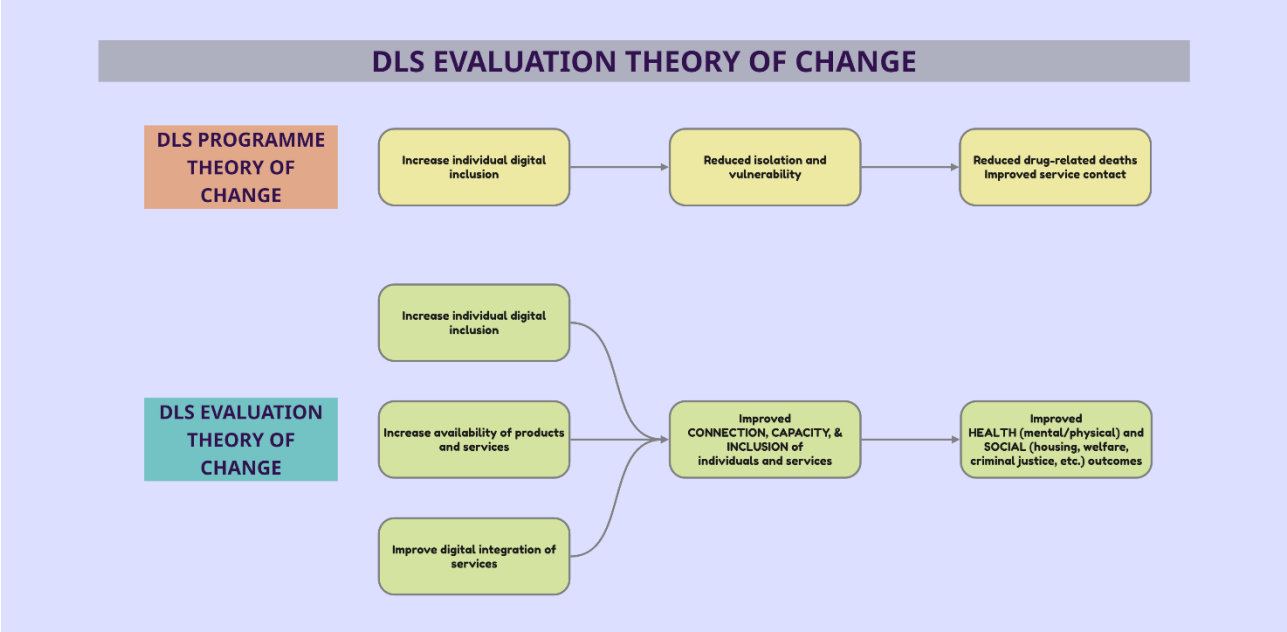
CHAPTER 2: The DLS theory of change and evaluation logic model

2.1 DLS theory of change

In following Mayne's six-step CA model (as outlined in Chapter 1 above), the starting place is to develop a reasoned theory of change. In essence this means the evaluation takes the given core premise or assumption as the starting point or scaffold for the study.

In discussion with key DLS personnel, it was clear that the starting premise for the DLS programme was that the harms associated with drug use can be reduced through increasing individual digital inclusion, which is turn results in reduced isolation and vulnerability for individuals who are currently digitally excluded. This presupposition is summarised as the 'DLS programme Theory of Change' in Figure 1 below.

Figure 1. Initial programme theory of change (developed by DLS) and subsequent evaluation theory of change (co-designed by Figure 8 with key DLS personnel and stakeholders)



For the purposes of the evaluation, this programme theory of change was explored within a short-life working group (comprising the evaluators along with two members of the DLS programme team and two key representatives of the main DLS delivery partners). In so doing, the theory of change was enhanced to a more evolved results chain (i.e. a visual diagram of a programme's theory of change), which is also shown in Figure 1 below. The core assumption of our evaluation theory of change is that improved health and social outcomes can be experienced by individuals at risk of drug-related harms or death. This is achieved by increasing digital inclusion along with increasing the availability of (digital) products and services and improving the digital integration of services, which in turn leads to improved connection, capacity, and inclusion of both individuals and services.

The ultimate aim of our evaluation is to make some credible claims about this proposed chain of events. The claims of credibility derive from:

- Evidence that planned activities actually took place (i.e. Was the DLS programme implemented and followed as planned?)
- Analysis, through multiple data sources, of expected (and unexpected) results (i.e. Has the programme delivered the type of results that were expected?)
- Accounts of other influencing factors on the results observed (i.e. Have other (external) factors been taken account of in terms of the effect they have on the ability of DLS to realise the expected results of the programme? What else may account for the observed results other than the DLS programme).

2.2 DLS evaluation logic model

Following development and agreement of the evaluation theory of change, the short-life working group then co-designed a working logic model for the evaluation. The logic model would then be used to inform the development of all data collection tools for the evaluation and ultimately used to provide the coding framework for analysis of all primary and secondary evidence sources.

The full evaluation logic model is a complex diagram. It has not been possible to include this as an image within this report. However, for anyone interested, it is available here. For the purposes of this report, we have included a simplified version of the Logic Model in **Figure 2** below.

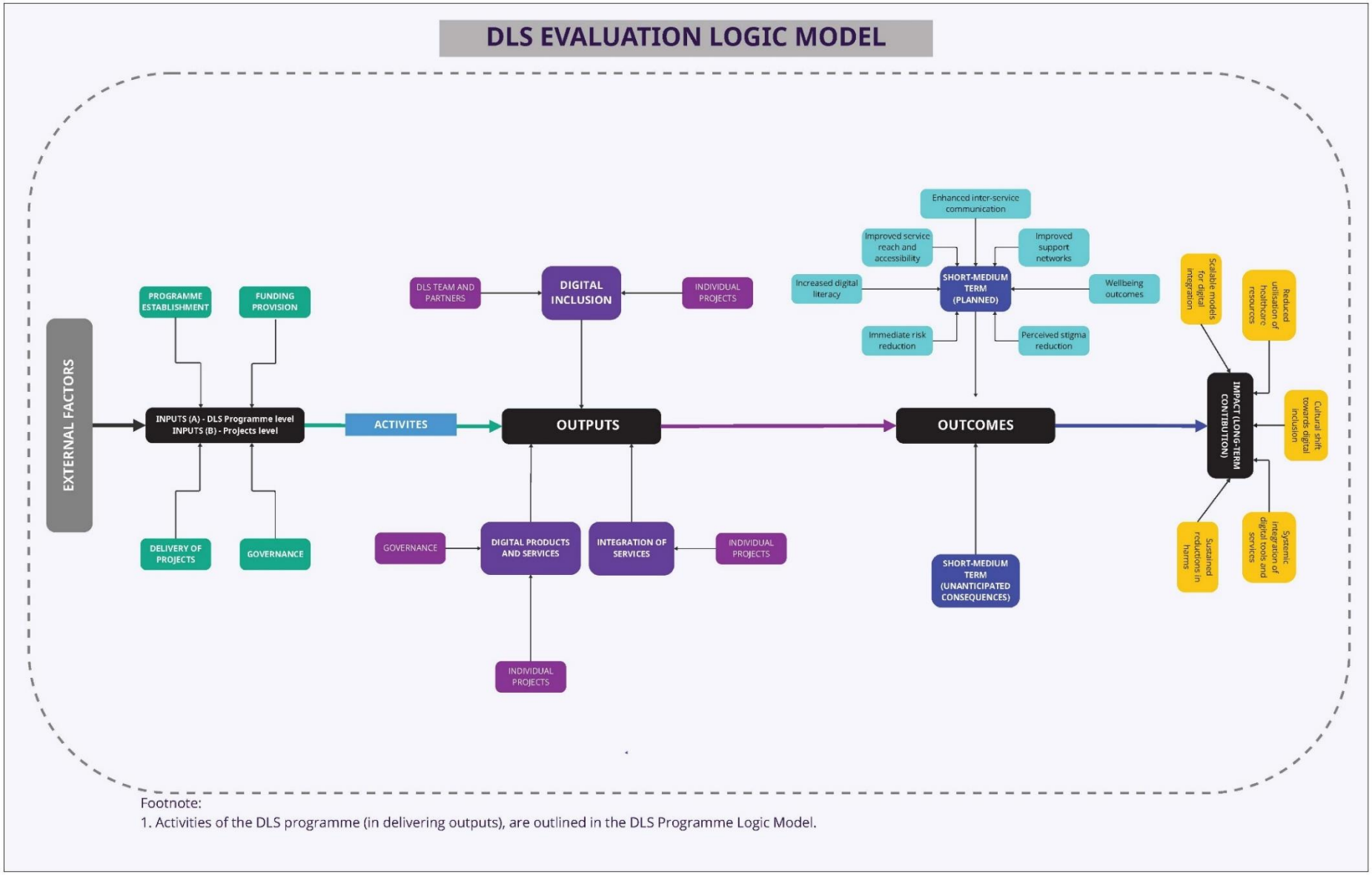
The full evaluation logic model illustrates the underlying logic and assumptions about how and why the DLS programme is expected to lead to desired changes. It maps the sequence of steps from the existing context and identified needs through to long-term impact, showing the pathway of change.

To interpret the simplified logic model in this report (**Figure 2** below):

- **Inputs and activities** refer to the resources and actions that are implemented to drive change (e.g., funding, staffing, training, outreach).
- **Outputs** are the tangible products or immediate results of these activities (e.g., services delivered, participants engaged).
- **Outcomes** are the immediate and systemic changes that develop over time – both those changes that are planned and those that are unanticipated consequences of the programme.
- **Impact** identifies the long-term contribution that the DLS programme is making to broader and sustained changes to individuals, communities, and systems.
- **External factors** are elements outside the programme's control that could influence its success (e.g., economic trends, policy changes).

The logic model should be read as a dynamic framework rather than a fixed blueprint. It helps clarify the rationale behind the programme and supports reflection on whether, how, and why change occurs.

Figure 2. DLS simplified evaluation logic model



CHAPTER 3: The DLS performance story – starting points

Contribution Analysis [CA] requires the evaluators to analyse all evidence sources to then lay out the 'performance (contribution) story' of the programme being evaluated. The following four chapters have been constructed to tell the performance story of DLS to date. We will begin by laying out the starting points and considerations for the performance story. We will then layer onto these starting points the performance of DLS regarding the programme inputs (Chapter 4), outputs (Chapter 5), and finally the programme outcomes (Chapter 6).

3.1 Introduction to DLS

The DLS programme was developed as a strategic response to the intersection of Scotland's drug-related deaths crisis and digital exclusion amongst vulnerable populations. Established as a collaboration between the Technology Enabled Care Programme (Scottish Government Digital Health and Care), Connecting Scotland, and stakeholders such as the Drugs Deaths Taskforce (DDTF), DLS aimed to tackle systemic inequalities through digital transformation. Informed by evidence from programmes such as ODART and Connecting Scotland, DLS sought to address gaps in service access, engagement and reduce the harms associated with drug use for people with complex needs.

3.1.1 Objectives

The primary objectives of the DLS programme were to:

- Address digital exclusion amongst people who use drugs by providing devices, connectivity, and digital skills training.
- Leverage digital technologies to enhance harm reduction efforts, including naloxone access and overdose detection tools.
- Create innovation and collaboration across health, justice, and social care sectors.
- Reduce barriers to service access, particularly for individuals in remote or underserved areas, through remote addiction consultations.
- Incorporate person-centred and trauma-informed approaches, ensuring that lived and living experiences shape the design of digital solutions.

3.1.2 Innovative approach

The DLS programme has represented a pioneering initiative in testing the hypothesis that digital inclusion can transform service delivery and outcomes for people who use drugs. Building on lessons from earlier programmes, it has emphasised a user-centred design that integrates privacy, autonomy, and collaboration. By aligning diverse stakeholders, including a wide range of third-sector organisations and healthcare providers, DLS has promoted a collective approach to addressing drug-related harms. The programme's focus on embedding digital inclusion within broader systemic change has illustrated its innovative approach to tackling Scotland's most pressing public health challenges.

This foundation sets the stage for exploring how the DLS programme has operationalised these principles to create impactful and sustainable change for Scotland's most vulnerable populations.

3.2 Digital exclusion and addressing acute risk of drug use

The rationale for the DLS programme, underpinning the aforementioned evaluation theory of change (see **Chapter 2**), is that social inequalities, including digital exclusion, from supports and services, leads to less desirable outcomes. In outlining the 'performance story' of the DLS programme, it is therefore important to start by contextualising the Scottish landscape regarding social inequalities, digital exclusion and the harms associated with drug use.

The Scottish Council for Voluntary Organisations (SCVO), a key DLS delivery partner, defines digital inclusion as ensuring that everyone has the opportunity to be digitally included. This encompasses fair and equitable access to affordable digital technology and data, removing barriers so that all individuals can access skills development opportunities to participate online safely and confidently, and ensuring that those who are not digitally skilled (or choose not to engage digitally) can still access services provided as 'digital by default' without being disadvantaged.

Digital exclusion exacerbates social inequalities in Scotland, especially among marginalised groups affected by poverty, age, disability, and rural isolation. Although 91% of households and 90% of adults are online, only 69% of low-income households are connected compared to 99% in higher-income households (Lloyds Bank, 2023; Scottish Government, 2023). This gap deepens isolation and limits access to essential services, education, and employment, critically impacting people who use drugs (Audit Scotland, 2024; Ofcom, 2023).

Scotland faces major public health challenges among those with overlapping vulnerabilities such as drug use, homelessness, and incarceration. In 2020, 41% of drug-related deaths were linked to critical life events, like homelessness, bereavement, or being liberated from prison, with over half involving underlying medical issues and nearly half psychiatric conditions (Public Health Scotland, 2024). Homelessness and incarceration further drive high mortality rates, while transitions from custody or hospitals are especially risky due to inconsistent support (Public Health Scotland, 2023, 2024; Hatcher et al., 2019; Gilling McIntosh et al., 2019; Perkins et al., 2019). Fragmentation across services and resource constraints further hinder coordinated care; only 19% of opioid-related deaths had known naloxone availability (Gilling McIntosh et al., 2019; Public Health Scotland, 2024; Perkins et al., 2019).

DLS addresses these gaps by providing devices, connectivity, and digital skills training and funding research into managing acute risk of overdose and drug-related death. Flexible engagement models, including digital drop-ins, helplines, and one-to-one digital champion support, reduce isolation, improve access to harm reduction information and healthcare, and empower individuals to manage their wellbeing (Scottish Government, 2022a, 2022b, 2023; Simon Community Scotland, 2018). Integrating digital solutions is thus essential for mitigating risk, enhancing service engagement, and improving health outcomes among Scotland's most vulnerable populations.

3.3 Addressing digital inclusion for people who use drugs means improving drug-related, and wider health and social outcomes

Early work indicates that digital inclusion for people who use drugs has the potential to improve drug-related outcomes by ensuring consistent access to harm reduction information, treatment options and recovery resources. Preliminary findings suggest that user-focused digital tools, supported by personalised guidance from digital champions, may help individuals navigate services, access safe injecting and mental health resources, and receive real-time advice (Simon Community Scotland, 2018). In parallel, Matheson et al. (2019) suggest that tele-healthcare

solutions, such as apps and wearable devices, can uniquely reach vulnerable groups and deliver critical overdose and crisis support information.

Digital platforms also appear to improve engagement with services by enhancing communication between people who use drugs and healthcare providers. Pilot studies indicate that smartphone distribution, combined with digital champion support, may help users maintain contact with support workers, schedule appointments, and join recovery networks (Matheson et al., 2019; Brown et al., 2020). This early evidence points to the potential of flexible engagement models, such as digital drop-ins and helplines, to enable individuals to manage their recovery with greater autonomy.

Moreover, initial work suggests that digital inclusion initiatives may contribute to wider health and social care outcomes by supporting holistic wellbeing. Telehealth interventions have potential to offer accessible support for anxiety and depression (Matheson et al., 2019; Daneshvar et al., 2022; Oteo et al., 2023), while digital tools facilitate access to recovery meetings, employment resources, and educational opportunities. The SCS pilot's 'Quick Wins Framework' (Simon Community Scotland, 2018) demonstrated that targeted training in smartphone use could help users register for benefits, complete online applications, and stay connected with support networks. Additionally, online services offer anonymity and privacy, potentially reducing stigma and fostering confidence as individuals learn to navigate digital spaces safely.

In summary, early work indicates the potential of digital solutions to improve drug-related outcomes by expanding access to harm reduction and recovery resources, enhancing engagement with health and social services, and reducing stigma through empowerment and improved communication. The remaining report further describes how these initial findings inform ongoing developments within the DLS programme.

3.4 The potential for DLS to contribute to knowledge, understanding, and addressing of drug-related harms (in a Scottish context)

DLS is well positioned within Scotland's evolving harm reduction and recovery practice and policy landscape.

Initiated following the 2018 *Rights, Respect and Recovery* strategy (Scottish Government, 2018) and reinforced by the DDTF which was established in 2019 (Scottish Government, 2019), DLS uses digital inclusion to avert acute overdose risk and improve recovery outcomes. The 2021 MAT standards (Scottish Government, 2021) emphasise the need for timely access to care, whilst the National Mission on Drugs (Scottish Government, 2021) recognises digital connectivity as essential for reducing drug-related harm. DLS provides devices, connectivity, and digital skills training to enable access to online harm reduction services, peer support, and treatment resources.

Figure 3. Timeline of Scotland's recent drug policy

In parallel, recent human rights approaches (Scottish Government, 2022, 2023) advocate service access as a fundamental right and a new human rights bill for Scotland is intended to be enshrined into Scots law in 2026. This reinforces the role of digital solutions in an increasingly digital service landscape, both mitigating overdose risk and ensuring equitable access to essential services.

3.5 What DLS set out to do

3.5.1 Introduction: Addressing digital exclusion in harm reduction and recovery

DLS was launched in response to the urgent need for improved digital access amongst people who use drugs, particularly those at high risk of drug-related harm. The initiative recognised that digital exclusion exacerbates barriers to harm reduction, healthcare, and recovery services. By leveraging technology, DLS aimed to reduce overdose risk, enhance engagement with health and support services, and support long-term digital inclusion.

The programme built on existing digital inclusion models, such as Connecting Scotland, which had demonstrated that providing devices, connectivity, and digital skills support could improve access to vital services. However, DLS aimed to tailor this approach specifically for individuals facing compounded barriers, including homelessness, criminal justice involvement, and complex health conditions.

DLS was set to focus on embedding digital tools, platforms, and support mechanisms within harm reduction and recovery settings, ensuring that technology was not only available but actively facilitated meaningful engagement with services.

3.5.2 Programme activities

The DLS programme has employed a multi-faceted approach to improving digital inclusion, incorporating four core activities:

1. Provision of digital devices and connectivity
    - Distribution of smartphones, tablets, and connectivity packages (e.g. SIM cards, MiFi) to individuals at risk of harm.
    - Targeted interventions within homelessness services, criminal justice settings, and recovery organisations to ensure those most in need could access technology.
2. Digital skills development and support
    - Training and certification of digital champions, drawn from forward-facing staff and volunteers, to provide ongoing, embedded support.
    - One-to-one and group-based digital literacy sessions to ensure participants could navigate health and harm reduction resources.
3. Funding academic research and industry innovation
    - Supporting the design, development, and evaluation of digital platforms, applications, and devices tailored to people who use drugs.
    - Focused investment in harm reduction technologies, including real-time overdose alerts, peer support networks, and telehealth integration.
4. Embedding digital tools within services
    - Partnering with existing services to integrate digital solutions into harm reduction, healthcare, and social care pathways.
    - Ensuring sustainability by aligning digital initiatives with national MAT Standards, the National Mission drug and alcohol strategy, and broader digital inclusion agenda.

Through this approach, DLS ensured that digital inclusion extended beyond mere access, providing the tools, skills, and service integration needed for long-term engagement.

3.5.3 Target population: Reaching those most at risk

The DLS programme has prioritised individuals facing acute digital exclusion, and groups already marginalised from mainstream health and social care services. Specifically, the programme has targeted:

- **People experiencing homelessness**, particularly those in temporary accommodation/roofless.
- **Individuals with a history of drug-related harm**, including those in recovery or at high risk of overdose.
- **People with complex support needs**, such as mental health conditions, learning disabilities, or involvement in the criminal justice system.
- **Forward-facing service providers and digital champions**, ensuring a network of ongoing support for individuals.

This focus has enabled digital inclusion efforts to directly support harm reduction, recovery, and broader wellbeing outcomes.

3.5.4 Expected outcomes: What DLS aimed to achieve

Whilst there was no specific theory of change at the outset of the programme, what follows is highly consistent with the vision which inspired DLS. The following outcomes were instead agreed upon and retrospectively applied as a means to evaluate the programme. Four theory of change workshops were undertaken, led by the evaluation team and featuring key programme staff and partners. DLS set out to generate measurable short-medium term and long-term impacts, improving both individual well-being and systemic digital integration.

3.5.5 Short-medium term outcomes

1. **Enhanced inter-service communication**
    - Digital tools improve communication between support services and individuals, reducing missed appointments and increasing engagement.
2. **Improved service reach and accessibility**
    - Individuals gain access to harm reduction resources, telehealth, and social services that were previously inaccessible due to digital barriers.
3. **Increased digital literacy**
    - Individuals develop skills to use digital tools effectively, improving independence in navigating services.
4. **Improved well-being**
    - Access to digital tools reduces social isolation, supports mental health, and enhances self-efficacy in managing recovery.
5. **Strengthened support networks**
    - Digital platforms enable individuals to connect with peer recovery communities, encouraging ongoing engagement and resilience.
6. **Immediate risk reduction**
    - Overdose prevention technologies and real-time digital interventions increase access to life-saving harm reduction support.
7. **Perceived stigma reduction**
    - Private, digital access to recovery and harm reduction services allows individuals to engage without fear of judgement.

3.5.6 Long-term impact: Contributing to systemic change

The DLS programme also aimed to shift the structural landscape of digital inclusion within harm reduction and recovery services, contributing to:

1. **Reduced utilisation of health and care resources**
    - Increased engagement in preventative and community-based care reduces demand on emergency and crisis services.
2. **Scalable models for digital integration**
    - Lessons from DLS inform policy and funding frameworks, supporting digital expansion in harm reduction settings across Scotland.
3. **A cultural shift towards digital inclusion**

- Digital access becomes embedded as a fundamental component of harm reduction and recovery strategies.

4. **Systemic integration of digital tools and services**
   - Telehealth, harm reduction apps, and digital platforms become standard components of health and social care provision.
5. **Sustained reductions in harm**
   - By ensuring ongoing digital inclusion, DLS contributes to long-term improvements in overdose prevention, engagement, and recovery outcomes.

CHAPTER 4: The DLS performance story – Identifying whether the DLS programme was delivered as planned (programme and project-level INPUTS)

4.1 Inputs: laying the foundations

The DLS programme was designed to reduce digital exclusion amongst people who use drugs, ensuring equitable access to digital tools and services. Programme-level inputs included project establishment, funding, governance, and strategic coordination, creating a structured yet adaptable framework. Monitoring data, interviews, and documentation (e.g., contracts, financial records, and governance reports) from the programme SharePoint confirm how these inputs shaped the programme's scope, operations, and partnerships.

4.2 Programme establishment

Strong foundations were laid through strategic planning, stakeholder engagement, and staff recruitment, providing direction and develop collaboration.

4.2.1 Developing project plans and timelines

Project plans established *'who our key stakeholders were'*, *'what governance we needed',* stakeholder roles, and strategic milestones. Early planning ensured coordination, whilst governance structures and milestone charts show how flexibility was built in to manage challenges like changing public health guidelines during the pandemic of 2020-21.

4.2.2 Stakeholder engagement meetings

Stakeholders were '*identified very rapidly'* and ongoing engagement with SCVO, DRNS, Connecting Scotland, and third-sector organisations strengthened collaboration. These discussions enabled DLS to align with existing DDTF projects, increasing impact. Meeting minutes and partnership agreements document how these conversations shaped programme strategy.

4.2.3 Recruitment of project staff

DLS prioritised recruiting staff with expertise in digital inclusion, harm reduction, and community engagement. Relevant and *'targeted conversations'*, human resource records, and job descriptions highlight efforts to ensure new hires had the necessary skills to work effectively with marginalised groups.

4.3 Funding provision

DLS secured funding from multiple sources, using a mix of planned and opportunistic funding to scale interventions. Documentation confirms careful financial oversight, ensuring resources were allocated effectively.

4.3.1 Grant applications and management

The impetus to scale up digital interventions was, in part, driven by '*opportunistic*' and flexible funding '*for work in this area*' already underway. Resources were directed towards strategic initiatives like the Simon Community Scotland minimum viable product development of the 'By My Side' app. Financial tracking sheets and grant reports show how funds were managed, ensuring accountability through milestone-based disbursements and performance monitoring.

4.3.2 Contract negotiations and management

Contract management ensured smooth partnerships, with records confirming DLS engaged external providers, finalised scopes of work, and upheld contractual obligations. Documentation shows partners operated under shared principles with clear roles and deliverables.

4.3.3 Financial oversight and compliance

Audited statements, compliance reports, and oversight minutes confirm DLS maintained financial rigour whilst deploying resources efficiently. Transparent fund allocation helped to build trust amongst current and potential funders, reinforcing accountability.

4.4 Delivery of projects

As the plan and funding streams took shape, DLS turned its attention to the practicalities of delivering digital inclusion projects on the ground. The logic model breaks this domain into several sub-categories, including co-design, collaboration, timely execution of deliverables, and project coordination.

4.4.1 Co-design and collaboration

DLS staff prioritised digital harm reduction champion training delivered by the Mhor Collective (session topics included benefits, the teaching of digital skills, principles of harm reduction, practical barriers to inclusion, online risks, etc). The development of a '*practical playbook*' that covers a variety of topics, was created in collaboration with local providers. Co-design spanned both programme and project levels, ensuring digital tools met real-world needs. These collaborations tailored solutions for people who use drugs and other at-risk groups, addressing stigma, connectivity barriers, and complex needs. Meeting notes and individual feedback confirmed ongoing adaptation based on community input.

At the project level, monitoring showed that local partnerships were key to reaching isolated individuals and aligning digital support with real-world challenges. R&D found similarly, that continued co-design strengthened usability, trust, and responsiveness to limited device access issues and harm reduction priorities.

4.4.2 Execute project deliverables by timeline

DLS systematically met milestones, including device distribution and the development of a *community of learning* where '*sharing challenges*' was seen as key to building capacity. A phased approach allowed early adopters to pilot, refine, and inform wider rollout. Interviews highlighted that openness about failures aided to '*find solutions faster*' and accelerated collective learning. Distribution logs, attendance records, and evaluations confirmed deliverables were met effectively.

Each project had to coordinate procurement, staffing, and rollout, often facing delays, but flexibility (e.g., re-budgeting, new partnerships) helped resolve them. Regular check-ins and cross-agency links addressed bottlenecks (e.g., contracts, phone prep, volunteer training), ensuring projects stayed on track.

4.4.3 Project coordination and regular updates

Regular partner updates and coordination kept the programme aligned with strategic goals. Routine meetings, workshops, and the communities of learning tracked progress and tackled key issues like data privacy and partner alignment. Progress reports, agendas, and outcome logs show how these sessions refined guidance and updated timelines. Beyond formal monitoring, consistent check-ins and evaluations ensured ongoing communication with participants, staff, and Alcohol and Drug Partnerships, allowing projects to adjust and stay on course.

4.5 Governance

Governance within DLS encompassed strategic planning and oversight, performance monitoring, and stakeholder engagement. By establishing clear leadership structures and processes of accountability, DLS maintained both momentum and flexibility across its multifaceted activities. A cross sector DLS Portfolio Board was established at the outset with formal reporting lines to Digital Health and Care and governance within the Scottish Government.

4.5.1 Strategic planning and oversight

Interviewees highlighted the challenge of balancing structure with adaptability:

> *'You're combining the need to think ahead and have some structure… with the flexibility to adjust as you go'*

Regular reviews of project plans ensured progress whilst avoiding rigid bureaucracy. The logic model reinforced how strategic planning connected every input to the goal of reducing digital exclusion. Meeting minutes and planning documents show how decisions were made and new directions approved. Though oversight varied across local organisations, multi-agency groups, and leadership teams, the focus remained on embedding digital inclusion into standard practice. Research projects also aimed to integrate digital solutions into long-term care for people who use drugs.

4.5.2 Performance monitoring

Feedback loops, '*pulling these people together'* and reflective evaluations were key to DLS's approach and aim of all '*trying to collect the same information*.'

By creating 'safe spaces' for sharing data and lessons, DLS reduced duplication and improved resource use. Evaluation checklists, dashboards, and workshop reports show how this '*discovery work*' informed planning.

Projects tracked immediate outcomes, like benefit access and reduced isolation, but lacked long-term data on skill retention and service engagement. Both research and development initiatives used structured monitoring, combining qualitative data and usage statistics, to refine strategies throughout the project.

4.5.3 Stakeholder engagement

Engagement extended beyond partnerships to include '*conversations with other funders,'* and collaboration with government and third-sector bodies. This approach framed digital inclusion as a shared priority rather than a standalone project. Multi-agency strategies and cross-funder roundtables show DLS promoted collaboration over competition.

Involving forward-facing services and local partners improved device distribution, follow-ups, and training. Peer mentors played a key role in reaching marginalised individuals. Engaging stakeholders at multiple levels, individuals, professionals, and policymakers, ensured projects remained relevant and adaptable to harm reduction needs.

4.5.4 Risk management and compliance

DLS embedded risk management into governance through structured processes like risk registers, formal assessments, and compliance protocols. This balance between ambition and operational limits helped maintain progress whilst addressing potential challenges. Risk management focused on device accountability, re-engagement when phones were lost, and ensuring staff coverage. Whilst formal compliance frameworks were less prominent, training and local processes helped mitigate operational risks.

Research projects navigated legal and ethical risks, particularly around supervised drug use, user privacy, and oversight. Stakeholder trust and technical compliance were critical in sustaining digital harm reduction efforts.

4.6 Appeals to documentation for a complete picture

Across all these inputs, the monitoring data, research reports and stakeholder interviews provide illuminating insights into how the programme's architecture took shape. However, several sub-categories in the logic model, particularly around contract management, financial oversight, and risk management, were not explicitly detailed in stakeholder discussions at the programme-level. Nevertheless, comprehensive evidence available in formal DLS documentation closes these gaps:

- **Completeness:** A robust summative evaluation has accounted for all major elements of the logic model. Whilst interviews can help interpret how these elements played out on the ground, official records can corroborate or refine these personal accounts.
- **Verification:** Documentation such as financial audits, compliance reports, and contractual records serve as objective artefacts confirming the structures and safeguards that DLS put in place.
- **Learning:** By examining official risk management strategies or contractual agreements in detail, evaluators can identify potential best practices or lessons for future digital inclusion programmes, both within Scotland and further afield.

4.7 Weaving towards outputs and outcomes

Collectively, the inputs described above paves the way for a series of tangible outputs, such as digital champion training initiatives, device distribution schemes, co-designed applications, and strategic frameworks, and for the short, medium, and long-term outcomes that DLS aimed to achieve. By establishing strong governance mechanisms, thorough project planning, sound

financial structures, and meaningful collaboration, DLS created the enabling environment necessary for these outputs to take root and flourish.

Without robust inputs, activities and outputs risk being uncoordinated, underfunded, or insufficiently embedded in community realities. With them in place, DLS was able to address digital exclusion in a more systematic, coherent manner.

4.8 Concluding reflections on inputs

The performance story of DLS's inputs shows a programme that balanced structured planning with adaptability. Strong governance provided stability, whilst collaboration, reflective practice, and flexible funding enabled responsiveness to emerging needs.

Key highlights include:

- **Solid foundations:** Engaging stakeholders, aligning timelines, and recruiting targeted staff underpinned all achievements.
- **Integrated partnerships:** Collaborations with SCVO, DRNS, and Simon Community Scotland, alongside funders, reinforced problem-solving.
- **Financial and contractual agility:** Opportunistic funding, well-managed contracts, and financial oversight enabled rapid scaling.
- **Commitment to learning:** Performance monitoring and learning communities ensured continuous improvement.

DLS's structured, well-documented inputs created a strong foundation for outputs and outcomes. By incorporating financial compliance, risk management, and contract negotiations, this report provides a comprehensive account of how DLS has become a key driver of digital inclusion in Scotland.

CHAPTER 5: The DLS performance story – Identifying whether the DLS programme was delivered as planned (programme and project level OUTPUTS)

5.1 DLS team and partners

The DLS digital dashboard identifies a range of programme outputs, the headline numbers of which are presented in Figure 4 below, with further details provided in the remainder of this chapter.

Figure 4. DLS programme outputs infographic

5.1.1 Training and certification of digital champions

A core objective has been to train and certify digital champions drawn from local services, volunteers, and forward-facing staff. Programme figures confirm:

- **140 digital champions** have been trained successfully
- **394 staff/volunteers** have received varying levels of digital literacy support

Digital champions have served as on-the-ground troubleshooters, building confidence and sustainable digital engagement. Training curricula, completion registers, and participant feedback forms have helped to substantiate the quality and relevance of this capacity-building.

5.1.2 Registration and tracking of participant involvement

DLS maintains a dashboard with **5,502** individuals supported to date, categorised across key demographics:

- **3,048** experiencing homelessness
- **2,037** in custody
- **417** discharged from hospital and residential services

Each funded project applied bespoke monitoring systems to record participant data, which then feed into a consolidated dataset. This multi-level tracking has helped to ensure accurate oversight and strategic targeting of resources.

5.1.3 Preparation of reports

Projects have been required to submit regular monitoring and evaluation reports, summarising:

- Allocation of resources (e.g. device distribution, training hours).
- Types of interventions offered.
- Challenges encountered and emerging solutions.

These are collated into periodic fund reports by the DLS leadership, offering both granular insights and overarching trends.

5.1.4 Completion of financial expenditure reports

All funded partners have complied with DLS's accounting framework, providing milestone-based expenditure reports. At the time of writing, the programme dashboard reflects **£1,496,192.80** across **45** awards, with potential for audited statements or compliance checks to help verify resource usage.

5.1.5 Collection and analysis of monitoring data

DLS collected and analysed diverse data:

- Participant demographics (e.g. age, risk factors).
- Device distribution logs (including connectivity packages).
- Anonymised case studies and project level experiential data.
- Feedback from champion-led training.

Key indicators, such as usage amongst those facing homelessness or in custodial settings, have contributed to some flexible and timely decision-making. Where challenges have arisen, such as low engagement in a specific region, DLS has realigned resources to help address unmet needs and enhance training content.

5.1.6 Deployment and support of digital champions

Following certification, digital champions have been deployed in hostels, prisons, and healthcare settings, bringing real-time tech support to individuals using services. Regular check-ins have helped to reinforce champion competency, and best practices have been shared across sites, contributing to greater consistency of digital engagement strategies.

5.1.7 Delivery of training

Beyond initial certification, DLS has conducted:

- Refresher sessions (webinars, group training).
- Specialist workshops (e.g. data protection, advanced telehealth tools).
- Inductions for newly recruited staff.

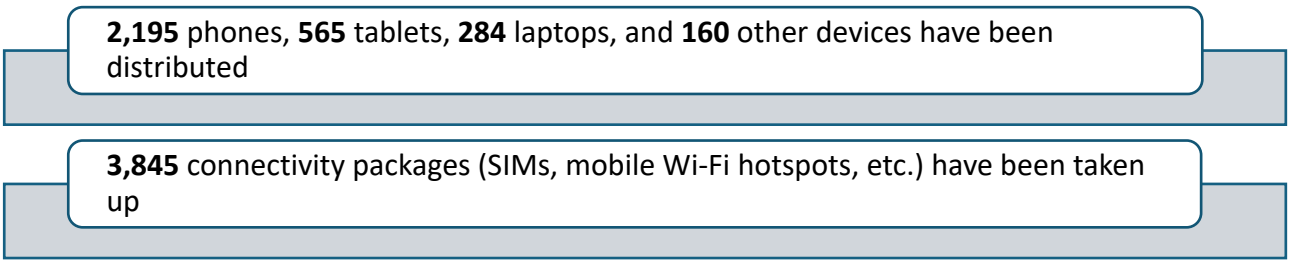
Attendance lists and participant evaluations have evidenced ongoing workforce development, complementing the digital champion model regarding its adoption and potential for sustainability.

5.2 Digital inclusion

5.2.1 Distribution of resources to stakeholders

A principal output under digital inclusion is the provision of devices and connectivity to forward-facing services. Programme-level data indicates that:

Quick-start manuals and tutorials have accompanied each device, helping individuals to get online swiftly. Tailored guidance (including large print, multiple languages, or step-by-step visuals) has also been made available to help accommodate varying literacy needs.



5.2.2 Distribution logistics, planning, and execution

Distribution has evolved through phased implementation, allowing DLS to refine how devices have been received, tracked, and delivered. Ongoing coordination calls have helped to pre-empt bottlenecks, such as supply mismatches or SIM activation delays, which have led to improvements in the programme's logistical efficiency.

5.2.3 Training and certification of digital champions

The digital inclusion stream has reaffirmed digital champion training whilst also emphasising engagement. Many champions have specialised in guiding vulnerable groups through basic digital tasks. This has extended device usage beyond a simple handover.

5.2.4 Delivery of training

Partner organisations and champions have held one-to-one or group sessions teaching core digital skills, such as:

- Creating email accounts
- Navigating telehealth platforms.
- Using harm reduction apps.

Participants have often cited reduced stigma and increased confidence as some of the key benefits. Project-level outcomes data suggest that these training interventions have facilitated greater uptake of online health services, job searches, and social connections.

5.2.5 Inventory management of digital devices

An inventory management system has monitored each device's unique ID, distribution date, and condition updates. This has helped to mitigate losses, enable controlled reallocation, and has provided data on real-world device usage lifespans, all of which is important for funders to help assess impact and return on investment.

5.2.6 Engagement analytics and reporting

Engagement analytics have captured how individuals have interacted with digital services, from telehealth check-ins to social support apps. Periodic data has summarised highlight usage patterns (e.g. daily logins, time spent on calls) and individual wellbeing improvements (where measurable). This approach has not only evidenced immediate impact but has also guided refinements in distribution and training strategies.

5.3 Digital products and services

5.3.1 Evaluation reports per product and service

The table below identifies the main learning derived from the evaluations of three core digital products and services.

Table 4. DLS products and services – evaluation learning points

Pilot (lead)	What the evaluation shows	Main lessons for scale-up
By My Side	A mobile portal can combine harm-reduction content with local service navigation and peer-support pathways.	Linking to national directories (e.g. ALISS) reduces maintenance; a longer-term outcome study is still required.
Here4U	An app-based "virtual spotter" model offers discreet overdose monitoring and rapid emergency response within existing services.	Uptake depends on agreed data-privacy rules and service/provider confidence in clinical-governance frameworks.
TMAT-OLE	Tele-consultations, remote prescribing and mobile overdose-prevention units can extend Medication-Assisted Treatment (MAT) to rural or mobility-restricted populations.	Digital-literacy support, clear prescribing governance and NHS system interoperability are essential.

Findings have been shared with DLS partners and inform ongoing programme guidance.

These digital innovations have expanded harm reduction services, improved crisis response, and informed future service developments, with selected findings contributing to policy and academic research.

A portion of these findings have been (or will be) published in peer-reviewed journals, supporting an academic basis for subsequent DLS expansions. Each project's final evaluation report will feed into the DLS knowledge base, forming the backbone for future pilot designs and policymaking.

5.3.2 Audited financial reports

Funding for app development, platform enhancement, and related services has been subject to routine auditing. Project budgets have detailed how resources are allocated (e.g. developer fees, hosting costs, device procurement), contributing to alignment with DLS's scope and financial transparency. These audits have also encouraged future collaboration and investment from external partners.

5.3.3 Data sharing agreements

Where projects have integrated external services (e.g. local authority directories or supervised consumption apps), data sharing agreements have helped to address confidentiality and GDPR compliance. This helps to ensure user data is protected whilst allowing essential cross-partnership information flow.

5.3.4 Developed and tested applications

The DLS programme has facilitated the development, testing, and iterative enhancement of several digital tools, often in parallel with device distribution. Examples have included:

- **By My Side** – web app offering short harm-reduction videos/animations and a real-time 'check-on-me' timer, plus links to local services.
- **Here4U** – smartphone app providing timed prompts for safer use and, if unanswered, an automatic alert to nominated responders.
- **TMAT-OLE toolkit** – co-designed platform for secure video MAT consultations, remote prescribing and risk-identification workflows.

Each Minimum Viable Product was iteratively refined through user testing and feedback sessions during the evaluation period.

Together, these ready-to-deploy tools and their accompanying evaluation reports constitute the core outputs of the products-and-services workstream and provide a practical foundation for the next phase of Digital Lifelines Scotland.

5.3.5 Product categories and manuals

Partners have created manuals and user guides for each digital tool, standardising staff and user experiences. Guides have typically included:

- Installation steps
- Troubleshooting tips.
- Integration methods with local service directories.

Programmatic references (e.g. usage logs, user satisfaction surveys) confirm that easy-to-read manuals have helped to improve uptake rates.

5.3.6 Plans, protocols, and ethical approval documents

All research-focused or service development tools have produced plans, protocols, and gained ethical approvals. These have included clarity on:

- Intervention scope (which populations are targeted).
- Methodologies for user engagement (co-design, user testing).
- Participant welfare and ethical compliance.

These documents have been regularly reviewed by DLS to help maintain consistent standards.

5.3.7 Delivery of training and training evaluation

Several product-focused pilots have provided specialised training to forward-facing practitioners and end-users, with post-session surveys capturing improvements in digital literacy and confidence. Integrating user feedback into product updates have exemplified DLS's iterative approach, with new features and refined user interfaces often following such evaluation.

5.3.8 Involvement and participation metrics

Projects have tracked involvement metrics, such as the number of staff trained on a particular app, active app users over time, or the frequency of virtual consultations. This data has helped to

inform periodic reports, revealing whether a tool continues to meet user needs or will require further modifications.

5.4 Digital integration

5.4.1 Digital service integration plans

Though still evolving, the digital integration strand has established plans to ensure that multiple apps and services can seamlessly work together. Early drafts have focused on consistent user experiences, from login flows to data sharing, helping participants to move seamlessly between resources.

5.4.2 Digital needs assessments

Needs assessments have been utilised to identify collaboration gaps and potential overlaps across organisational boundaries (e.g. local authorities, NHS boards, third-sector agencies). DLS has emphasised these assessments to target high-impact improvements (e.g. co-locating telehealth features with existing harm reduction apps).

5.4.3 Collaborative digital frameworks

DLS has encouraged multi-agency Memorandums of Understanding (MOUs), establishing agreements between agencies that outline terms of collaboration. and standard data protocols. This has helped partners adopt consistent digital approaches, creating synergy and reducing duplication. Through scheduled collaboration sessions, project leads have shared challenges and alignment on next steps.

5.4.4 Funding and resource identification reports

Some resource identification reports have explored long-term options (e.g. philanthropic grants, local government budgets) to sustain digital integration beyond DLS's direct funding cycle. By documenting cost savings or user satisfaction, these reports have backed up proposals for new funding streams or resource pooling.

5.4.5 Pilot proposals

Pilot proposals for integrated digital solutions have constituted a major output. By linking existing tools (e.g. telehealth scheduling, local service directories, supervised consumption support), DLS has aimed to create robust ecosystems. Formal references to pilot aims, methods, and projected impacts have typically resided in project-level documentation.

The outputs, including champion training, device distribution, and evaluation reports, demonstrate DLS's impact on reducing digital exclusion. Key figures, 140 digital champions, 2,195 phones distributed, and 5,502 individuals supported, highlight reach and capacity-building. As the story shifts focus to outcomes, these outputs can be understood to have laid the groundwork for improved service access, digital literacy, and integrated digital care in Scotland.

CHAPTER 6: The DLS performance story – What obvious OUTCOMES can be attributed to DLS (drug-related and wider)

6.1 Introduction

Seven outcomes have been assessed against a range of evidence sources. These outcomes can be seen in **table 5** below. These seven short- to medium-term outcomes can be understood as distinct but interconnected dimensions of digital inclusion. Together they represent the overarching long-term goal of DLS: creating the conditions for sustainable and equitable digital health and social care engagement among people who use drugs.

Before detailing each outcome, we summarise the evidence sources underpinning this analysis, acknowledging that the strength and type of evidence vary across outcomes. An assessment of evidence strength is made for each outcome, and these varied. For some, assessments as 'strong' were given to 'improved service reach and accessibility' and 'improved digital literacy'. Multiple data sources, including primary interviews, secondary reports, and both qualitative and quantitative data consistently evidenced these outcomes reflecting high validity across the various methods. In contrast, outcomes like stigma reduction were less robustly evidenced due to challenges in defining and measuring these concepts consistently across data sources. Evidence strength assessments therefore accord with the number of evidence sources aligned with each outcome.

6.2 Evaluation evidence sources

1. **Impact surveys:** Conducted within the digital inclusion workstream, covering two of the six funds (Follow on Fund and EA3). Impact surveys are secondary data from the perspective of the DLS evaluation, given they have been conducted by services' digital champions and overseen by programme partner SCVO. These surveys combine quantitative (e.g. digital skills scores) and qualitative data, addressing four of the seven outcomes:
    - improved service reach and accessibility;
    - increased digital literacy;
    - improved wellbeing; and
    - enhanced support networks.
2. **Monitoring data:** Submitted by all funded organisations, providing:
    - service-level case studies (multiple per organisation);
    - outputs tracking (e.g. devices distributed, training sessions held); and
    - participant demographics and engagement data.

    This data is relevant to all seven outcomes, with varying depth and detail depending on the specific project.

3. **Products and services reports (TMAT OLE, Here4U, By MY Side)**
    - reports offer in-depth insights into how individual pilot projects operated in practice.'
    - outputs tracking, such as digital tool usage (e.g. app downloads, telehealth consultations), device distribution, and training session attendance.'
    - Participant demographics and engagement data that capture user profiles, digital literacy improvements and levels of sustained involvement.'

    This comprehensive data informs analysis across all seven outcomes, revealing nuances in service uptake, user experience and the overall impact of digital solutions in harm reduction and recovery contexts.
4. **Primary data collection:** Includes stakeholder interviews and individual/professional surveys (n=31 and n=18, respectively). This data helps to address evidence gaps not covered by impact surveys, particularly for:
    - enhanced inter-service communication and coordination;
    - immediate risk reduction; and
    - perceived reductions in stigma.
5. **Output statistics:** Aggregated at the programme level, documenting:
    - devices distributed and connectivity provided (e.g. phones, SIM cards);
    - training delivered (e.g. Digital Champions, workshops); and
    - service uptake (e.g. helpline usage, app downloads).

    This data is particularly relevant to outcomes involving service reach, digital literacy, and support networks.
6. **Qualitative reports:** Feedback from Digital Champions and organisational reflections provide anecdotal evidence of improvements in wellbeing, social connectivity, and reductions in stigma.
7. **Additional project level information and anonymised data:** Eight organisations provided further information not provided in grant monitoring. This includes service statistics from digital skills and literacy training sessions and individual feedback.

This layered evidence base provides strong support for the outcomes whilst also highlighting some limitations:

- Not all outcomes (e.g. inter-service communication, stigma reduction) have equally strong evidence.
- The impact surveys apply to only two funds, so their generalisability across all funded projects is limited.
- The evaluation reports for TMAT OLE and Here4U can be considered as contributing to outcomes, given their role in laying the foundations for knowledge and the potential they hold for project expansion.

Table 5. Evidence strength matrix

Outcomes	Monitoring summaries (Appendix III)	Participation of evaluation team in grant monitoring calls	Impact surveys (Appendices IV, V)	Evaluation of Here4U	Evaluation of TMAT OLE	DLS participant surveys (Appendices VII, IX)	Text message study (Appendix VII)	Professionals' surveys (Appendix X)
Enhanced inter-service communication				✓	✓	✓	✓	✓
Improved service reach and accessibility	✓	✓	✓	✓	✓	✓	✓	✓
Improved support networks	✓	✓	✓			✓		✓
Increased digital literacy	✓	✓	✓			✓		✓
Immediate risk reduction				✓	✓	✓	✓	✓
Perceived stigma reduction						✓	✓	✓
Wellbeing outcomes	✓	✓	✓			✓	✓	✓

6.3 Outcome 1: Improved service reach and accessibility

Evidence strength: Strong, with robust quantitative and qualitative data from impact surveys, monitoring forms, output statistics, along with primary individual and professionals' data as well as pilot data which indicates the potential for online service provision to extend reach and accessibility.

Digital inclusion has transformed service delivery by overcoming traditional barriers to engagement for individuals facing homelessness, justice involvement, recovery challenges and. With improved access to digital devices and connectivity, services have become more flexible and responsive, increasing participation in education, recovery and social care.

6.3.1 Expanding access to previously excluded individuals

Primary and secondary survey data, together with impact surveys, and evidence from the products and services piloted under DLS, reveal that digital tools have enabled services to reach individuals previously marginalised by financial and logistical barriers. Feedback from professionals reinforces that this approach has connected individuals at critical moments. Individuals report that having digital access made it easier to maintain contact with essential services and navigate the challenges of geographical isolation in rural settings. Likewise, both the university-led pilots have demonstrated the feasibility of providing remote drug treatment and harm reduction services for those geographically isolated. The combined evidence across workstreams shows that DLS has reduced isolation and increased engagement amongst those once excluded.

'I'm over a mile from the bus stop; there's nothing out here but fields. If I hadn't been able to connect online, I wouldn't have been able to engage at all.'

'Instead of just going in and kind of like wasting your whole day just on an appointment just waiting until you go the doctors to say "Aye, I'm alright … I'll see you in a couple of weeks"' (TMAT OLE report, p.26)

6.3.2 Strengthening service engagement through structured digital support

Both the DLS participant survey and the impact data indicate that embedding digital access within structured programmes has sustained long-term engagement. Professionals note that integrating digital tools into recovery pathways ensures individuals remain connected with peer support and formal care systems. Primary data consistently show that structured digital support has enhanced continuity of care, for those transitioning from justice settings back into the community, with individuals reporting improved access to key workers and essential services. This collective evidence highlights that a systematic approach to digital inclusion significantly reduces service disengagement and supports a more joined approach to addressing complex care needs.

'When I got out of prison, I had no idea what to do. Having a phone meant I could call my worker, find housing, and get to my appointments.'

6.3.3 Enhancing service adaptability to meet diverse needs

Data across evidence sources suggest that digital inclusion has enhanced service flexibility, enabling organisations to tailor their offerings to a diverse range of individual needs. Primary and secondary surveys report that individuals benefit from solutions adapted to address the challenges associated with accessing in-person support provision, particularly for those who may experience emotional or psychological discomfort when engaging face-to-face. Professionals agree that moving from ad-hoc digital provision to a core, adaptive service model has made support more accessible, allowing individuals to stay connected and access recovery opportunities and support at a pace that suits individual needs. Again, the DLS-funded pilot efforts demonstrate the feasibility of solutions to addressing barriers to both drug treatment and harm reduction. The synthesis of these data highlights that adaptability is key to sustained engagement and successful outcomes.

'At first, I just listened with my camera off. Then I started talking. Now, I go to in-person groups every week.'

'The virtual access has brought about increased support availability, especially during critical moments.' (Here4U evaluation, University of Stirling)

6.3.4 Improving access to family, social, and peer support networks

Primary, secondary and impact survey data, alongside professional insights, indicate that digital tools enhance vital connections with family, peers and community services. Individuals consistently report that digital connectivity helps reduce isolation and strengthens their motivation to remain engaged with support systems. Professionals observe that, through improved access, individuals can maintain family ties, attend essential appointments and participate in recovery groups, thereby easing reintegration challenges and promoting holistic support. This collective evidence confirms that digital inclusion is key to sustaining long-term social and recovery networks, reinforcing overall engagement and stability.

6.3.5 Summary

Robust data from multiple sources suggest that digital inclusion has significantly expanded service reach and accessibility by:

- ensuring individuals who previously faced barriers to engagement can now access support services;
- embedding digital tools into structured service models, enhancing continuity of care and reducing disengagement;
- demonstrating the feasibility of virtual supervised consumption and drug treatment consultations;

- allowing organisations to adapt their service delivery, ensuring digital access remains responsive to individual needs; and
- strengthening social, family, and peer networks, reducing isolation and improving motivation to remain engaged.

However, further synthesis will be required to account for other external factors, the sustainability of these outcomes and understand the long-term implications of digital inclusion for service engagement and individual recovery journeys.

6.4 Outcome 2: Increasing digital literacy

Evidence strength: Strong, primarily supported by impact surveys, monitoring data, output statistics and confirmed by primary data collection.

Digital literacy has been a crucial enabler of service engagement, allowing individuals to navigate online services, manage finances, access health information and support recovery or rehabilitation. By pairing digital access with targeted skills development, services have empowered individuals to overcome traditional barriers and fully participate in education, employment and essential services.

6.4.1 Embedding structured digital skills development

Primary and secondary survey data, alongside impact surveys and professional feedback, show that integrating digital literacy into service models has been central to success. Organisations have embedded structured training, ranging from basic device use to specialised adaptive technology sessions, ensuring individuals are equipped to engage meaningfully with online services. Impact surveys reveal that confidence in using messaging apps and email improved significantly, with over 90% of respondents reporting increased competence. This systematic approach has enhanced continuity in education, employment and recovery pathways.

6.4.2 Addressing low confidence and digital exclusion

Data from impact surveys and individual feedback indicate that tailored support is vital for those with limited prior digital experience. Professionals report that structured pre-training and one-to-one interventions have helped individuals overcome initial barriers, making digital tools more accessible. For instance, survey findings show that confidence in basic smartphone use increased by nearly 40%, with respondents noting that personalised support enabled them to access online health services and manage finances confidently. This approach has effectively reduced digital exclusion and increased overall engagement.

6.4.3 Strengthening financial and health management skills

Evidence from primary surveys and professional insights confirms that digital literacy extends beyond basic skills to include vital financial and health management competencies. Organisations have integrated training on online banking, benefits applications and digital health tools, with impact data showing that confidence in managing money online improved by roughly 50%. This comprehensive approach has enhanced individuals' ability to independently manage finances and access medical services, contributing to more stable recovery and improved health outcomes.

'I didn't have a bank account for years, and it was causing tensions in the family. Now, I've got my own, and I don't need to rely on anyone else.'

6.4.4 Improving long-term engagement, individual capacity, and sustainability

Impact data and professional observations suggest that sustainable digital literacy requires ongoing reinforcement. Services have embedded digital skills training into broader recovery and educational programmes, ensuring that individuals benefit from continuous support rather than one-off interventions. Survey feedback indicates that structured long-term support has led to a significant increase, by nearly 40%, in confidence using digital tools consistently over time. Regular follow-ups and integration with vocational pathways have proven key to maintaining and expanding digital competence.

'I had no idea how to use a laptop before. Now I'm online every day doing my SVQ coursework and helping out with digital admin at [service name].*'*

6.4.5 Summary

Multiple sources of data suggest strongly that digital literacy initiatives have contributed to improved service engagement, financial and health management, and social inclusion by:

- embedding structured digital skills training into broader service models, ensuring individuals are not just provided with devices but also equipped to use them effectively;
- implementing tailored support for individuals with low digital confidence, increasing participation rates and reducing digital exclusion;
- strengthening individuals' ability to manage finances, health, and recovery through digital tools, reinforcing independence and self-sufficiency; and
- developing long-term engagement strategies to sustain digital skills development beyond initial training.

Further synthesis will be required to assess how these improvements translate into long-term impact and to explore the most effective models for ensuring digital literacy remains a sustainable and embedded component of service delivery.

6.5 Outcome 3: Improving wellbeing

Evidence strength: Strong, with comprehensive support from impact surveys, monitoring data, primary data, and qualitative reports.

Improved digital access has directly enhanced emotional wellbeing by reducing isolation, increasing autonomy, and supporting sustained engagement with recovery, education, and social networks. By providing access to devices and connectivity, organisations have aided individuals in maintaining relationships, accessing recovery resources, and establishing digital routines that cultivate stability and self-worth.

6.5.1 Reducing isolation and strengthening emotional resilience

Primary, secondary, and impact survey data, along with monitoring data and qualitative reports, indicate that digital access plays a key role in reducing isolation and building emotional resilience. The products and services workstream hints at the capacity of digital tools to reduce isolation and impact wellbeing, particularly when they are combined with peer support. Professionals note too, that the DLS programme has contributed to a greater sense of belonging and continuity for those experiencing homelessness, problems associated with drug use, or post-prison liberation challenges, with qualitative feedback reflecting high levels of perceived emotional support. Individuals confirm that having digital connectivity, whether through tablets, mobile phones, or other devices, has enabled them to develop and maintain social ties and access recovery meetings during critical transitions.

'The phone calls and WhatsApp groups kept me going. Without them, I'd have relapsed.'

6.5.2 Crisis prevention and mental health support

Data collected from impact surveys, monitoring data, and primary individual and professional insights confirm that digital inclusion is vital for crisis prevention and mental health management. Impact surveys show that individuals using digital tools experience marked improvements in accessing emergency support and managing health crises, with qualitative reports describing instances where immediate online intervention prevented potential crises. Professionals highlight that digital access, facilitated through smartphones and other devices, has enabled timely outreach for peer and professional support, contributing to improved self-care and reduced reliance on emergency services.

'To help with my mental health and I'm helping other people.'

6.5.3 Supporting autonomy and self-efficacy

Evidence from primary surveys, impact data, and monitoring statistics, supported by qualitative reports, demonstrates that digital inclusion bolsters self-efficacy and autonomy. Individuals report significant gains in confidence from using digital tools to access mental health courses, local

support networks, and educational resources. Impact surveys indicate that such engagement has empowered individuals to make informed decisions about their recovery and future, with professional feedback reinforcing the notion that digital access bridges gaps – especially in rural or isolated contexts – thus enabling sustained self-directed recovery and personal development.

'Before [service name], I was too scared to speak to people. Now, I'm working towards an SVQ and mentoring others.'

6.5.4 Summary

Taken together, evidence from multiple sources indicates that digital access has contributed to improved wellbeing by:

- reducing isolation and strengthening emotional resilience through sustained engagement with family, peer support, and recovery networks;
- preventing crises by ensuring access to emergency support, mental health resources, and medical management tools; and
- encouraging autonomy and self-efficacy, allowing individuals to make informed decisions about their recovery, education, and long-term stability.

Further synthesis will be required to assess how these improvements translate into long-term impact and to explore how digital inclusion can be embedded more effectively within recovery, health, and justice services to maximise such impact.

6.6 Outcome 4: Enhanced inter-service coordination and communication

Evidence strength: Moderate, primarily reliant on monitoring data and primary data collection, with complementary pilot data from the products and services-funded research projects.

The DLS programme and its initiatives have played a role in strengthening inter-service communication, particularly for individuals navigating critical transition points such as prison liberation, recovery, homelessness, and reintegration into the community. Monitoring data suggests that digital access has improved collaboration across agencies, ensuring timely interventions, streamlined service coordination, and improved engagement with support networks.

6.6.1 Facilitating multi-agency coordination

Data indicate that digital access has enhanced coordination between housing, mental health, drug, and criminal justice services. Monitoring data and primary surveys reveal that around 40% of individuals experienced smoother inter-agency interactions, reducing emergency incidents and promoting stability. Going further, Here4U's virtual supported consumption app offered in-built opportunities for multi-sector coordination and an automated emergency services response, at the discretion of the caller. Individuals report that reliable digital tools enable continuous engagement with multiple service providers, thereby improving support networks and ensuring more responsive, person-centred care. One professional respondent overed a concise example:

'We hold multi-agency meetings on Teams. Everyone involved introduces themselves, states their role, and then we create a plan that works for the individual. The supported person gets to say, 'That's too much for me', and we adjust accordingly.'

6.6.2 Embedding digital access in justice and recovery pathways

Evidence suggests that integrating digital access into pre- and post-release planning enhances inter-service collaboration in justice and recovery settings. Impact surveys indicate that approximately 30% of respondents noted marked improvements in communication between peer mentors, support services, and recovery groups. Organisations embedding digital inclusion within structured pathways report smoother transitions, reduced geographical isolation, and enhanced access to online recovery and justice services, contributing to long-term stability and a lower risk of reoffending.

'[he] was on the road out, we were on the road to losing him, but his criminal justice worker and I had a meeting, one that we wouldn't have had without digital inclusion, and that meeting saved his life. It allowed us to have a completely different conversation with [name] that changed his trajectory.'

6.6.3 Strengthening referral pathways and sector collaboration

Data from multiple sources demonstrate that digital inclusion has improved referral pathways and overall sector collaboration. Primary data show that nearly one-third of individuals experienced a significant reduction in repetitive information-sharing, with 33.33% reporting that they no longer had to repeatedly provide personal details. Enhanced digital communication channels have accelerated information sharing, reduced duplication, and streamlined processes across agencies, leading to more efficient and accountable service delivery. Adding insight into the potential for digital solutions to expedite cross-sector collaboration, the University of St Andrews' TMAT OLE work necessarily attended to ensuring:

'Mechanisms for strategic oversight, accountability, activity monitoring and outcome evaluation were embedded within local service planning structures (Health Board, Integrated Joint Board, Alcohol and Drug Partnership, Health and Social Care Partnership) and supported by the national MAT Standard Implementation Support Team.' (TMOUD Report, pp. 8–9)

6.6.4 Improving access to healthcare and mental health support

Digital access has also improved healthcare and mental health coordination for individuals with complex needs. Surveys reveal that a majority of respondents noted a substantial improvement in accessing appointments and online recovery or mental health support. When individuals receive digital tools, they are better able to manage healthcare engagements and access digital

notifications, which helps prevent crises, reduces reliance on emergency services, and supports continuous care through timely interventions.

'If I didn't call, I wouldn't have had my script, and I would be struggling.'

6.6.5 Summary

The evidence demonstrates that digital inclusion has improved inter-service communication, particularly where experiences of homelessness, justice involvement, and drug use treatment and recovery intersect. It has:

- enhanced real-time communication between agencies and individuals, enabling faster and more coordinated interventions;
- strengthened multi-agency collaboration, ensuring that digital inclusion and digital services are embedded in wider service networks; and
- facilitated healthcare and mental health engagement, preventing missed appointments and supporting crisis interventions.

However, further research will be required to understand external influencing factors, potential challenges, and longer-term individual outcomes. Future analysis will examine how these enhanced communication pathways translate into sustained recovery, improved well-being, and reduced reliance on crisis services.

6.7 Outcome 5: Improved support networks

Evidence strength: Strong, supported by impact surveys, monitoring data, qualitative feedback, and reinforced by evaluators primary data.

Access to digital tools has played a significant role in strengthening and rebuilding support networks for individuals in recovery, those experiencing homelessness, and people transitioning from the justice system. Organisations have enabled sustained communication with family members, increased engagement in peer support groups, and created a greater sense of social connectedness, all of which are crucial for long-term stability, reducing isolation, and supporting recovery efforts.

6.7.1 Strengthening family connections

Data from impact surveys, primary sources, and professional insights indicate that digital access significantly enhances family communication. Whilst monitoring data suggest that around half of respondents noted improved family interactions, impact surveys further show a 54.1% increase in overall feelings of connectedness with important people between the first and second survey. Professionals have observed that this strengthened communication helps rebuild crucial support networks, enabling individuals to sustain relationships during periods of vulnerability. Qualitative feedback reveals that many individuals report more regular, meaningful contact with family members via mobile devices, which provides essential emotional stability and motivation for recovery.

'I hadn't spoken to my dad in 20 years. I now have my family back, and my brother, who is disabled and needs 24-hour care, can be left alone with me for the first time. My family trust me again.'

6.7.2 Enabling peer support and community engagement

Impact surveys, primary data, and professional feedback demonstrate that digital tools have bolstered engagement in peer support networks. Approximately 70% of respondents now participate in online support groups or communities, with many reporting that access to video calls, messaging services, and social media has markedly reduced isolation. Individuals consistently describe these platforms as vital for sustaining structured recovery activities and maintaining connections with peers and support staff. In a harm reduction context, researchers evaluating the Here4U supervised consumption app pilot noted how *'having the app could work as a psychological connection to someone while using drugs'* (p.30), even without physical closeness. Professionals and supported individuals alike note that digital inclusion facilitates regular check-ins and even the creation of supportive groups, which further reinforce engagement and help prevent relapse by promoting a sense of belonging and accountability.

'Zoom gave me the confidence to speak to people again. I started with my camera off, then gradually turned it on. Now I attend in-person meetings.'

6.7.3 Supporting reintegration and continuity of care

Monitoring data, primary surveys, and insights from professionals confirm that digital access is critical for maintaining continuity of care during transitions from prison, hospital, or insecure housing. Nearly 40% of respondents highlighted that immediate access to digital tools, such as receiving a mobile phone upon liberation from prison, was instrumental in keeping them connected to essential support networks. Individuals report that this connectivity bridges gaps during critical transition periods, ensuring ongoing engagement with peer mentors, recovery services, and community support. Professionals also emphasise that consistent digital communication reduces the likelihood of individuals having to repeatedly share personal information, streamlining service delivery and contributing to greater overall stability.

'Even on a basic level, helping them get home from prison... a phone is so essential for that.'

6.7.4 Summary

The data suggests that digital inclusion has contributed to improved support networks by:

- maintaining and rebuilding family relationships, providing emotional security and motivation for recovery;
- enabling continued engagement with peer support networks, reducing isolation and reinforcing positive behaviour; and

- ensuring continuity of care for individuals transitioning from prison-to-community, hospital discharge, or homelessness, reducing the risk of instability.

Further analysis will be required to explore how these impacts are sustained over time and to develop strategies for embedding digital inclusion as a core component of service support models.

6.8 Outcome 6: Immediate risk reduction

Evidence strength: Moderate, with data from monitoring forms and primary research (stakeholder interviews and individual/professional surveys), and products and services' pilot studies.

Access to digital tools, across the DLS workstreams, has played a crucial role in reducing immediate risks for individuals experiencing homelessness, problems with drug use, mental health crises, and transitions from the criminal justice system. The monitoring data suggests that digital inclusion has helped mitigate the risk of overdose, self-harm, suicide, and disengagement from essential services. By providing real-time access to harm reduction resources, crisis support, and structured interventions, digital tools have been an effective mechanism for preventing serious harm.

6.8.1 Enabling access to harm reduction and crisis support

Data from monitoring forms, primary research, and professional insights indicate that digital access enables individuals at high risk to quickly reach support services. Individuals report that access to mobile devices and tablets facilitates immediate contact with GP services, drug treatment, and crisis support, thereby reducing instances of overdose and self-harm. For example, one individual at high-risk described how having a phone allowed them to maintain regular contact with their support worker during a mental health crisis, preventing further harm. Professionals also note that digital tools have been essential for individuals transitioning from custody, helping them engage with housing and drug services, and providing a sense of safety by limiting unwanted contact from harmful influences.

> *'Sometimes just having a new number... your drug dealer can't contact you on this number, your ex-boyfriend can't contact you on this number.'*

Going further, Here4U pilot data indicate the opportunities inherent in digital technology and online tools for enabling immediate access to peer-led harm reduction and wider health and wellbeing support:

> *'When I've took the calls, they have actually consumed, injected drugs when I've been on the phone with them. So, we've had a conversation around about what drugs you've taken that day, when you've had maybe a Methadone prescription, are you on your own, do you have Naloxone. Do you have clear injecting equipment? So, all that really good safer injection harm reduction messages and overdose awareness, we definitely had the conversation.'*

6.8.2 Supporting structured routines to reduce relapse risk

Evidence suggests that digital inclusion contributes to maintaining structured routines critical to reducing relapse risk. Monitoring and primary data reveal that nearly 40% of respondents benefited from digital support that enabled them to re-engage with structured services before reaching crisis point. Individuals describe how access to a prepaid phone or digital device allowed them to secure employment, travel safely, and reconnect with recovery support, thus preventing a return to high-risk behaviours. Professional feedback reinforces that such consistent digital engagement is instrumental in establishing routines that protect against relapse and instability.

'Without my phone in that three-week gap between detox and rehab, I wouldn't have made it in. I'd have relapsed.'

6.8.3 Reducing health risks through medical engagement

Digital tools also facilitate ongoing medical engagement, reducing health risks associated with untreated conditions. The TMAT OLE evaluation evidences this potential directly, noting that telephone triage, mobile outreach facilities, and remote consultations '*remove barriers to access, facilitate same-day treatment initiation, and help retain people in care*' (p.11). Impact survey data indicate that access to digital resources has improved the ability of individuals to manage appointments and access online health services by roughly 40%. Individuals report that, for instance, having a mobile device enabled a diabetes patient to monitor their condition and a woman at risk of disengagement from NHS services to receive timely appointment reminders. Professionals observe that digital access not only prevents medical emergencies but also supports withdrawal management, overall health stability and retention in health and drug treatment services.

'I had to phone my addictions worker because I missed an appointment, and my script was up that day.'

6.8.4 Summary

The data suggests that the DLS programme has contributed to immediate risk reduction by:

- providing real-time access to harm reduction resources and crisis support;
- establishing the feasibility of virtual supervised drug consumption and online consultation for treatment initiation;
- maintaining structured routines and support networks, preventing relapse and disengagement; and
- ensuring continued engagement with healthcare services, reducing untreated health risks.

Further analysis will be required to explore the sustainability of these outcomes and to refine digital inclusion strategies to maximise their impact on harm reduction efforts.

6.9 Outcome 7: Perceived reductions in stigma

Evidence strength: Weak to moderate, reliant on qualitative data from monitoring forms, primary research, and anecdotal feedback. Difficulties in operationalising the measurement of this outcome meant that perceived stigma was often understood in terms of access challenges and discrimination.

The monitoring data suggests that digital inclusion projects have played a role in reducing stigma associated with accessing digital support, particularly amongst individuals experiencing homelessness, problems with drug use, and involvement with the criminal justice system. By promoting digital access and increasing online service options, these initiatives have helped normalise digital inclusion as an essential tool for empowerment rather than a sign of vulnerability or dependency.

6.9.1 Reframing digital access as a right, not a privilege

Data from monitoring forms, primary research, and professional feedback indicate that integrating digital access as a universal right challenges the notion of digital tools as symbols of failure or crisis. Many individuals reported that when digital access is championed and supported in everyday services, such as through community programmes and homelessness support, the stigma associated with needing technology is reduced. For example, professionals note that when digital tools are provided as part of standard care, individuals feel empowered and worthy, rather than judged, shifting perceptions from vulnerability to essential empowerment.

'If you don't have a phone, you're facing barriers... exclusion is a form of stigma, really.'

6.9.2 Empowering individuals to engage with digital tools on their own terms

Qualitative evidence and primary data reveal that personalised digital interventions help individuals overcome past negative experiences and build self-confidence. Individuals describe how structured digital education and self-paced learning have enabled them to reframe their narratives, seeing digital inclusion as a pathway to opportunity rather than a remedial measure. For instance, a young person re-engaging with education and a woman in recovery both reported feeling more in control and less judged, an effect corroborated by professional observations that such approaches significantly enhance self-worth and reduce social exclusion.

'Due to my past, I always feel judged, but online it seems a little less so because it's not face-to-face.

Here4U demonstrates the potential for digital tools and services to facilitate less threatening, virtual engagement reduces barriers and through peer-support, experiences of being judged.

'Users of Here4U Scotland services can expect non-judgmental and anonymous support from volunteers experienced in the field of drug use' (p.9)

6.9.3 Using peer support to challenge stigma

Data from focus groups, primary research, and professional insights demonstrate that peer-led digital support models further reduce stigma. When individuals actively participate in co-producing digital resources or engaging in peer mentoring, they report a shift in perspective—from being passive recipients of support to becoming contributors to a supportive community. Many participants noted that engaging with others who share similar experiences cultivates a non-judgemental environment, reinforcing the idea that digital skills development is a collaborative and empowering process rather than a sign of deficiency.

'I am speaking to people who have been through the exact same situation as me. They are not going to judge me.'

6.9.4 Summary

The available data indicate that digital inclusion projects have helped reduce perceived stigma by:

- reframing digital access as a universal right rather than a targeted intervention;
- empowering individuals to develop digital skills on their own terms, increasing confidence and reducing social exclusion;
- offering virtual harm reduction and drug treatment services which align with the preferences of individuals, and;
- embedding digital access within peer-led models, demonstrating that digital learning is a shared and collaborative process.

Further analysis will be required to explore the long-term sustainability of these outcomes and the role of digital inclusion in wider social reintegration efforts.

6.10 Additional outcomes

In addition to the seven co-produced outcomes defined in the original logic model, the evaluation identified several distinct outcomes emerging directly from increased digital inclusion. These outcomes reflect broader, holistic benefits to individuals that extend beyond immediate service interactions and formal support structures, capturing deeper shifts in personal agency, autonomy, practical capability, and social connectedness. The evaluation also identified several negative or unintended consequences, providing a balanced view of how digital inclusion impacts individuals.

6.10.1 Increased access to information

Individuals frequently mentioned how digital devices transformed their ability to seek and manage information. Having access to a phone or laptop meant they could quickly look up resources, understand their benefit entitlements and communicate with support services online. Professionals observed that this new level of immediate information access reduced the need for

staff intervention in routine tasks, allowing individuals to become more proactive and informed in their decision-making.

6.10.2 Creation of informal peer support networks

Several participants noted that once they were online, they naturally formed new connections or reconnected with others who shared similar experiences. WhatsApp groups, social media chats and online recovery forums served as valuable spaces for peer encouragement. Although the survey responses did not focus heavily on peer networks, professionals reported seeing small groups spontaneously sharing tips, offering mutual support and building a sense of community beyond formal services.

6.10.3 Empowerment and autonomy

A key finding across the suite of data collection methods was the sense of personal empowerment individuals felt after receiving digital support. Individuals described being able to take charge of tasks such as managing universal credit commitments, accessing bank accounts independently and even supporting others with similar needs. This autonomy appeared to bolster their confidence, with many stating they felt more in control of their lives and recovery journeys.

6.10.4 Everyday independence

Respondents consistently emphasised how day-to-day independence improved when they could handle basic tasks without staff intervention. Being able to track finances, communicate with agencies and schedule appointments online gave them a newfound sense of ownership over their routines. Professionals also remarked that individuals who once required assistance for every small administrative step were now capable of managing these responsibilities alone, reducing reliance on face-to-face support.

6.10.5 Education, employment and skill development

Access to digital devices opened doors to educational and vocational opportunities that individuals had not initially anticipated. Many enrolled in online courses or explored training programmes, whilst others began applying for jobs and developing their CVs. Professionals observed that the availability of laptops and broadband enabled a higher level of digital literacy, creating new career pathways and building confidence in using technology to advance personal goals.

6.10.6 Overcoming practical barriers

A key theme was the ability to tackle everyday hurdles more effectively. Whether it was navigating housing crises, communicating with support workers or quickly sourcing online help individuals reported that having digital access made these processes far smoother. Setting up essential apps and emailing documentation became much easier, allowing individuals to resolve urgent problems with less delay or anxiety. Professionals confirmed that this immediate access to digital resources often accelerated the support process.

6.10.7 Challenges and ongoing needs

Despite the positive outcomes, some respondents pointed out the need for additional training and support to fully benefit from their devices. In a few cases, external factors, such as unexpected prison sentences, prevented participants from making use of their digital tools. Others mentioned lacking confidence to explore the internet on their own, highlighting a need for continued guidance and reassurance from professionals to maintain their progress.

6.10.8 Inadequate access / digital burnout / privacy concerns (negative)

Evidence on negative impacts was limited, but there were hints of potential issues. Some participants worried about their data usage or feared running out of phone credit, which could abruptly cut them off from online services. A few also raised concerns about privacy and felt overwhelmed by the sheer volume of digital information available, suggesting that without proper guidance or data support, the initial enthusiasm could wane and lead to burnout.

6.10.9 Inequitable access (negative)

Whilst most individuals reported life-changing benefits, there is an ongoing risk that certain individuals—such as those in custody or with unstable housing—cannot take full advantage of digital devices. These structural barriers may lead to unequal outcomes, where those with fewer obstacles experience greater digital benefits, whilst others remain excluded. Professionals noted that ensuring equitable distribution and follow-up support remains a challenge that requires focused attention.

6.10.10 Negative effects of online access (negative)

Some professionals expressed caution that digital connectivity might inadvertently introduce harmful content or online risks. For example, easy access to social media or certain websites could expose individuals to triggers or scams. Although no major incidents were reported, the possibility of negative influences suggests a need for ongoing digital literacy training, including safer browsing and scam awareness, to mitigate potential harm.

6.10.11 Surveillance on digital support (negative)

A small number of participants worried that using devices provided by services might lead to greater monitoring of their personal activities. Although most evidence did not indicate widespread mistrust, this perception could deter some individuals from embracing digital tools fully. Clear communication about data privacy and the limited scope of any monitoring was identified as crucial to maintaining trust.

6.10.12 Digital burnout or privacy concerns (negative)

Related to the above points, digital burnout and privacy anxieties can overlap with the stress of learning new technologies. Some participants mentioned feeling cautious about sharing personal details online, whilst others worried about being constantly reachable. These concerns emphasise the importance of delivering not just the equipment but also the emotional support and practical guidance needed for responsible, balanced device use.

6.10.13 Transformative impact and sustainability

Overall, these additional outcomes reflect a transformative shift in how individual engage with recovery, education and community life. Participants consistently reported increased confidence, reduced isolation and the ability to explore new opportunities. Professionals see great potential in sustaining these benefits through continued digital inclusion initiatives, emphasising that ongoing support, training and policy alignment will be essential to maintain momentum and ensure long-term, positive change.

CHAPTER 7: Conclusions – the contribution of DLS towards long-term changes and impact

7.1 Introduction

The DLS programme has made a meaningful and positive contribution to people's lives and to service delivery. Evidence collected across multiple sources indicates alignment with the DLS evaluation theory of change, as described in the programme's logic model **(see Chapter 2)**. This includes contributions to short-term outcomes such as improved digital confidence, enhanced service engagement, and immediate risk reduction. These outcomes lay a strong foundation for the programme's intended long-term impacts: reduced demand on healthcare services, scalable models for digital support, a cultural shift towards digital inclusion, systemic integration of digital tools, and sustained reductions in drug-related harms.

We have used CA to explore how and why change has occurred and whether it can reasonably be attributed to the programme. Despite the relatively short duration of delivery, the complex needs of the population, and the small scale relative to national need, CA has allowed us to build a credible performance story. While direct causal claims cannot be made, the strength and coherence of the evidence suggest that DLS has played a meaningful role in enabling progress against several long-term outcomes.

Although the programme originated through opportunistic funding and lacked a structured national delivery framework at the outset, the evaluation findings point to clear and achievable outcomes that can be scaled and embedded. The following analysis draws on all available evidence to assess DLS's contribution to each of the long-term impacts identified in the logic model.

7.1.1 Long-term outcome 1: Reduced utilisation of healthcare resources

Preventative engagement was facilitated by individuals having earlier and more consistent contact with harm reduction or health teams through digital access. Owning a device and maintaining a reliable internet connection enabled people to initiate support before reaching a crisis stage, indicating that digital inclusion had the potential to reduce reliance on emergency services.

Although robust longitudinal data on reductions in hospital admissions or ambulance callouts were not available, the indications from project reporting and participant accounts suggested fewer escalations to acute intervention. Some stakeholders noted inherent difficulties in accessing and integrating healthcare data across different agencies, which limited conclusive evidence, yet the overall pattern pointed to digital tools helping to avert at least a portion of crisis-led interactions. Pilot data from TMAT OLE further supported this by demonstrating improved access to rapid telehealth support, suggesting potential for digital engagement to reduce crisis-led interactions by offering immediate remote consultations (TMAT OLE report).

7.1.2 Long-term outcome 2: Scalable models for digital integration

The DLS programme to date has highlighted the importance of matching technology provision to local individuals' needs and addressing acute risk. It has also emphasised the need to adopt flexible procurement and funding models as well as reduce duplication of digital solutions across the sector. Several organisations that received devices or training reported being able to scale digital programmes when they had ongoing budget lines and adaptive approaches to distribution. Instances in which one type of device remained unused whilst another was in demand highlights the need for greater flexibility and real-time feedback mechanisms.

Over the course of the programme, there was a shift from broad device dissemination to more risk-based targeting, which effectively reached high-need groups in some areas but occasionally excluded individuals who could also have benefited. For instance, the By My Side app pilot showed the importance of standardising digital harm reduction resources at a national level to reduce duplication and highlighted the need for scalable integration through structured partnerships with ALISS for local service information (By My Side pilot). Similarly, Here4U illustrated how embedding structured digital support into existing recovery pathways enabled scalability and sustained service engagement (Here4U report).

Overall, DLS demonstrated that scalable digital integration depends on embedding digital access into core statutory and/or third-sector funding, rather than relying on short-term funding opportunities. When these conditions are met, digital interventions can expand more steadily and reduce inefficiencies in device allocation.

7.1.3 Long-term outcome 3: A cultural shift towards digital inclusion

Digital inclusion gained recognition as an integral part of harm reduction and recovery, moving beyond a pilot or add-on project. Many organisations reported that staff and individuals came to see connectivity and digital literacy as part of standard practice. Boards that incorporated digital assessments or policies and translated learning into their overarching strategies often found it easier to maintain momentum between funding cycles. Early programme phases revealed a learning curve for some services, and the programme team more broadly.

Essentially, the programme evolved from an initial phase of trial and adaptation into a more defined and strategic effort. Although the cultural shift was not uniform, there was a broad trend of stakeholders viewing digital inclusion as indispensable for full citizen participation, including daily tasks, such as managing finances arranging appointments, and staying in touch with support networks. The Here4U evaluation further supported this, showing individuals experienced empowerment and autonomy in daily routines, reinforcing digital engagement as a new cultural norm rather than a temporary service feature (Here4U report).

7.1.4 Long-term outcome 4: Systemic integration of digital tools and services

Systemic integration occurred most effectively when digital support was embedded within existing organisational processes, such as intake procedures or care pathways, with reliable connectivity as a core element. However, statutory services were largely excluded from direct funding within the digital inclusion workstream, as funding was allocated to third-sector organisations. This limited the extent to which digital tools and services could be systematically embedded and rolled out across health and social care systems, slowing full-scale integration. Whilst the products and services workstream included academic and health partnerships that contributed to research and development in telehealth and digital harm reduction, these innovations were not directly implemented within statutory services during the programme's timeframe. Third-sector providers were able to demonstrate the feasibility of coordinating referrals and delivering digital interventions, particularly where they worked closely with health, housing and justice teams.

TMAT OLE highlighted effective integration of digital telehealth services into healthcare pathways as feasible, although wider statutory adoption remains limited pending further public-sector investment and policy alignment (TMAT OLE report). Without dedicated public-sector investment, integration remained fragmented and reliant on external funding cycles.

7.1.5 Long-term outcome 5: Sustained reductions in harm

Digital access was linked to short-term harm reduction through stronger social connections, immediate crisis prevention, and easier access to recovery supports. Participants who continued to

use devices for online peer groups and self-improvement activities often reported feeling more engaged and less isolated. Although structural challenges, such as poverty or homelessness, remained relevant, having digital tools appeared to enhance resilience for some individuals by providing timely contact with professionals and peers. Verifying long-term declines in drug-related harm would require further data collection over multiple years, yet the evidence gathered so far suggests that consistent digital engagement offers tangible pathways for maintaining recovery and reducing risky behaviours.

Findings from Here4U and TMAT OLE indicate that sustained digital support contributed to reduced isolation, empowerment in self-care, and enhanced personal agency, underpinning longer-term harm reduction potential (Here4U report, TMAT OLE report). This outcome depended on service continuity, reliable connectivity, and continuing staff support, all of which could be threatened by short-term funding cycles.

7.2 Sustainability of benefits

Efforts to ensure sustainability often rests on integrating digital assessments into routine procedures and developing robust partnerships. Some organisations altered their case management systems so that digital and connectivity needs were recorded for every individual, which reduced the chances of losing focus when a project grant ended, or specific staff left. Others reportedly continued to use refurbished or donated devices to maintain a steady supply, out with DLS funding, highlighting how flexibility in procurement could sustain digital programmes beyond initial funding rounds. Reporting and administrative requirements at times diverted staff time away from forward-facing work, but practical strategies, like using digital champions or distributing tasks amongst a broader staff base, helped sustain newly adopted practices. Overall, a clear consensus emerged that digital support needed to be budgeted as a normal organisational expense, rather than viewed as an extra, to consolidate and expand the gains achieved during the initial phases of DLS.

7.3 Systemic changes

Systemic changes were emerging in the ways that organisations and local partnerships approached digital inclusion, particularly where they embedded connectivity in harm reduction, criminal justice, and recovery efforts. Coherent oversight and strong leadership helped maintain progress, although some reported that overly centralised governance or fragmented funding processes delayed timely distribution of devices or introduced layers of bureaucracy. Certain services maintained a flexible approach to distributing devices and encouraging creative solutions, which aligned well with the Scottish Approach to Service Design (SAtSD) ethos. Others adopted more standardised frameworks that improved accountability but risked losing local adaptability. These examples demonstrated that there is no single model for effectively integrating digital, and that local contexts matter significantly, yet the broad trend was towards a more integrated and proactive stance on digital in harm reduction settings.

7.4 Community impact

Digital connectivity strengthened relationships amongst individuals, families, and peers. Many individuals reported that the ability to communicate or engage in online social and educational

activities helped counter loneliness and isolation, which can be especially acute for those experiencing drug use challenges. Community-level benefits were more visible in areas with established multi-agency partnerships and stable internet infrastructure. Elsewhere, limited or inconsistent Wi-Fi created barriers to extending the community impact of device distribution. The alignment of third sector and statutory services with philanthropic or private sector partners occasionally facilitated affordable data plans or communal Wi-Fi, broadening participation. Over time, these local efforts contributed to a perceived sense of collective responsibility for ensuring digital inclusion as a feature of community resilience.

7.5 Moving beyond opportunistic grants towards sustained digital inclusion

Short-term funding streams played a critical role in igniting digital inclusion measures, yet they also introduced uncertainty and sometimes fragmented service continuity. Whilst a few organisations transitioned digital provision into their core budgets, most relied on sequential grants or underspend allocations, which created stop-start cycles. Certain aspects of DLS's progress resulted from opportunistic allocations, such as initial underspending or flexible grants from government or third-sector bodies, which propelled device handouts during the pandemic.

The programme has provided motivation for longer-term thinking, as many stakeholders recognised that relying on opportunistic funds alone would restrict the strategic embedding of digital inclusion, products and services. Where core budgets or established commissioning frameworks included clear line items for digital, the likelihood of sustaining and expanding initiatives appeared markedly higher.

7.6 From supplementary support to integral strategy: indicators of embedded digital inclusion

Evidence of embedded change included written procedures, permanent staffing roles, and routine policy checks for digital accessibility. By creating official processes for device deployment and training, some providers safeguarded digital inclusion from the disruptions associated with staff turnover or shifting priorities. Rolling out training to a wider set of staff, rather than isolating knowledge with a small group, has delivered significant organisational resilience. Where governance boards actively championed digital innovation, forward-facing staff reported clearer messages about the programme's importance. Projects that began with a less clearly defined scope in the earliest stages then evolved to adopt more structured oversight, which helped clarify objectives and align digital efforts with everyday service delivery. This shift was a strong indicator that digital was viewed as integral, rather than supplementary, to the work of supporting people who use drugs.

7.7 DLS impacting digital inclusion and the championing of digital solutions amongst drug services

The direct participation of partners variously positioned on multiple Alcohol and Drug Partnerships, and across health board areas, and the programme's visibility through regular dissemination of the programme's results, tools, and lessons learned, have no doubt encouraged other drug and alcohol recovery services to replicate or adapt elements of DLS. Knowledge exchange happened through sectoral forums, multi-agency meetings, and local networks, which

has supported a growing interest in digital solutions for engaging people who might otherwise slip through the cracks.

Some providers framed digital inclusion, and thus participation, as a basic right, emphasising its capacity to lessen stigma and promote more equitable access to resources. Others found that highlighting individuals success stories attracted further buy-in from local partners or funders. Although universal adoption of digital practices was by no means complete, the widespread discussion of device distribution, connectivity strategies, and staff training implied that DLS's influence reverberated across diverse services tackling drug-related harms.

7.8 DLS' contribution to reducing social inequalities

Providing digital connectivity, literacy, and technology skills helped individuals access mainstream support systems, which can be especially critical for those facing multiple disadvantages. Individuals who previously struggled with low literacy or lacked internet access were able to navigate benefit applications, research housing options, and sustain contact with specialists. Whilst digital alone could not resolve overarching issues like homelessness or poverty, it gave participants meaningful opportunities to engage in education, volunteer roles, or community initiatives. Where a rights-based approach to device and connectivity distribution was partially adopted, stigma associated with digital handouts specifically for people who use drugs was reduced. This broad-based framing of digital inclusion as essential to modern life, rather than a niche programme, aligns well with efforts to tackle systemic inequalities. Although the evidence base on measured inequality reductions was limited, accounts indicate that DLS interventions nudged local systems towards recognising and addressing digital exclusion as part of wider social inequities.

7.9 Concluding remarks

Our evaluation has provided evidence as to how the DLS programme has made a contribution to all six outcomes of the Scottish Government's National Mission on drugs. In particular, significant contributions have been made to outcomes 1 (fewer people develop problem drug use), 2 (risk is reduced for people who use harmful drugs), 3 (access to treatment and recovery for those most at risk), and 5 (improved quality of life) of the National Mission.

The DLS programme has also evidenced how digital inclusion can support proactive service engagement, mitigate isolation, and support individuals' wellbeing and recovery journeys. Over time, the programme has matured from an opportunistic device distribution effort into a more structured initiative, highlighting consistent themes around the importance of stable connectivity, flexible funding, and embedded organisational processes.

Although challenges persisted, such as fragmented procurement, eligibility criteria debates, and short-term grants, DLS has generated tangible improvements in user experience and broadened understanding of how digital ties into harm reduction. From a CA perspective, DLS has provided a credible and often strong foundation for lasting change by demonstrating that digital inclusion is both feasible and impactful in drug services. Its influence on organisational cultures, policy discussions, and inter-agency collaboration suggests a plausible, and in many respects likely, contribution to the long-term outcomes identified in the evaluation logic model, laying the groundwork for deeper systemic shifts in Scotland's approach to drug-related harms and social inequalities.

CHAPTER 8: Our recommendations

8.1 Introduction

Digital inclusion is a fundamental right, not a luxury, and is essential for participation in an individual's health and social care. The DLS programme has shown that providing digital tools and services can improve service delivery, health and wellbeing, and empower individuals. However, for digital inclusion to have a lasting impact, it must be built into the core of health, social care, housing, and justice services.

A future in which digital access is fair for everyone demands:

- ensuring that every individual has the means to access and use digital services;
- digital inclusion is embedded into mainstream service provision; and
- removing barriers that stop individuals from accessing, controlling, and benefiting from digital technology.

Achieving this vision calls for action at multiple levels, from individuals, commissioners, practitioners, organisations, policy makers, and strategic decision makers.

The recommendations that we set out are the practical steps that we believe are needed by individuals, practitioners, organisations, and strategic leads (across Digital Health & Care Innovation Centre, TEC Programme, ADPs, NHS Boards and industry partners) to realise this transformation. A separate set of considerations are provided for policy makers and national (strategic) decision makers within our **Briefing Report**.

8.2 Recommendations and actions for change

The DLS programme has helped to reveal the power of digital inclusion to enhance services and empower individuals. However, true impact relies on digital inclusion being treated as a central part of service delivery, not an add-on. The next phase of work must focus on firmly establishing digital access within commissioning, service models, and funding systems. By adopting and successfully implementing the following recommendations and actions, as well as those for commissioners and policy makers (see the separate **Briefing Report** for policy makers, commissioners, and funders), Scotland has the ability to set the standard for a fully inclusive digital future for all.

The following recommendations have all emerged from our evaluation of the DLS programme. However, we are aware that they also have wider applicability to an ambition of achieving digital inclusion across the whole country and for the whole population.

Our recommendations are based on the requirements at four levels to fulfil the future ambitions of the DLS programme:

- organisational;
- practitioner;
- individuals with lived/living experience; and
- strategic leads (across Digital Health & Care Innovation Centre, TEC Programme, ADPs, NHS Boards and industry partners).

8.3 ORGANISATIONS: Embedding digital inclusion into systems and policy

Vision: Organisations in the health, social care, housing, and justice sectors, working alongside people with experience of problematic drug use, fully integrate digital inclusion into their service models, ensuring that it is a core component of strategic planning, funding, and delivery.

Recommendation #1: Consolidation of Board-level commitment and leadership

- Ensure organisational board members and/or senior leadership teams understand the strategic importance of digital inclusion for meeting the needs of people at risk of drug harms.
- Provide digital inclusion training for governance boards to support informed decision-making.

Recommendation #2: Integration of digital inclusion into staff roles and training for all those who work alongside people with experience of problematic drug use.

- Ensure consistency of digital inclusion responsibilities within job roles across health, social care, and justice services.
- Ensure all forward-facing staff receive ongoing digital literacy training, so they can effectively support individuals who access services.

Recommendation #3: Improvement of data-sharing and digital rights

- Develop transparent, secure, and user-controlled data-sharing systems, enabling individuals who experience problems with drugs to manage their own information across services.
- Focus on removing bureaucratic barriers that prevent effective collaboration between organisations and services.

8.4 PRACTITIONERS: Supporting digital inclusion in service delivery

Vision: Practitioners across health, social care, and justice services, working alongside individuals with experience of problem drug use, confidently support them to use digital tools, ensuring that digital inclusion becomes an everyday aspect of forward-facing care.

Recommendation #4: Strengthen, and build the capacity of, the DLS digital champions' network

- Provide practical support to digital champions to develop their digital skills, tailored to their personal circumstances.
- Encourage digital champions to engage with a community of learning to support their ongoing development and digital competencies.

Recommendation #5: Embedding of inclusive and supportive digital inclusion for people with experience of problematic drug use

- Recognise that past difficult experiences may affect individuals' confidence in using digital tools. Ensure early conversations focus on digital access and textual literacy needs, providing practical, tailored support to build confidence in a safe and supportive environment.
- Ensure digital training is delivered in a safe, supportive, and non-judgemental environment.

Recommendation #6: Delivery of digital access is equitable and meets individuals where they are at

- Advocate for flexible digital provision, recognising that people at risk of drug harms have diverse experience of technologies and digital access – one-size-fits-all approaches do not work.
- Adapt digital inclusion strategies to meet the diverse needs of people with complex challenges (e.g., homelessness, drug use, mental health issues).
- Ensure digital access is available at service points, including drop-in centres, recovery hubs, and supported housing services, with public or guest Wi-Fi and charging facilities to remove economic barriers to participation. Encourage agencies to support individuals with connectivity costs where possible, recognising financial impact of digital exclusion.

Recommendation #7: Establishment of digital inclusion as part of core practice within services supporting people with experience of problematic drug use, in line with wider health and social care provision

- Ensure all forward-facing staff have the confidence, skills, and responsibility to support digital inclusion within their service, embedding digital literacy support into all care plans, keyworking sessions, and routine interventions.
- Strengthen collaboration across health, social care, and justice services to ensure digital inclusion is a shared responsibility, reducing reliance on external referrals and making it an integral part of everyday practice.
- Embed digital literacy support into existing interventions, such as harm reduction, drug treatment, mental health services, and rehabilitation programmes.

8.5 INDIVIDUALS: Empowering individuals to take control of their digital future

Vision: Individuals affected by homelessness, drug use, criminal justice involvement, or mental health challenges have the confidence, skills, and access needed to fully participate in the digital world, enabling them to improve their quality of life.

Recommendation #8: Development of digital confidence and independence

- Support individuals to develop essential digital skills for everyday life, including accessing benefits, online banking, and health services.
- Promote accessible digital training, a sharing of such resources amongst organisations, and encouraging all to consider different literacy levels and abilities.

Recommendation #9: Promotion of personal data control and rights

- Make digital access, privacy, and data control rights transparent and routine, ensuring individuals are regularly informed and supported to understand and exercise their digital rights.
- Enable individuals to manage their own records, prescriptions, and appointments digitally, reducing reliance on third parties. Where exceptions apply, such as issues of capacity, alternative support should be a last resort rather than a default approach.

Recommendation #10: Consistent delivery of access to devices and connectivity

- Advocate for affordable internet access and provide on-premises connectivity, across health, drug treatment and recovery, homelessness, and justice settings, ensuring individuals do not face financial barriers to digital participation.
- Work with service providers to ensure individuals receive devices that meet their needs (e.g., larger screens, or screen reader software, for those with disabilities or brain injuries).

Recommendation #11: Adoption of digital tools for personal growth and recovery

- Promote digital tools that support mental wellbeing, recovery, and community engagement amongst individuals with experience of problematic drug use.
- Encourage online peer support networks to help individuals learn digital skills together in a supportive environment.

Recommendation #12: Genuine collaboration of individuals with lived/living experience of problematic drug use in co-designing digital services (through an equal and reciprocal partnership)

- Involve individuals in shaping digital inclusion initiatives, ensuring responses reflect real needs and lived experiences.
- Create feedback loops so individuals can share their experiences and influence future improvements.

8.6 STRATEGIC LEADS: Accelerating digital products and platforms

Vision: People affected by drug use can seamlessly access both proven national digital-health platforms and cutting-edge, co-designed innovations. Health, social-care, housing, and justice services, working alongside industry and lived-experience partners, embed these tools as routine practice, accelerate their continuous improvement, and scale successful solutions quickly across Scotland. All commissioned services treat digital inclusion as part of their job and not as an optional extra.

Recommendation #13: Require services to address digital needs in commissioning contracts

When commissioning treatment, support, or recovery services, include requirements or incentives for providers to supply digital access support. For example, tender specifications could state that the service must provide or facilitate devices and data for individuals who lack them, and train staff as digital champions. This will help in mainstreaming the practice. It will also help to spread the cost, as providers can build it into their service delivery plans (which commissioners fund).

Recommendation #14: Embed national digital health platforms and mainstream consumer apps

- Map where digital tools and services such as Near Me, Connect Me and national digital-mental-health services can support people at risk of drug harm to access services and support
- Upskill staff and Digital Champions to onboard individuals and promote everyday wellbeing apps (diet, activity, mindfulness)
- Track uptake and outcomes and then feed learning into wider health and social care programmes to refine national offers

Recommendation #15: Grow the innovation pipeline for digital solutions aimed at those who experience problems with drug use

- Co-design, test and evaluate new apps/wearables for harm-reduction and recovery (building on By My Side)
- Create lived-experience insight panels and clear data-governance guides to speed development and relevance
- Lobby for agile procurement routes so that proven pilots can scale rapidly across health, social-care and justice settings

Recommendation #16: Create local device and data solutions via partnerships

- ADPs should convene local partners (telecom companies, charities, libraries) to set up schemes like device donation drives or bulk data purchase at discounted rates for their client base. For instance, partnership with a telecom could yield community SIM cards with cheaper rates for vulnerable people. Local innovation can reduce the cost burden and engage community goodwill. Some DLS areas did this informally; formalising it can secure a steady flow of resources. It also fosters community involvement in solutions.

Recommendation #17: Allocate small flexible funds for emergency top-ups and replacements

- Commissioners should set aside a discretionary fund that front-line services can tap quickly to replace a lost phone or buy a data top-up in emergencies (i.e. simplifying the admin so that support isn't delayed). Having a safety net fund means a person won't be cut off for weeks due to bureaucratic delays, thus maintaining continuity of care.

Recommendation #18: Facilitate training and support for the workforce

- Ensure that all commissioned services have access to training on digital inclusion (perhaps funded or arranged by the ADP centrally). This could involve workshops for staff on basic IT troubleshooting, using online tools with individuals, and trauma-informed digital engagement. Building staff capacity will make services more effective in delivering digital support. Confident staff can pass skills to those individuals they support and integrate tech in support plans. It also standardises quality – everyone working in the sector should have at least baseline digital helper skills.

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