



Wales Centre for Public Policy
Canolfan Polisi Cyhoeddus Cymru

Implementation- minded policy making

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Centre for Evidence and Implementation

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Summary

- Across numerous policy fields, many instances illustrate how implementation challenges have caused policies to fall short of their intended outcomes. This report aims to synthesise learning about policy implementation and identify how policy work can be more cognisant of what is required for effective implementation. It is aimed at policy makers and those involved in policy implementation in Wales, particularly within the Wales government.
- This synthesis brings together evidence from i) reviews of studies of policy implementation, and ii) policy resources that offer guidance for integrating an implementation focus in policy making and delivery. It also draws on learning from the field of implementation science and practice. A conceptual model was developed to support the synthesis of evidence and refined based on our findings.
- Policies need to be clear about the ‘why’ (the problem or perceived need to which it responds), the ‘what’ (the aims of the policy and the change intended to be brought about), and the ‘how’ (the policy instruments, strategies and responsibilities for implementation). Ambiguity around the policy content can undermine implementation. Use of theory and evidence in policy design is a facilitator for policy implementation.
- The degree of alignment of the policy content with the implementation context is a key determinant of implementation success. This involves alignment with: i) the policy context, ii) the needs and priorities of those involved in implementation, iii) the infrastructure and financial and human resources available to support implementation.
- Aspects of good alignment are facilitators and enablers for implementation, while aspects of poor alignment pose barriers or challenges.
- Implementation success depends on the support and activity of a range of actors, depending on where implementation takes place.
- Those involved may be policy makers in associated areas, other parts of government, sub-national governance bodies such as local authorities or health boards, downstream implementation organisations (e.g. hospitals, schools), and intermediary organisations providing sectoral support. Implementation activity

- needs to be coordinated and integrated across these levels.
- The degree to which policies will or can be specific about the policy content will vary. Similarly, the degree of alignment of the policy content with the implementation context will differ. This may be due to, for instance, political agendas and pressures, policies being imported from elsewhere, budget constraints, the need for translation and variation across settings in implementation, or diversity in opinions and perceptions among different policy stakeholders.
 - This synthesis highlights the need for implementation to be a central consideration from the outset and throughout all phases of policy work.
 - Implementation -minded policy making involves building implementation thinking into policy logic, so that policy includes direction, guidance and resources for implementation and establishes the processes and infrastructure needed for coordinated implementation activity across levels.
 - Implementation -minded policy making also involves attending to ambiguity in the policy content and assessing and improving the degree of alignment between policy and multi-level implementing contexts.
 - Approaches that can support implementation -minded policy work are: problem and context analysis; evidence gathering, synthesis and use; stakeholder engagement; identifying and planning resources and capabilities; governance and collaboration; monitoring, evaluation and learning; leadership, and communication and framing.
 - These implementation support approaches can be used by policy makers and civil servants at different points in the policy cycle.
 - The approaches are mutually reinforcing and compensatory. The earlier implementation thinking and implementation-focused analysis and activity done (or not done) will influence what is needed in later stages of work.

Introduction

The focus of this report

This report aims to answer the question: "What does implementation--minded policy work involve?". In essence, how can policy work be cognisant of what is required for effective implementation, and how can this thinking be brought into the policy process?

The impact of any policy, no matter how well designed and formulated, will depend on how well it is implemented. '*Policies do not succeed or fail on their own merits.*' (Hudson, Hunter and Peckham, 2019, p.1). WCPP has a longstanding interest in policy implementation, increasingly drawing on implementation science and the evolving empirical and theoretical evidence on effective implementation from other fields of study.

This report is principally aimed at policy makers and those involved in policy implementation in Wales, especially within the Welsh Government. The outset of this report reflects some salient features of the Welsh policy context. First, a common view in Welsh policy arenas suggests that while Wales has many 'good' policies, their implementation is sometimes poor. Second, the Senedd, as a devolved system, only holds partial legislative competence. Welsh devolution is more restricted than the Scottish and Northern Irish systems, with more powers reserved to the UK. Consequently, Wales occasionally receives policies made in Westminster over which it has had limited influence and may make devolved policies which (intentionally or unintentionally) are in tension with those developed in Westminster that apply to reserved powers.

The challenge of policy implementation is, of course, not exclusive to Wales. Across the UK, and indeed globally, there are numerous examples of policies that have failed to fulfil their intentions. Hogwood and Gunn (1984, cited in Cairney, 2019) describe this as resulting variously from *bad policy* (policy is implemented well, but was not capable of bringing about the desired outcomes), *bad execution* (policy not implemented well) and *bad luck* (implemented well and could have been expected to work, but undermined by factors beyond the control of policy makers).

Recent initiatives in the UK have sought to address these shortcomings by seeking to improve policy making and delivery. For example, Deliverology (Barber and Moffit, 2011) leverages key principles of performance management, through the formation of delivery units, setting targets and trajectories, and regular data-led review of performance. Design Thinking uses iteration and user involvement to explore and define a policy issue, and collaborative ideation and prototyping to design innovative policy solutions. Other approaches include systems thinking and open policy making. In the Welsh context, an approach to policy making is embedded in law. The Well-being of Future Generations (Wales) Act (2015) outlines five 'ways of working' that public bodies need to take into account when making decisions:

- Collaboration: working across intra- and inter-organisational 'silos';
- Integration: approaching issues in a holistic way that reflects the connections between issues;
- Involvement: working with those who have an interest in the issue being addressed, and ensuring that this reflects the diversity of the target population;
- Prevention: acting to prevent problems occurring; and
- Long-term: balancing short-term needs with safeguarding longer-term needs.

The intention is that by pursuing this approach to policy making, public bodies will make better decisions that are aligned with the principles of sustainable development.

These initiatives stemmed from recognising a need to improve policy and increase effectiveness, yet they have not generally delved deeper into the 'how' of implementation. Therefore, the policy process in Wales has not yet evolved to incorporate deep consideration of implementation.

This report aims to synthesise learning about policy implementation. We approach this by collating evidence on the challenges (and facilitating factors) experienced in policy implementation, and the strategies recommended to support and enhance policy implementation. The line we take in this report is that implementation thinking, and implementation-focused analysis and activity, need to be embedded in policy work from the start and sustained through all stages of policy work.

Our focus is on what is sometimes termed 'Big P' policy - that is, government-directed policy legislated, mandated or regulated at national, federal, state or local/municipal government level. The nature of government-led policy raises particular implementation challenges (Norris et al., 2014; Forberger et al., 2022; Havers et al., 2020; Jankhotkaew et al., 2022):

- It is intended to be applied widely, but may be contested;
- Implementation contexts are complex and varied; and
- It is developed by individuals and groups distant from and not always grounded in the settings that will be responsible for implementation.

The evidence we draw on

In this report, we draw on two forms of evidence:

- **Reviews:** syntheses of evidence from studies of policy implementation that identify factors that aided or hindered policy implementation. We refer to these throughout the report as 'reviews'. Using existing syntheses in a 'review of reviews' was an efficient approach which enabled us to examine a range of policy areas.
- **Resources:** guidance documents (toolkits, guides etc.) that propose strategies and approaches for integrating an implementation focus in policy making and policy delivery. We refer to these throughout the report as 'resources'. Most are wide-ranging with only some coverage of implementation, and the robustness of their empirical or evidential foundations varies.

We refer collectively to the reviews and resources as 'texts'.

Moreover, we incorporate insights from the field of implementation science and practice, and apply an implementation science lens to our analysis to integrate learning from the reviewed texts.

Structure of the report

The next section provides a concise introduction to and framing of policy implementation and implementation science. The subsequent section provides more detailed information about

the methods used in this study. We then proceed to the findings in three sections, covering i) a synthesis of evidence from the reviewed texts relating to policy content; ii) implementation barriers and facilitators emerging from the level of alignment between policy and implementation contexts; and iii) recommended approaches to support implementation. The final discussion section integrates the findings and aims to suggest directions for strengthening policy implementation in Wales.

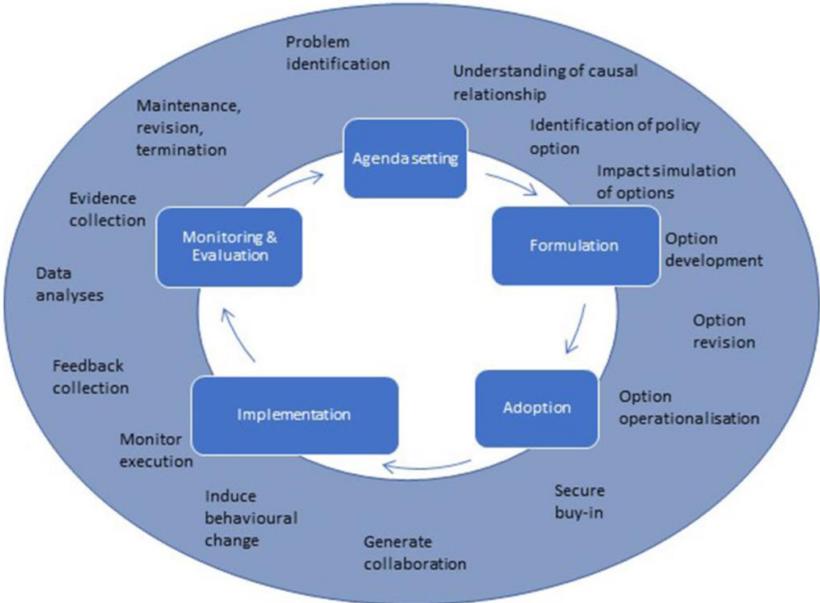
Policy implementation and implementation science

This section provides a concise introduction to policy implementation and implementation science. Our intention is to outline some of the concepts and models used in each, thus providing context to the study and highlighting concepts that we draw on in our analysis. We also set out the conceptual model we developed to support the synthesis of evidence from the reviews (i.e. existing syntheses of studies of policy implementation) and resources (i.e. guidance documents and toolkits for policy work).

Framing policy implementation

The policy cycle is a classic heuristic for understanding policy making (Forberger et al., 2022). It presents implementation as a specific phase in the cycle. There is some variation in the specific stages used in representations of it, but an adapted and extended version, taken from one of the reviewed syntheses, is reproduced in Figure 1.

Figure 1. The policy cycle heuristic and typical accompanying activities



Reproduced from Forberger et al., 2022.

However, the policy cycle has been criticised for portraying an overly rational and linear model which fails to reflect the realities of modern policy making (Cairney, 2019).

Translating policy intentions into enduring changes on the ground is undoubtedly a highly complex task that depends on a wide range of factors. Policy implementation involves transitioning policy between levels, from policy makers in government to implementing organisations. Implementing organisations may themselves operate at various levels, for example including regional or local governance structures (e.g. local authorities, police forces, health trusts, tax offices) and frontline services (e.g. schools or hospitals). Moreover, within organisations policy implementation moves through different levels of staff (from leaders through management to workers). Existing networks, coalitions, lobbies, communities, partnerships and interest groups are also part of the equation, and new ones may form or be formed as part of policy implementation. Umbrella bodies, professional bodies, sector agencies or other intermediary bodies may be involved, either tasked with supporting implementation or because they are part of the implementation context. The composition will vary between policy sectors, reflecting formal management and governance arrangements as well as informal alliances that have developed over time. Collectively, these various individuals, networks, organisations and parts of organisations are the 'implementation actors' involved in policy implementation, in various ways. Policies are reinterpreted and reshaped as they move through these parts of systems (Bullock et al., 2021).

A distinction is often drawn between 'top down' and 'bottom up' approaches to policy. 'Top down' approaches view policy and implementation as a centralised, government-led process that is executed through hierarchical structures and relationships, in which the central players are policy makers. Therefore, implementation is about adherence to their intentions.

A 'bottom up' approach views policy and its implementation as the actions taken by local implementers ('street-level bureaucrats', as termed by Lipsky, 1980) who translate and enact policy decisions into practices, using discretion and autonomy to modify policy to take account of local concerns and needs. In such a view, policy success is dependent on the skills of these local actors, and only marginally on the central activities and the work of policy makers.

Perspectives that synthesise and recognise the limitations of these two approaches view policy making as an ongoing set of interactions, negotiations and exchanges between multiple actors at multiple levels, each with different understandings, framings and pressures. In this conception, factors such as the networks and coalitions that exist, the wider contexts in which policy happens, and the distribution and flow of information, power and resources are all seen as important influences on implementation processes. Implementation is not seen as a separate stage in a linear process, but as an integral part of policy *making*, as policy enactment shapes the policy and influences its outcomes through interpretation, translation and reconstruction (Viennet and Pont, 2017). Sabatier's (1988) Advocacy Coalition Framework exemplifies this integrated perspective. Policy implementation becomes more challenging in less hierarchical systems, and where negotiation and co-construction play a significant role.

Matland (1995) argues that scholars of 'top down' and 'bottom up' approaches are, in fact, studying different policies. He proposes a model for understanding implementation based on two dimensions: conflict and ambiguity. Ambiguity refers to a lack of clarity about intended policy goals and uncertainty about the roles of different organisations in implementation, or the tools or strategies to use. Conflict refers to whether organisations with a stake or interest in implementation have differing views about the policy goal. Together, these two dimensions shape the broad approach to implementation required according to Matland's (1995) model:

- *Low ambiguity + low conflict*: provides conditions for *Administrative Implementation* where determining implementation strategies is a rational decision-making process, and the desired outcomes are reasonably certain provided sufficient resources are made available. Implementation can be ordered hierarchically, and a top down approach is suitable.
- *Low ambiguity + high conflict*: occurs where there are clearly defined but incompatible goals, or where there is conflict over access to means which are controlled by actors sceptical about or opposed to the policy. These are the conditions for *Political Implementation*. Successful implementation relies on coercion or negotiation, and top down approaches are favoured.
- *High ambiguity + low conflict*: here, although the goals of policy are accepted, there is ambiguity about roles and approaches, and cause-effect mechanisms are uncertain. Outcomes are dependent on contextual conditions, and implementation is likely to

vary from site to site. These are the conditions for *Experimental Implementation* which prioritises learning, and bottom up approaches to implementation are favoured.

- *High ambiguity + high conflict*: here, there is likely to be a proliferation of interpretations and competing visions. There is likely to be high levels of local variation, with local coalition strength and professional values and allegiances at play. The conditions are set for *Symbolic Implementation* dominated by local actors but with central actors an important influence providing resources, incentives and focusing attention. Neither top down nor bottom up models are appropriate.

Approaches such as these for understanding implementation have been criticised for focusing on the delivery and execution of policy, sometimes termed 'mid-implementation', and not sufficiently accounting for the complex processes that occur across systems from pre-implementation to sustainment (Crabbe et al., 2022; Lobczowska et al., 2022).

Furthermore, the study of policy implementation is still a relatively new field which has been reliant on qualitative research methods. As such, there is scant generalisable evidence about the most crucial determinants within implementing organisations and the wider system for implementation (Allen et al., 2020).

Implementation science

Implementation science provides a more extensive body of empirical evidence for understanding the processes involved in implementation and how intra-organisational and external contexts come into play. However, it has largely developed as the study of the take-up and institutionalisation of evidence-informed programmes, practices or interventions.

Policy has often been conceptualised and studied as an aspect of the wider implementation context, an influence on implementation or a barrier or facilitator, but the implementation of policy itself has not typically been the central focus (Bullock et al., 2021; Crabbe et al., 2022). However, there are connections between policy implementation and implementation science, and much scope for learning from their integration (Bullock et al., 2021; Nilsen et al., 2013).

As with policy implementation, studies highlight that *implementation* effectiveness is critical for *intervention* effectiveness. Indeed, an illustration of how significant implementation is for outcomes is the conclusion from a meta-analysis of criminal justice intervention effectiveness

(Lipsey et al., 2009, p.127) that: ‘... a well-implemented intervention of an inherently less efficacious type can outperform a more efficacious one that is poorly implemented.’

Implementation science encompasses wider temporal framing of implementation than the policy cycle. The Exploration, Preparation, Implementation and Sustainment (EPIS) framework (Moullin et al., 2019) outlines distinct implementation phases as:

- Exploration (identifying the problem, scoping and selecting solutions)
- Preparation (building the infrastructure and capacity for implementation)
- Implementation (initial implementation with course correction and modifications in light of early feedback)
- Sustainment (when the change becomes embedded and institutionalised).

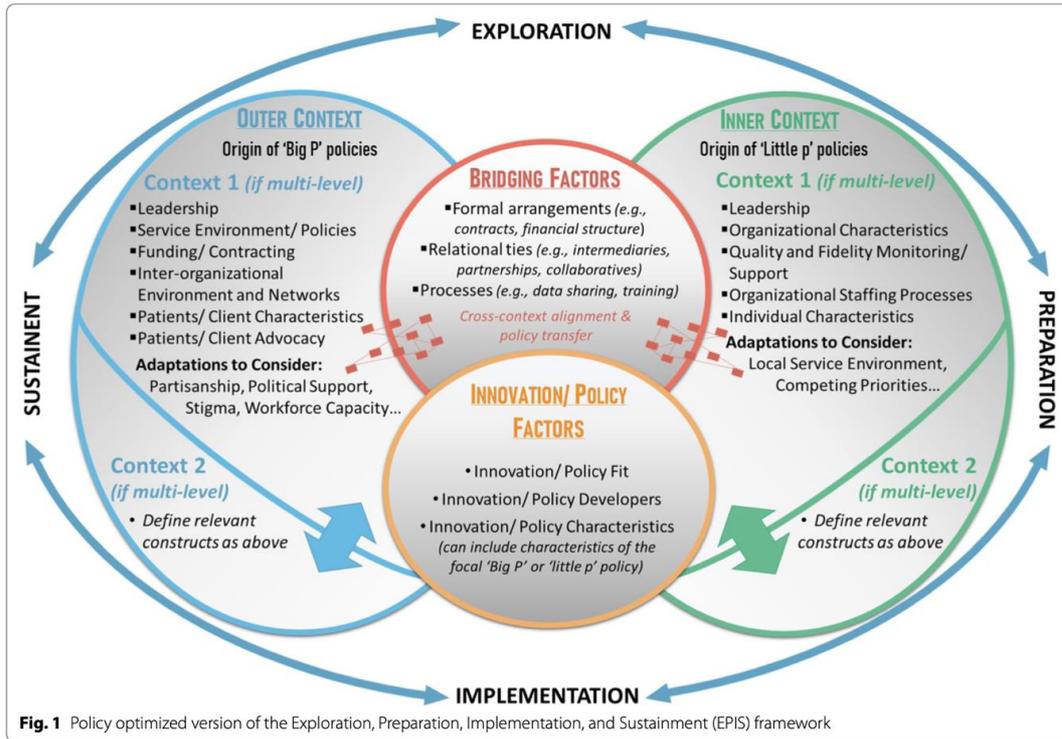
It is important to note that there are connections and feedback loops between phases, and implementation is not a neat linear sequence. It is sometimes necessary to return to an earlier stage to repeat or reinforce work, and action taken (or not taken) in one phase can influence others.

The factors that can either enable or hinder effective implementation (or 'determinants') have been synthesised in several frameworks and models. For example, the EPIS framework conceptualises:

- An *outer context* or broader environment (that includes influences such as policies, funding, inter-organisational networks, social movements and patient or public characteristics)
- An *inner context* of local organisational factors influencing implementation (e.g. leadership, organisational characteristics, staffing etc.)
- Between these are characteristics of the *innovation or policy* including its fit with inner and outer contexts
- *Bridging factors* such as contracting or financial arrangements, partnerships, and processes such as training that link inner and outer contexts and the policy attributes.

A version of the EPIS framework, optimised for policy implementation, is shown in Figure 2.

Figure 2. Policy optimised version of the Exploration, Preparation, Implementation and Sustainment (EPIS) framework



Reproduced from Crable et al., 2022

The Consolidated Framework for Implementation Research (Damschroder et al., 2022) similarly outlines influences on implementation relating to:

- The *intervention*: e.g. its source, evidence base, relative advantage, adaptability and complexity
- The *outer setting*: i.e. the wider context for implementation, including partnerships and networks, policies, funding, social movements and local conditions
- The *inner setting*: i.e. the implementing organisation, e.g. school or hospital, including structural characteristics, culture, resources, tension for change, and compatibility with the innovation
- *Individuals* involved as implementation leaders, team members or recipients: e.g. their need, capability and motivation
- *Implementation processes*: e.g. the use of teaming, needs and context assessment, context assessment, planning, tailoring, engaging others.

A key focus in implementation science is how well the innovation being introduced aligns with the features of the wider context. This is where implementation strategies – the specific activities undertaken to introduce, implement and embed change – come in. Implementation strategies are usefully understood as bridging between an innovation and the implementation setting, and as attempts to enhance the alignment between an innovation and the implementation setting (von Thiele Schwarz, Aarons and Hasson, 2019). There are a number of taxonomies or frameworks, but the most widely used (Powell et al., 2015; Waltz et al., 2015) identified 73 individual strategies from empirical studies and grouped these into nine sets of implementation strategies:

- Evaluative and iterative strategies: using evidence to assess and modify implementation and the intervention
- Interactive assistance e.g. facilitation, supervision, technical assistance
- Adapting and tailoring to context
- Developing stakeholder inter-relationships
- Training and educating stakeholders
- Supporting practitioners or those involved in delivery, for example through technical assistance
- Engaging the public or ultimate beneficiaries
- Financial strategies e.g. accessing new funding
- Changing infrastructure e.g. physical site features, roles, organisational systems, legislation.

The Implementation Outcomes Framework (IOF) (Proctor et al., 2011) is widely used to formulate relevant outcomes of implementation. This framework distinguishes outcomes as client or social outcomes (i.e. the ultimate goals of interventions, e.g. improved well-being or increased employment) and service outcomes (e.g. efficiency and client-centredness). The IOF distinguishes between and describes the following implementation outcomes, which have also been used in evaluations of policy implementation:

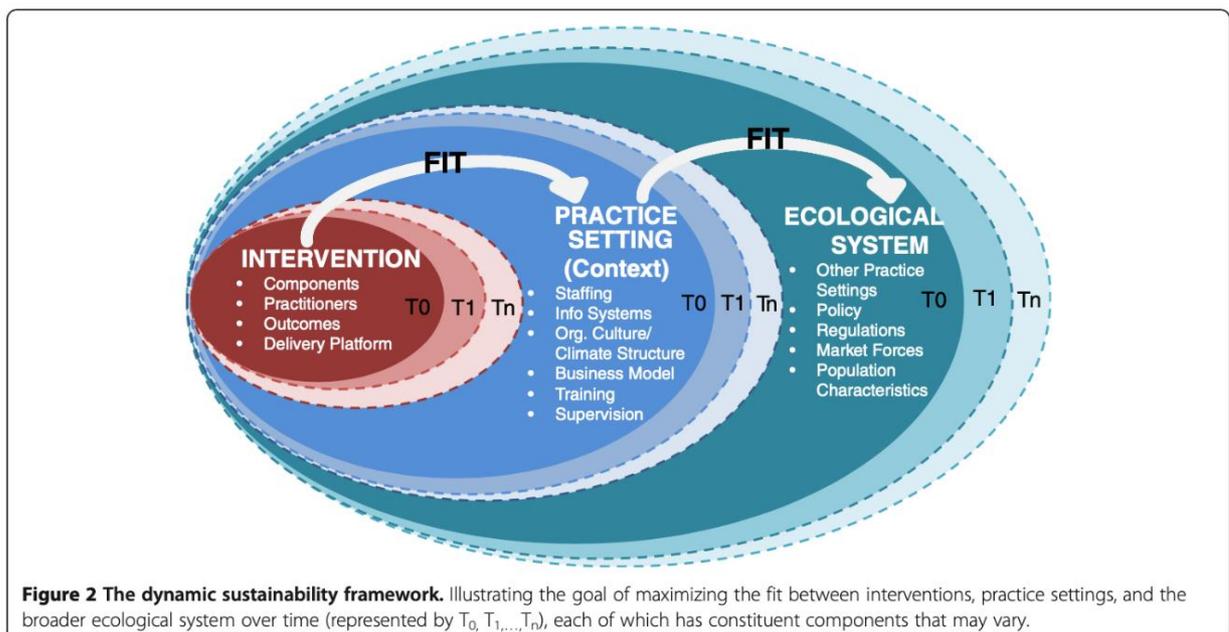
- Acceptability: whether the intervention is liked and supported
- Adoption: whether it is taken up
- Appropriateness: whether it is seen to fit with needs and cultural preferences
- Feasibility: whether it can be implemented with ease

- Fidelity: whether it is implemented as intended
- Implementation cost: the specific costs of implementation
- Penetration: integration or institutionalising within systems and practice
- Sustainability: and scalability, whether the innovation remains or continues to be used and in place, and whether it is expanded to new settings.

All nine outcomes can be relevant over the course of implementation and to different aspects of implementation. The IOF can also provide clarity about which are the focus of implementation endeavours or of evaluation at different points in time.

As implementation science has matured, it has placed more emphasis on understanding how innovations become embedded and sustained in systems, and the need for continuous mutual adaptation between innovations and the organisational and wider settings in which they are implemented. The Dynamic Sustainability Framework highlights that innovations and their contexts are in a constant state of flux so that a continuous process of learning, problem solving and adaptation is needed to optimise alignment and fit (Chambers, Glasgow and Stange, 2013). The formal content of policy, as set out in statute or regulation, may be less malleable than other interventions, but policy does change and adapt as it is enacted in local contexts. Therefore, the framework may offer helpful insights for policy analysis.

Figure 3. Dynamic Sustainability Framework



Reproduced from Chambers, Glasgow and Stange (2013)

Framing policy implementation for this study

We needed to develop a framing for this study that would steer us in synthesising evidence from the reviews and the resources used in this study. This would allow us to bring in learning from implementation science. The model we arrived at is influenced by the implementation science frameworks described above and by those developed by Bullock et al. (2021) and Viennet and Pont (2017) (described below), and it was adapted as we worked through our analysis. Although, as we have noted, there are several existing frameworks (and concerns regarding their continued proliferation), we formed the view that a bespoke conceptual model was required for this study that would provide a straightforward linkage between implementation determinants, processes and activities, and that could act as a guide to policy action.

Bullock et al. (2021) developed an integrated theoretical framework of the implementation process from a policy perspective, which points to three sets of factors that influence policy processes and outcomes:

- policy instruments and strategies;
- determinants or wider influences on implementation; and
- policy actors.

They note that the policy implementation process involves policy transitioning between levels (from government to implementation organisations as described), although it can start at any level and skip levels. They also note that policy changes as it moves between levels. Policy decisions and implementation activities at one level become part of the context for implementation at other levels. Discussing determinants of implementation, Bullock et al. note that the success or failure of policy is not determined by policy content per se, but by whether it is the right content for the problem and its alignment with the implementation context. What is done (or not done) at the initial policy formulation stage will also impact on implementation, for instance, who was involved and whether adjustments were made in response to feedback. They also highlight that the complexity of the vertical nature of public administration will influence implementation. A more complex or 'thicker' hierarchy will

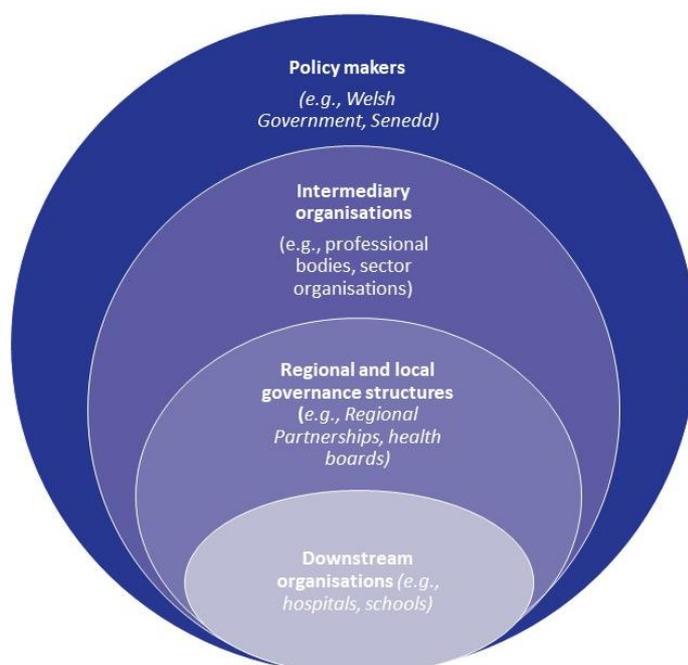
require more managerial competence and governance for effective implementation; and stronger networks and inter-organisational relationships among implementation stakeholders to facilitate implementation.

Viennet and Pont (2017) developed a framework for policy implementation in education that outlines four dimensions critical for effective policy implementation:

- smart policy design;
- inclusive stakeholder engagement;
- a conducive institutional, policy and social context; and
- a coherent implementation strategy for reaching schools.

The model we developed for this study drew on both these frameworks and is shown in Figure 4, below. Our model begins with policy content involving a combination of policy goals and policy instruments which determine, at a high level, how change is intended to come about (recognising that the 'change' envisaged might be continuity or sustainment). The policy may itself also include implementation guidance. These elements are referred to as the 'policy logic' in later sections.

Figure 4. Domains in implementation



This policy logic may be more or less well aligned with the context in implementing settings (e.g. schools or hospitals - the 'inner context' in the EPIS and CFIR frameworks: Moullin et al., 2019; Damschroder et al., 2022) and the wider context for implementation (including e.g. policy, social, institutional (at different levels), economic aspects of context, and the networks, alliances, coalitions and partnerships that exist). This policy logic may align well with these contexts if, for example, there is a widely recognised need for change; broad agreement with the policy logic; alignment with norms and values; and the capacity and infrastructure for implementation exists or is put in place. It may be less well aligned if few or none of this applies.

Aspects of good alignment will generally be potentially positive influences for implementation (facilitators and enablers), and aspects of poor alignment will potentially be negative influences for implementation (barriers or challenges). It is important to note that there may be justifiable reasons for initial poor alignment, perhaps where a policy is intentionally disruptive or where it emerges from Westminster government and is not (yet) adjusted or modified for Wales.

Our model envisages that implementation activity takes place within three broad domains:

- National government: Welsh Government or, in the case of legislation, the Senedd
- Implementation settings: as we noted, these are multi-level and include both regional and local governance bodies (e.g. Regional Partnership Boards, Public Service Boards, local authorities, police forces, health boards) and more 'downstream' organisations (e.g. hospitals, third sector service providers, and schools). Governance bodies may be the ultimate implementation setting (e.g., a social work team in a local authority), or may be positioned above the ultimate implementation setting (e.g., a health board in the case of policy implemented in hospitals)
- Intermediary organisations: such as professional bodies, sector organisations, or arms-length organisations within and outside government structures. There may be directions in policy content to these organisations to undertake particular work to support implementation settings, or they may do so autonomously.

Implementation activity needs to be coordinated and integrated across these domains. For example, the implementation of the Welsh Government decision to roll out universal

provision of free school meals might involve negotiation between Welsh Government, the Wales Local Government Association and local authorities over the funding support needed to increase provision; guidance for local authorities set out by Welsh Government on promoting wider objectives (e.g. supporting healthy diet, supporting local and sustainable food production); changes to Estyn school inspections; local authority guidance issued to schools; schools collaborating at a local or regional level to plan for or deliver necessary changes; schools renegotiating contracts with catering companies; and activity within individual schools, e.g. investment in facilities and equipment.

Central to our model is that alignment can be increased, and that frictions that result from misalignment can be addressed. There are actions that policy makers can take to increase the likelihood of successful implementation across phases of the policy process from initial exploration and policy development to scaling and sustainment. We describe these as implementation support approaches (see later section). These are processes that can be used to help policy makers (and others) in aligning policy content with the implementation context, and addressing implementation barriers and facilitators that may arise as a result of areas of misalignment, i.e. by mitigating potential or actual barriers and leveraging potential facilitators. Exactly which approaches are necessary or optimal will depend on the areas of misalignment as well as the potential barriers and facilitators to implementation.

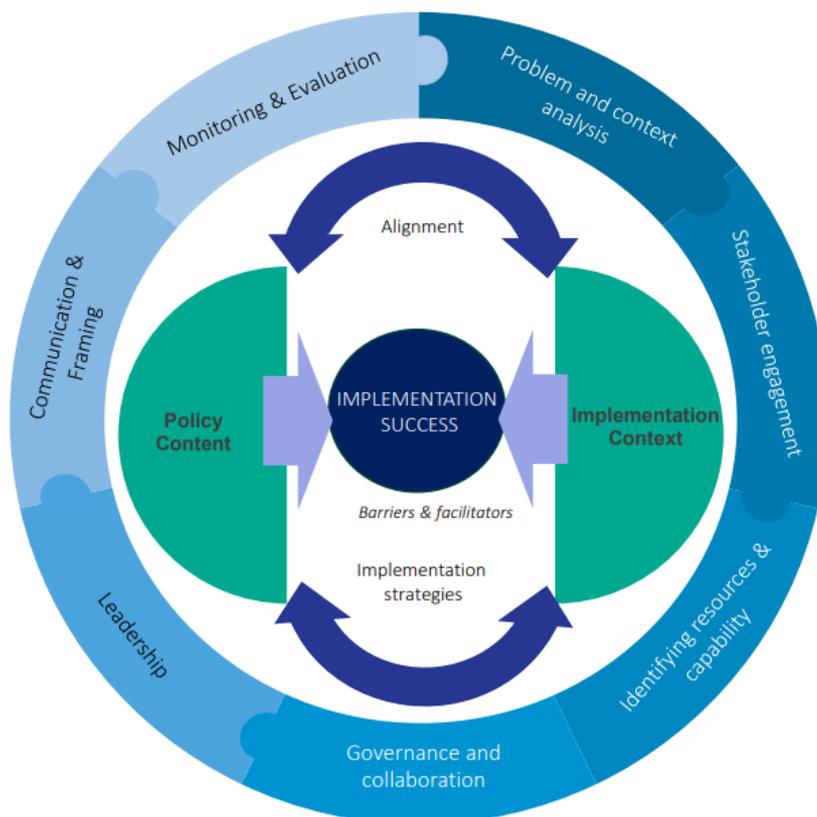
A further key assumption in our model is that interactions exist between the implementation support approaches used at different points in time and in different parts of the implementation context, with feedback loops and compensating mechanisms between them. For example, policy development strategies such as systems mapping, prototyping and co-development might help to ensure that policy content is better aligned with implementation contexts from the start, reducing potential barriers and creating enabling conditions for implementation. On the other hand, doing less in the policy formulation stage might mean that more intensive implementation support is needed later, for example, providing more guidance, involving intermediaries to support and guide implementation, providing incentives and resources, and engaging stakeholders.

The components of our conceptual model are:

- *Policy content or 'logic'*: the 'why' (problem definition), 'what' (objectives) and 'how' of policy (policy instruments and direction for implementation);

- *Implementation context*: the social, cultural, political, economic, infrastructural and institutional context at different levels (e.g., implementation setting, regional, national);
- *Implementation strategies*: the specific activities undertaken to introduce, implement and embed policy by implementation actors at different levels (i.e., Welsh Government, intermediary organisations, implementation settings). These strategies may have been specified (usually at a high level) in the policy content, but may be further elaborated as part of implementation planning that happens after policy content has been finalised; and
- *Implementation support approaches*: the activities that we have identified through our review that can help policy makers and civil servants in ensuring alignment of the policy content with the implementation context, and to mitigate potential or actual barriers that may arise from a lack of alignment, and to leverage potential facilitators of implementation.

Figure 5. A framing model of policy implementation



We use this model as the organising structure in our analysis and reporting in the following sections. We draw primarily on the reviews to illustrate how features of policies and the degree to which they were aligned with implementation contexts either supported or constrained policy success. Further, we draw on both the reviews and the resources to identify and describe implementation support approaches that could be used to support alignment and address barriers and leverage facilitators at different phases of policy work.

It is important to note that, although the included texts sometimes drew explicit connections between implementation strategies or support approaches and barriers (recommending a specific strategy or approach to address a specific barrier), these connections were often absent. Moreover, there is limited empirical evidence in the texts reviewed relating to this aspect, representing a significant gap given the growing evidence from implementation science research suggesting that implementation strategies should be selected to fit barriers, facilitators and operating contexts. In our analysis, we identify approaches that we consider may be most in addressing or avoiding different barriers or areas of misalignment, drawing on learning from implementation science. However, it is important to note that these are our interpretations and are not empirically tested.

Before we delve deeper into our findings, the next section provides more information on the methods we used to identify and select reviews and resources for inclusion, and describes those included.

Methods

As outlined in the introduction, this synthesis is focused on the implementation of government-directed policy that is legislated, mandated or regulated by a governing body at the local, state, federal or national government level. We define policy as '*a statement of the government's position, intent or action on a particular issue or subject*'. We excluded service protocols, NICE and other health guidelines, as well as practice change and service models not explicitly linked with the implementation of a policy.

Based on consultation with WCPP, the policy domains that we included as being within scope were: health, social services, housing, social welfare, agriculture and rural development, environmental protection and climate change, local area regeneration, education, crime and justice. We included policies implemented at the local, regional, state or national level, or at the level of an individual organisation (e.g., schools or hospitals) or larger units (e.g., local authorities). In terms of geographies, we only considered reviews that included studies from high income countries (as per World Bank classification), as we anticipated these would be most relevant to the Welsh context. An Advisory Group consisting of experts from academia, Welsh Government and the What Works Network supported decisions on definitions and the scope of the synthesis, and they also advised on the selection of resources that were included.

Policy resources

To find relevant policy resources, a systematic organisational website search was conducted on 22 websites, including the UK Policy Lab (Cabinet Office), National Audit Office (UK and Australia), Centre for Effective Services (Ireland), and the OECD. We identified resources that aim to bring an implementation focus to policy making and delivery, and resources that included guidance documents and toolkits. In total, 113 resources were identified as being potentially relevant. After subsequent detailed screening, 22 resources were identified as in scope, of which 10 were selected for inclusion. The final set of resources was selected in consultation with WCPP taking into account the degree of focus on policy implementation, and whether the resource offered potentially transferable and actionable findings.

Some resources cover policy design and implementation in more general terms (e.g., Australian National Audit Office, Harvard Kennedy School), while others focus on a specific approach such as behaviour change, systems thinking, open policy making or whole of government. The resources by the Institute for Government and Public Health England have a sectoral focus on justice and health, respectively. The empirical or evidential foundations for the strategies and recommendations set out are not always clearly stated, although some resources explicitly base their findings on case studies and interviews with individuals possessing extensive policy experience.

Table 1. Summary of included resources

Title	Organisation: authors	Year	Summary
Successful implementation of policy initiatives	Australian National Audit Office	2014	The guide identifies better practice considerations when implementing a policy initiative, covering topics such as governance, managing risk, engaging stakeholders, planning, resources, monitoring and evaluation.
The Public Impact Fundamentals. Helping governments progress from idea to impact	Centre for Public Impact	2018	The report discusses the key aspects of effective policies using the Public Impact Fundamentals framework which includes Legitimacy, Policy and Action.
New approaches to policy implementation: How public executives address the complexity of policy implementation and what can be done to increase efficiency and sustainability	Ramboll consultants: Ejler et al.	2018	The paper provides guidance and inspiration for how to navigate complexity to successfully ensure implementation of policy reforms and policy programmes. The paper was developed based on interviews with 30 public sector executives in Northern Europe.

Title	Organisation: authors	Year	Summary
Implementing whole of government approaches	Centre for Effective Services: Colgan, Kennedy and Doherty	2014	The report examines the potential of implementation science to support a whole of government approach in a practical way. An implementation framework is described to assist with both the phasing and sequencing of the work, along with the enablers that need to be attended to at each of the stages of implementation.
Achieving behaviour change: a guide for national government	Public Health England: West et al.	2020	The guide provides a structured approach to achieving behaviour change in support of policy objectives. It is based on the Behaviour Change Wheel that was developed by integrating 19 behavioural science frameworks from multiple disciplines and sectors.
Open policymaking toolkit	Policy Lab, Cabinet Office	2016	The manual includes information about Open Policy Making as well as the tools and techniques policy makers can use to create more open and user led policy.
Architect, Pilot, Scale, Improve: A framework and toolkit for policy implementation	Harvard Kennedy School: Fagan, Cornejo and Cushing	2021	The resource provides a four-step framework for developing effective implementation plans: Architect, Pilot, Scale, Improve. A set of tools that support each of the framework stages is provided, in addition to tools for change management and project management.

Title	Organisation: authors	Year	Summary
An introductory systems thinking toolkit for civil servants	Government Office for Science	2022	The toolkit aims to provide the systems thinking tools to collaborate with cross sector partners to design implementation and create conditions that enable effective policy delivery in complex systems.
Introducing a 'Government as a System' toolkit	Policy Lab: Siodmok	2020	The toolkit outlines different levers or actions that could be used by policy makers to influence different policy outcomes.
Doing them Justice. Lessons from four cases of policy implementation	Institute for government: Norris et al.	2014	The publication illustrates what is distinctive about implementing policies that focus on social justice and the lessons these examples provide for the implementation of policy more generally.

Reviews

We searched seven databases for systematic and other reviews of studies and evaluations that focussed on policy implementation and contained findings related to barriers and facilitators to implementation, the selection of implementation strategies and/or policy design. We screened 4043 texts (4043 title and abstract screening, 144 full text screening) and identified 50 as meeting our inclusion criteria. Because the resources for this study were limited, we selected 15 papers for inclusion. In agreement with WCPP, we excluded reviews that focussed on a very specific policy instrument or topic which limited their generalisability, took a narrow angle to implementation (e.g., looked exclusively at acceptability), or contained only brief findings related to determinants of policy implementation.

Data were extracted from the 15 papers, and quality appraisal was conducted using the CASP checklist for systematic reviews. Overall, the included reviews were assessed as being of sufficient quality to be included in the review.

The majority of papers (13) are, broadly, health-related, covering physical activity, food and nutrition, maternity employment protection, alcohol control, local health promotion, and hospital-based infection prevention and control. The other two reviews focused on environmental innovation and education, respectively. Implementation settings varied but included schools, hospitals, the work place, food settings, and local authorities. Some reviews studied a mix of implementation settings, or did not specify this. Most reviews covered policies set by governing bodies at different levels (e.g., national, federal and/or local government).

Policy implementation outcomes or measures for effectiveness were not specifically defined or measured in most papers. Few papers used implementation science frameworks, notably CFIR (in Jankhotkaew et al., 2022) and the RE-AIM framework (Reach, Effectiveness, Adoption, Implementation, Maintenance) (in Horodyska et al., 2015a).

Table 2. Included reviews

Title	Authors and year of publication	Policy domain	Type of review	Geography of research	Summary
What we know about the actual implementation process of public physical activity policies: results from a scoping review.	Forberger et al., 2022	Education, Health	Scoping review	Studies conducted in USA (7), UK (1), New Zealand (1), and Oman, (1)	The review identifies the implementation processes and strategies of public policies targeting individual physically inactive behaviour.
Transformative innovation policy: A systematic review	Haddad et al., 2022	Innovation	Systematic review	Not described	The review looks at the emerging literature on 'Transformative Innovation Policy' and identifies unique policy characteristics and their implications throughout the policy cycle.
A systematic review and meta-synthesis of policy intervention characteristics that influence the implementation of government-directed policy in the hospital setting: implications for infection prevention and control	Havers et al., 2020	Health	Systematic review and meta-analysis	Largest proportion of studies conducted in United States (44), UK (5), Australia and Canada (3)	The review examines the implementation of government-directed policy in hospital settings, with the aim to identify policy intervention characteristics that influence implementation.

Title	Authors and year of publication	Policy domain	Type of review	Geography of research	Summary
Implementation conditions for diet and physical activity interventions and policies: An umbrella review	Horodyska et al., 2015a	Health	Umbrella review	Not described	The review identifies conditions that are identified as being supportive of the implementation of diet and physical activity policies and these conditions are mapped onto the RE-AIM framework domains.
Good practice characteristics of diet and physical activity interventions and policies: an umbrella review	Horodyska et al., 2015b	Health	Umbrella review	Not described	The review identifies the 'good practice characteristics' that are seen across a range of papers about the implementation of policies and interventions to improve physical activity and diet.
Integrative review: identifying the evidence base for policymaking and analysis in health care	Kennedy et al., 2019	Health	Integrative review	Studies conducted in countries in North America (13), Europe (16), Australia (6) and New Zealand (1), Asia (8), Africa (15). Middle East (4), Caribbean (1) , and in multiple regions (3)	This review identifies and synthesises learnings around health policy making, to support the development of a health-related policy analysis framework.

Title	Authors and year of publication	Policy domain	Type of review	Geography of research	Summary
Factors influencing the implementation of nutrition policies in schools: A scoping review	Mclsaac et al., 2019	Education, Health	Scoping review	Policies originated from: United States (32), Canada (10), Australia (6), United Kingdom (3), and Denmark, Slovenia, Norway, Mexico, South Africa, Netherlands, New Zealand, multi-country (8 in total)	This scoping review looks at what is known about how school nutrition policies are implemented, and what action can be taken to support schools to do this well.
Identifying barriers and facilitators in the development and implementation of government-led food environment policies: a systematic review	Ng et al., 2022	Health	Systematic review	Policies originated from 39 countries, including United States (64), Canada (17), Fiji (16), Australia (14), Mexico (11), and Chile (9).	The review looks at the factors that impact implementation of policies that support healthier food environments (physical, political, economic and sociocultural surroundings and conditions that mediate food systems and shape individual diets), such as policies around food labelling, promotion, prices and availability, and food provision in schools and other settings.

Title	Authors and year of publication	Policy domain	Type of review	Geography of research	Summary
Implementing food environment policies at scale: What helps? What hinders? A systematic review of barriers and enablers	Nguyen et al., 2021	Health	Systematic review	Studies conducted in 6 countries, with the highest number of studies stemming from the United States (6), Australia (5), and Canada (5)	This review looks at factors that influence the implementation of healthy food and drink policies, which aim to support obesity prevention.
Implementation, mechanisms and effects of maternity protection legislation: a realist narrative review of the literature	Probst et al., 2018	Health	Narrative review	Studies conducted in UK (2), Switzerland (4), Denmark (2), Spain (1), Canada (12), Ireland (1), Norway (2), France (4), Germany(1), Belgium (1), Poland (4), and Italy (2).	The review assesses the barriers to and facilitators of implementing legislation to protect the health of pregnant workers and their unborn children from workplace exposure.
Enablers and barriers to implementation of and compliance with school-based healthy food and beverage policies: a systematic literature review and meta-synthesis	Ronto et al., 2020	Education, Health	Systematic literature review and meta-synthesis	Studies conducted in United States (11), Canada (8), Australia (5), UK (1), Malaysia (1), Norway (1), and Philippines (1).	The review focuses on schools' implementation of, and compliance with, healthy food and drink policies, and the associated barriers and facilitators.

Title	Authors and year of publication	Policy domain	Type of review	Geography of research	Summary
Education policy implementation: A literature review and proposed framework	Viennet and Pont, 2017	Education	Literature review	Focussed on OECD countries	The review analyses the determinants of education policies and clarifies what is involved in policy implementation in complex education systems.
Facilitators for the development and implementation of health promoting policy and programs – A scoping review at the local community level	Weiss et al., 2016	Health	Scoping review	Studies conducted in USA (19), Netherlands (8), Canada (5), Sweden (4), England (4), Australia (3), Denmark (2), Ireland (1), Germany (1), New Zealand (1), Finland (1), Croatia (1), Norway (1) and Scotland (1).	The review investigates the factors that influence the implementation of local health promoting policies and facilitators to support capacity building and achieving better health outcomes.
Alcohol policy Implementation in high-income countries: A systematic review of empirical studies	Wright, 2020	Health	Systematic review	Studies conducted in England only (9), England and Wales (4), Scotland only (5), Australia (4), Canada (1), Denmark (1), Sweden (1), USA (1), UK (1), and multiple countries (1)	The review aims to understand how national alcohol policies have been implemented locally and to identify key factors which help shape implementation.

Strengths and limitations

This synthesis brings together evidence from different sources that has enabled us to examine a wide range of barriers to, and facilitators of, policy implementation in relation to different settings and policy domains, along with strategies to strengthen and support implementation. Conducting a rapid review of reviews allowed us to synthesise information from a wide range of primary data collection. However, the reviews occasionally provided limited detailed descriptions of implementation processes and determinants. This approach also restricted our ability to comprehensively and sensitively search for relevant studies, as a full systematic review would permit, or to synthesise information from primary sources. Additionally, because of limited resources for this study, the number of studies that could be included in this review was contained. Moreover, the majority of the academic reviews covered the implementation of health policies.

The academic reviews primarily focused on policy implementation in service delivery organisations, particularly highlighting barriers and facilitators at this level. The policy resources concentrated on policy development at a higher level, describing strategies and approaches but not relating these to specific barriers or facilitators. The empirical or evidential foundations of the resources were not always clear. Reviews tended to lack clear measures of implementation success and were limited in the strategies proposed in response to implementation barriers. The slightly different focuses of the two types of resources made it challenging to create coherence between findings from the reviews and resources. In addition, there is scarce evidence linking specific strategies and approaches with specific barriers and facilitators.

Policy content

As noted in the previous section, the first element of the conceptual model that frames our analysis is the content of the policy. In this section, we discuss two key issues raised by the reviewed texts: the need for clarity in policy goals, intentions and implementation requirements; and the selection of optimal policy instruments and strategies for the policy to become enacted (the 'policy logic'). Collectively, these encompasses the 'why', 'what' and 'how' of policy.

Clarity of policy goals and objectives: the 'why' and 'what'

A clear diagnosis and analysis of the problem aids legitimation and helps guide policy design and delivery (Norris et al., 2014; Viennet and Pont, 2017; Centre for Public Impact, 2018). It is suggested that the issue or (perceived) need to which a policy responds must be clearly outlined (Viennet and Pont, 2017; Kennedy et al., 2019; Centre for Public Impact, 2018). Policies that respond to urgent policy needs and are best justified may be prioritised in implementation (Fullan, 2015 in Viennet and Pont, 2017). Norris et al. (2014), based on their case studies of social justice policy implementation, suggest that clear problem definition can aid decision makers in making choices during implementation, particularly regarding resource prioritisation. Even when there is common ground in the policy goal and shared stakes in it, implementation can be hindered by different ways of seeing the problem (Norris et al., 2014).

Many of the reviews point to the need for policy goals and objectives to be clear to those involved in implementation (including implementation leaders, practitioners and intended beneficiaries, including the public) for a policy to be successfully implemented (Havers et al., 2020; Mclsaac et al., 2019; Horodyska et al., 2015b; Kennedy et al., 2019; Nguyen et al., 2021; Weiss, Lillefjell and Magnus, 2016). A lack of clarity result in varied interpretations of policies among relevant groups and thus can become a barrier to policy compliance and successful implementation (Ronto et al., 2020; Jankhotkaew et al., 2022; Viennet and Pont, 2017).

Clearly defining expected results, what constitutes success, and which policy goals hold the highest priority is beneficial in guiding implementation (Viennet and Pont, 2017; Norris et al., 2014). Furthermore, such clarity can be advantageous during periods of political transition, as it can assist incoming governments or ministers to *'understand, preserve and build on the policy in a coherent way'* (Norris et al., 2014, p.11).

Outlining the assumed causal mechanisms underpinning the policy can also aid implementation. As described by Fullan (in Viennet and Pont, 2017, p. 29) *'the causal theory (or theory of change) underpinning the policy is essential, because it tells the story of how and why the policy change takes place, and can contribute to get engagement and guide those involved.'*

Determining policy implementation: the 'how'

Selection of policy instruments

Several texts highlight the importance of selecting appropriate policy instruments and strategies.¹ As noted by Viennet and Pont (2017), implementation is *'a complex change process rather than the execution phase of policy making'* (p.11). Policy implementation is essentially about behaviour change, including of those involved in the delivery of the policy (Colgan, Kennedy and Doherty, 2014). Therefore, successful policy implementation requires identifying the intended (behaviour) changes for different groups/levels, and the selection of appropriate policy instruments and levers, which are linked to the policy problem through a valid causal theory (Viennet and Pont, 2017). Whether a policy can be implemented is largely determined by the logic the policy *'suggests between the policy problem and the solution it offers and the feasibility of the latter'* (Viennet and Pont, 2017, p. 28).

Several reviews mentioned the need for a comprehensive policy response. Horodyska et al. (2015b) list multi-dimensionality of the approach (aiming at change in individual/personal factors, social and physical environment) as a good practice for policies aiming at changes in

¹ Policy instruments can be described as the tools used by governments to pursue a desired outcome, such as regulatory, financial, or information and educational instruments (Cairney, 2019)

dietary behaviour and physical activity Others (Nguyen et al., 2021; Ronto et al., 2020; Mclsaac et al., 2019; Ng et al., 2022) note that successful implementation of healthy food and beverage policies in schools requires interventions to address the full range of barriers. This may require strategies to address potential financial impacts for selected stakeholders (e.g., increased costs, reduced profits/revenues) which has negatively impacted implementation. Several reviews highlight gaps in the policy instruments and strategies used, including communication and awareness raising, a monitoring system or legal instruments to support accountability and compliance or regulation (Ronto et al., 2020; Mclsaac et al., 2019; Wright, 2019; Jankhotkaew et al., 2022; Ng et al., 2022). ‘Wicked problems’ (such as poverty, crime or obesity) require multi-faceted policy interventions and a more varied and complex set of policy instruments. These may combine supply-side and demand-side policies, and policies that cut across policy domains and sectors (Haddad et al., 2022).

Providing direction on implementation

Policies also need to provide – at least at a high level – some direction on the approach to implementation (e.g. Mclsaac et al., 2019; Forberger et al., 2022). The absence of high-level direction and guidance on the policy implementation process can lead to confusion about how a policy should be operationalised and executed (Mclsaac et al., 2019; Ejler et al., 2018; Weiss, Lillefjell and Magnus, 2016; Jankhotkaew et al., 2022). Those responsible for implementation should not be left to figure out how to implement a policy (Viennet and Pont, 2017).

In part, this involves defining the roles and requirements for those involved in implementation (Jankhotkaew et al., 2022; Havers et al., 2020; Weiss, Lillefjell and Magnus, 2016). Havers et al. (2020) state that policy implementation requires clarity around: the policy content, the planning and resources necessary for implementation, what is required of those involved in implementation, the evidence base behind the policy, and the implementation process.

The importance of a well-designed and coherent implementation process is raised across several texts (e.g. Viennet and Pont, 2017; Forberger et al., 2022). Some of the reviews illustrate the substantial effort often involved in policy implementation and the need for support from governing or sponsoring organisations to foster policy implementation, such as technical support, training, or the provision of guidelines and examples (Probst et al., 2018; Kennedy et al., 2019; Havers et al., 2020; Nguyen et al., 2021; Mclsaac et al., 2019).

However, the reviewed texts infer that there is a judgement to be made about the degree to which implementation is specified at the national level. Guidance on implementation can support the contextualisation of policies to local contexts and settings. The texts we included stress the need for policy implementation processes to allow space for the tailoring of policies to local contexts, balancing the need for implementation consistency with the need for local contextualisation (Wright, 2019; Kennedy et al., 2019). Wright (2019) says that *'alcohol policy implementers are navigating a balance between trying to effectively contextualise alcohol policy to local needs while meeting national expectations surrounding a centrally-developed policy, all while constrained by the (monetary and non-monetary) resources available to them'* (p. 91). Colgan, Kennedy and Doherty (2014) also reference the importance of finding a balance between imposing reform and leaving implementing organisations with scope for learning and adjustment when facing unknown and/or changing conditions. Some texts explicitly state that a top down approach to policy was as a barrier to successful implementation (Ronto et al., 2020; Nguyen et al., 2021).

Implementation guidance and support may be provided by intermediaries that are external to the governing body setting the policy. Havers et al. (2020) discussed the implementation of national policy on infection control in hospitals, and noted that guidance around policy implementation was commonly provided by a body separate from the directing government body. In some cases, this was a coordinating centre or other health system entity, or even on occasions by the hospital itself. Translation of policy content to clinical settings was supported by entities or networks external to the government, such as professional colleges or funding bodies (Havers et al., 2020). Similarly, Ronto et al. (2020) note that there may be a need for a wider framework or assistance, namely from nutritional experts, to guide the implementation of school-based healthy food and beverage policies.

Several texts comment on the lack of implementation thinking during policy formulation. Havers et al. (2020) conclude that consideration of policy implementation during the development of government-directed policy in the hospital setting was not common.

Use of evidence

Use of theory and evidence in policy design is identified as a facilitator of policy implementation (Horodyska et al., 2015a; Horodyska et al., 2015b, Havers et al., 2020). Defining the problem that the policy will address should ideally be based on robust evidence

and good knowledge of the sector and the socioeconomic, cultural, demographic and political context (Viennet and Pont, 2017; Kennedy et al., 2019; Centre for Public Impact, 2018). Similarly, the selection of policy instruments and strategies should ideally be guided by knowledge of the mechanisms of change in the policy system, such as actors and their bargaining strategies (Viennet and Pont, 2017; West et al., 2020). Horodyska et al. (2015b) list the application of theory – for instance about behaviour change – as good practice in the development of policies aimed at changing dietary behaviour and physical activity.

The use of (robust) evidence can also lend legitimacy or credibility to policies (Wright, 2019; Kennedy et al., 2019; Centre for Public Impact, 2018). A lack of evidence and consensus in the scientific community about risk exposure of pregnant women adversely affected the introduction of maternity protection policy (Probst et al., 2018). In Wright's (2019) review on alcohol control policy, *'certain articles noted that being seen to be 'evidence-based' would lend credibility to a particular programme, helping to garner stakeholder buy-in'* (p.72). However, what is considered persuasive evidence may vary across stakeholders, such as between public health practitioners and licensing stakeholders in the case of alcohol control policy (Wright, 2019). While the review by Kennedy et al. (2019) also states that policies are more accepted by stakeholders where the evidence base is robust, they note that the contribution of evidence to inform health policy is varied and *'political drivers may be more influential than evidence in driving the policy content'* (Kennedy et al., 2019, p. 3239).

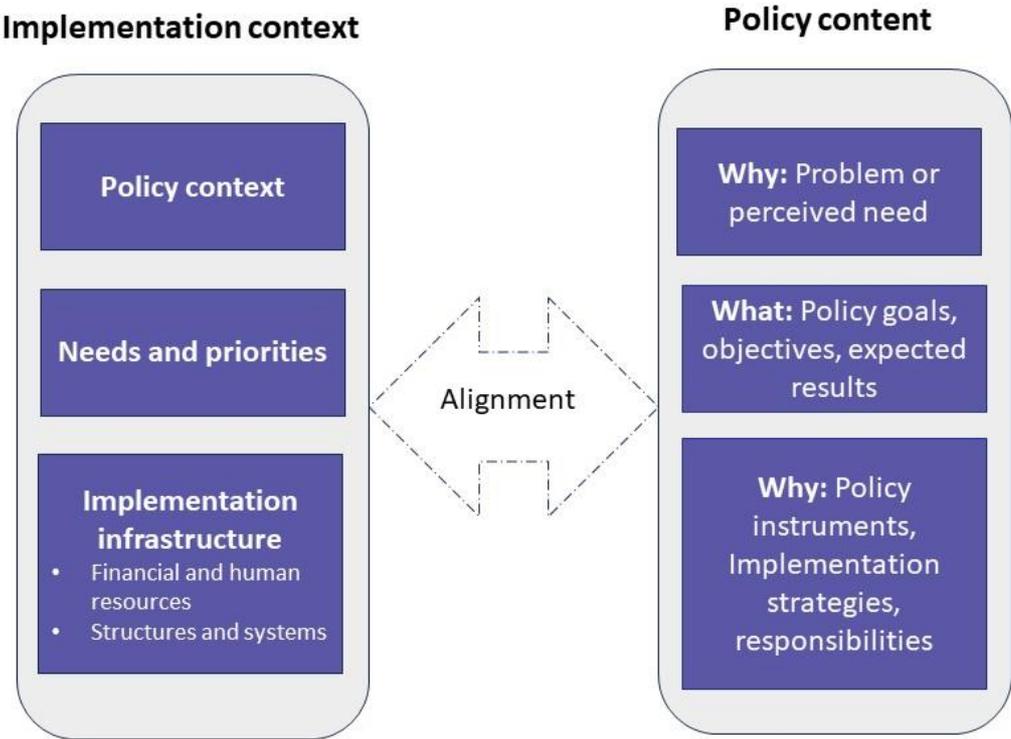
Approaches for barriers relating to policy content

The degree to which policies will or can be specific about the 'why', 'what' and 'how' will vary. This may, for instance, depend on the existing evidence base, level of political commitment, and the space and desire for local variation, as is explained in more detail in the Discussion chapter. Moreover, the chapter on implementation support approaches outlines activities that can offer support to define the policy content, including problem analysis; systems thinking and analysis of systems dynamics; use of frameworks such as the Behaviour Change Wheel (Michie, van Stralen and West, 2011); and stakeholder engagement.

Alignment

The conceptual framing set out in the Introduction identifies the concept of alignment as key to policy implementation. The degree to which the policy content is aligned with the implementation context will influence the barriers and facilitators and, in turn, the strategies needed to address them. Our analysis of the texts identifies three central issues: the degree to which policy is aligned to the policy context; to needs and priorities; and to the infrastructure within which implementation takes place. We discuss each issue in this section. However, it is worth stating at this point that these barriers can be addressed, and alignment is dynamic, not a fixed concept. This means that issues can be addressed through both the design of policy content and the selection of implementation strategies, at multiple stages through the policy process.

Figure 6. Alignment of policy content with implementation context



Alignment to the policy context

Policies are not introduced in isolation, but into a complex set of existing policies and regulations. Each new policy potentially competes with other national and local priorities for resources and attention (Norris et al., 2014). The reviews noted that where there is poor alignment between policies or regulations, competing priorities can hinder implementation.

For example:

- Competing policy priorities created conflicts and increased bureaucratic burden in the implementation of food environment policies and of hospital policies for infection control (Havers et al., 2020; Ng et al., 2022).
- The existing network of policies and regulations created legal loopholes and complications that were a bottleneck to implementation of alcohol control policies (Jankhotkaew et al., 2022).
- The availability of sick leave as an alternative to preventative leave inhibited implementation of maternity protection legislation (Probst et al., 2018).
- Layering new policies on old can create inconsistencies that hinder implementation of transformative innovation policies (Haddad et al., 2022).

Alternatively, if policies are sufficiently aligned, it becomes possible to change even complex systems (Viennet and Pont, 2017). Existing policies may also create an infrastructure and set of networks that can support the implementation of a new policy (Norris et al., 2014).

However, Haddad et al.'s (2022) review on transformative innovation policy makes the important point that achieving change in 'grand challenges' requires destabilising locked-in socio-technical systems, implying that deliberate non-alignment may be needed in some instances.

Policy implementation often spans boundaries at both national government and local implementation levels. Misalignment between policies may reflect areas of political resistance (Haddad et al., 2022) or conflicting mandates, for example between health and education systems. This may be the result of insufficient dialogue in policy development and in day-to-day work (McIsaac et al., 2019). The 'whole of government' resource (Colgan, Kennedy and Doherty, 2014) notes that a growing number of challenges require dialogue and joint approaches across government departments and agencies, particularly to address 'wicked' or deep-rooted problems that are part of the remit of multiple government departments.

Alignment with needs and priorities

Many of the reviewed texts highlight the degree of alignment with needs and priorities of stakeholders as an enabling or challenging factor to implementation (e.g. Jankhotkaew et al., 2022; Ronto et al., 2020; Horodyska et al., 2015b). Policies promoting healthy diet and physical activity are more likely to be successful when informed by the identification and assessment of the needs of the target population (Horodyska et al., 2015b). Additionally, the process by which health-related policy priorities are identified and decided upon should be transparent (Kennedy et al., 2019). This idea is linked in some reviews with the use of evidence in policy formulation and/or for policy justification (Kennedy et al., 2019; Wright, 2019).

The way in which a problem and the purpose of the policy are framed can affect legitimation and stakeholder commitment, particularly as views about the nature and causes of the challenge being addressed may vary among different stakeholders (Norris et al., 2014; Colgan, Kennedy and Doherty, 2014; Viennet and Pont, 2017).

Support from policy stakeholders was identified as a key barrier or facilitator in most texts. Various types of support from different stakeholder groups were identified as being required:

- *Political backing* (Horodyska et al., 2015a; Kennedy et al., 2019; Centre for Public Impact, 2018; Norris et al., 2014; Jankhotkaew et al., 2022). The willingness of political leaders to expend political capital in support of the policy objective can influence the legitimacy of a policy and can provide support to implementation (Centre for Public Impact, 2018). Political leaders' personal alignment with a policy and their leverage of influence to build consensus in support can significantly impact the likelihood of success, while active political opposition affects the perceived legitimacy of policy (Centre for Public Impact, 2018). Further, political support for policy objectives is vulnerable during periods of political transition (Norris et al., 2014).
- *Organisational priorities and goals*. Support and engagement from those involved in the delivery of a policy were widely identified as a determinant of success (Ronto et al., 2020; Ng et al., 2022; Viennet and Pont, 2017; Nguyen et al., 2021). No new policy will be successfully enacted unless those involved in its implementation are committed to it (Fagan, Cornejo and Cushing's, 2021). For example, successful

implementation of school-based healthy food and beverage policies (Ronto et al., 2020) or physical activity policies (Forberger et al., 2022) was challenging when school leaders and staff saw the policy as being misaligned with the priority of academic performance. Similarly, the low value placed on alcohol-related public health problems by agencies responsible for policy implementation undermined delivery (Jankhotkaew et al., 2022). Even within government, different departments may hold different norms, values and beliefs (Colgan, Kennedy and Doherty, 2014; Norris et al., 2014). However, implementation can be aided when policies aligned with the attitudes, beliefs and preferences of those involved in implementation (Havers et al., 2022; Ronto et al., 2018; Horodyska et al., 2015a; Ng et al., 2022; Nguyen et al., 2021; Probst et al., 2018).

- *Social norms and priorities of the target population:* The degree of alignment with the attitudes and priorities of the intended beneficiaries of policy, and with social and cultural norms, was also highlighted (Ronto et al., 2020; Nguyen et al., 2021; Ng et al., 2022; Mclsaac et al., 2018; Probst et al., 2018; Horodyska et al., 2015a). For example, gender and social inequalities created economic and organisational pressures on women to remain at work and impeded implementation of maternity protection legislation (Probst et al., 2018). Fagan, Cornejo and Cushing's (2021) framework and toolkit notes that to be scalable, a policy needs to be consistent with local culture and norms, and so consideration needs to be given to whether a policy can become part of the intended community's daily routines (relevant also to alignment with organisational level factors).
- *Alignment with interests of other stakeholder groups* is identified as a determinant. Several reviews highlight limited alignment with the interests of food and alcohol retail industry as an inhibitor of implementation (Horodyska et al., 2015a; Ng et al., 2022; Ronto et al., 2020; Jankhotkaew et al., 2022). Whether community organisations offered support or resistance is also noted (Ng et al., 2022, Horodyska et al., 2015a; Jankhotkaew et al., 2022).

Alignment with the implementation infrastructure

The third aspect of alignment identified in the reviewed texts is alignment with what we conceptualise as the implementation infrastructure. We use this term to refer to the features

of the implementation context that are available (or not) to support implementation, specifically: resources (financial and human), and structures and systems.

Resources

Across the included texts, inadequate resources were frequently cited as a key barrier to successful policy implementation, even where policies were mandated by law or regulation (Forberger et al., 2022). This involved resources in implementing organisations and other parts of the system. Reviews did not always specify the types of resources involved, but funding and human resources were clearly key.

A key consideration is the availability of the funds, resources and expertise needed to implement policies at scale (Fagan, Cornejo and Cushing, 2021; Kennedy et al., 2019; Jankhotkaew et al., 2022). *'Misalignment between resources and needs at the roll-out stage creates significant risk that the implementation team will be unable to deliver the required outcomes in the required time period.'* (Australian National Audit Office, 2014, p. 51).

Financial resources were a particularly important facilitator and relevant at different levels including local government or agency, service delivery organisation and family levels (Mclsaac et al., 2019; Ronto et al., 2020; Viennet and Pont, 2017; Wright, 2019). Forberger et al. (2022) provide an example of complete failure of implementation when the budget required to implement national laws on physical activity in schools in two states in the US was reduced. Probst et al. (2018) note the need to make the financial case for implementation (in the context of maternity protection policies), by comparing the costs of implementing protections with not implementing. A lack of sustainability in funding and unequal distribution of financial (and other) resources between implementation stakeholders were also identified as barriers (Weiss, Lillefjell and Magnus, 2016; Wright, 2019).

The alignment of policy requirements with the human resources available is highlighted in the reviewed texts. The availability of staff time and the skills and knowledge of those involved in implementation at various levels was also cited as a key determinant (Jankhotkaew et al., 2022; Havers et al., 2020; Weiss, Lillefjell and Magnus, 2016; Ng et al., 2022; Nguyen et al., 2021). In relation to transformative innovation policies, Haddad et al. (2022) note that policy implementation is influenced by the capabilities of implementation actors, including governance capabilities, competence and implementation capacity of governments and policy makers as well as those involved in the adoption of policies.

A lack of capability among the organisations and individuals implementing the policy was a recurring barrier to implementation across the reviewed texts (e.g. Jankhotkaew et al., 2022; Ng et al., 2022; Weiss, Lillefjell and Magnus, 2016; Mclsaac et al., 2019). Successful implementation requires understanding of and investment in a broad set of skills at multiple levels, including central government, local government and within implementing organisations (Norris et al., 2014). These skills include political, technical and administrative skills, expertise in implementation and change management, and in the specific practices required by the policy. Knowledge and skills were particularly important if the processes being introduced were complex and time-consuming (Mclsaac et al., 2019; Jankhotkaew et al., 2022).

Weiss et al. (2016) conclude that increasing the competency of policy makers and practitioners for health promotion policy development and implementation at local levels has the potential to strengthen financial and political support. They note that the emergence of the Social Determinants of Health as a practical framework for policy implementation has been influential, and that a similar framework at a local level might increase the competency of local practitioners and policy makers and create a common language.

Skills gaps were mitigated by providing information, guidance, training, support and technical assistance, as well as resources such as curriculum tools, lesson plans, and handouts (Mclsaac et al., 2019; Havers et al., 2020; Horodyska et al., 2015a; Nguyen et al., 2021).

Structures and systems

The role of *'physical and organisational structures or systems that were developed or utilised in order to support implementation of a government-directed policy'* (Havers et al., 2020, p. 90) is also noted. It was the second most important barrier in their review of implementation of hospital infection policies² and was noted often across reviews. Most of the evidence from the reviews concerns infrastructure at the level of the implementing organisation (or inner context), but some reviews also note features of networks external to the implementing organisation (within the outer context) as being relevant and/or at different levels (Haddad et al., 2022; Havers et al., 2020; Forberger et al., 2022).

² Haver et al. use the term 'infrastructure' to refer to physical and organisational structures and systems. We have used it to refer to a wider set of determinants.

Key aspects of infrastructure, as noted across the reviews, are:

- *Internal physical infrastructure:* for example, having canteens, cafeterias, gardens and compost recycling facilities were facilitators for the implementation of food environment and school nutrition policies (Ng et al., 2022; Mclsaac et al., 2019). IT systems facilitated implementation of new health and education policies (Havers et al. 2020; Viennet and Pont, 2017).
- *Organisational systems, processes and practices:* implementation of hospital-based infection control was facilitated if policy mechanisms were aligned with organisational processes, workflow and activities (Havers et al., 2020). Checklists, guidelines, and decision support tools such as electronic record alerts or clinical decision support tools were also facilitators (Havers et al., 2020). The effectiveness of organisational structures and internal procedures determines organisations' capacity to implement a new policy (Viennet and Pont, 2017). Readiness and capacity to implement and sustain policy reforms is also influenced by organisational leadership, management and culture (Viennet and Pont, 2017).
- *Roles to support practice change:* Having existing roles in place to support policy implementation, or the ability to restructure roles or change work allocation were facilitators of implementation (Havers et al., 2020).
- *Professional and other bodies, governance structures, networks and established relationships:* These can provide direction or oversight of implementation. Implementation of infection policies in hospitals was facilitated where there was a separate (internal or external) body supporting implementation, because of the demands of implementation alongside clinical services as usual (Havers et al., 2020). Implementation of food environment policies was facilitated by having structured organisational capacity, such as a task force committee (Nguyen et al., 2021). A history of city-wide formal and informal structures and of coordination between different government levels and agencies facilitated implementation of public physical activity policies (Forberger et al., 2022).
- *Features of local areas:* Alignment with aspects of the infrastructure in local geographic areas was a determinant in the implementation of school nutrition and food environment policies, where the availability of policy compliant and non-compliant food options was identified in several studies as a major barrier to implementation (Ronto et al., 2020; Ng et al., 2022; Nguyen et al., 2021). Mclsaac et al. (2019) highlight the need to recognise broader and systemic issues and their

influence on the school environment, such as demographics, issues of poverty and food security, and availability and accessibility of food offered and sold to students “off-campus”. These broader systemic issues relating to socioeconomics and other sources of inequities emerged as influential in implementation (Mclsaac et al., 2019).

Implementation may require engagement with existing infrastructure (in which case there is a need for early consideration of how they can be engaged) or may require resources for the creation or installation of new infrastructure specifically to support implementation of the new policy. Studies highlight the need for identification of these early in planning for implementation. For example, health policy implementation was facilitated where the policy content included description of the infrastructure necessary for implementation (Havers et al., 2022).

Approaches to support alignment

Policies will not always fully align with the policy context, perceived needs and priorities, and implementation infrastructure. This may be due to, for instance, political agendas and pressures, policies being imported from elsewhere, budget constraints, significant variation across settings where the policy is implemented, or diversity in opinions and perceptions among different policy stakeholders.

As noted, alignment can be increased, and the frictions that result from misalignment can be addressed, through a range of approaches, which are discussed in the next section.

Ambiguity and alignment can be addressed both in the design of the policy and in its implementation. Approaches to support policy design to reduce ambiguity and maximise alignment include problem analysis and systems thinking; analysis of the implementation context and infrastructure; stakeholder engagement; and leadership. Awareness of areas of misalignment and its implications can support decision makers in taking appropriate action in implementation. Examples of implementation support approaches that can help mitigate or compensate for areas of misalignment include investment in resources and infrastructure, governance and collaboration, and monitoring and evaluation.

Implementation support approaches

This section outlines possible approaches to support alignment of policy content with the implementation context, and to address implementation barriers and facilitators that arise as a result of areas of misalignment. The processes are proposed as ways of strengthening the alignment between the policy content – the why, the what and the how – and the implementation environment; namely, the degree to which it aligns with existing policy, with the needs and priorities of different groups, and with the resources, structures and systems for implementation.

This section presents a summary of the implementation support approaches that are discussed or recommended in the reviewed texts, especially on the policy resources. The approaches we cover are: problem and context analysis, stakeholder engagement, identifying and planning implementation resources and capabilities, governance and collaboration, monitoring and evaluation, leadership, communication and framing. Where available, we signpost the approaches, methods and tools that were included or referenced in the policy resources.

These approaches are relevant at multiple stages of the policy process. For example, stakeholder engagement is crucial throughout the process from early ideation and problem analysis to sustainment and scaling. Moreover, what transpired in the earlier stages of the policy process may influence implementation. For instance, if potential areas of disagreement with regards to policy solutions or approaches were not surfaced during policy development, then these may emerge during implementation and affect the motivation of different actors to support and enact a policy. Finally, the approaches are interrelated and influence each other. For instance, stakeholder engagement can support problem analysis, identification of resources and collaboration; and leadership is integral to securing resources for implementation capability and governance.

Problem and context analysis

Several texts emphasise the importance of adopting a problem analysis approach early to build a shared understanding of the underlying causes of the problem being addressed and

create a shared vision for change (Colgan, Kennedy and Doherty, 2014; Kennedy et al., 2019; Centre for Public Impact, 2018).

Resources point to the wide range of analysis relevant to inform problem definition and the selection of policy instruments and strategies. The importance of recognising the broader systemic issues that will influence implementation, and consideration of barriers and facilitators across multiple levels is noted (Mclsaac et al., 2019; Kennedy et al., 2019). The review by Viennet and Pont (2017) highlights the need to understand the political and social environment; assess social, economic, political and demographic trends and shocks that will influence implementation; understand which actors will influence views, priorities and motivation; and assess likely reactions. Reviewing successful policies in other contexts can also inform design (Norris et al., 2014; Australian National Audit Office, 2014).

Policy alignment should be a focal point during policy formulation. This involves considering social, economic and environmental objectives together, analysis of interactions between policies, bringing new constellations of actors into the work, and recognising the need to work across policy domains (Haddad et al., 2022). This process also requires alignment with national strategies or frameworks and with policy making in other sectors (Kennedy et al., 2019). Any interdependencies across areas of government and among levels of implementation (national, local, professional, administrative) should be accounted for during policy design (Colgan, Kennedy and Doherty, 2014).

The selection of implementation strategies should be underpinned by a solid understanding of the implementation context and tailored to suit local contexts (Ejler et al., 2018; Forberger et al., 2022). This involves, for instance, understanding existing priorities, pressures, workflows, working practices and physical environments in organisational settings for implementation (Havers et al., 2020; Horodyska et al., 2015a).

Approaches and tools

Resources recommend specific approaches and techniques for problem analysis and the assessment of implementation contexts.

Systems thinking is suggested as an approach to strengthen a shared problem analysis of complex or wicked problems, help articulate the 'so what' of the policy, and identify and analyse potential leverage points. Systems thinking *'is a framework for seeing the interconnections in a system and a discipline for seeing and understanding the relevant*

aspects of the whole system – the ‘structures’ that underlie complex situations’ (Government Office for Science, 2022b, p.2). A system is defined as *‘a set of elements or parts interconnected in such a way that they may produce their own, potentially unexpected, pattern of behaviour over time’* (Government Office for Science, 2022b, p.3).

The Government Office for Science (GO Science) Systems Thinking Toolkit (2022a) offers a set of tools to aid problem analysis, clarification of sought policy impacts, and understanding of how context might affect policy outcomes in complex systems. Systems mapping is put forward as a particularly useful approach for dealing with complexity. This resource also describes simulation as an approach to rehearsing or experimenting with alternative policy solutions and implementation approaches and aids in anticipating how different stakeholders might respond to proposed changes.

The toolkit by Fagan, Cornejo and Cushing (2021) advocates for systems dynamics, describe as an approach to understanding, modelling and describing complex systems. This toolkit can illuminate the interconnections, thus helping to diagnose why a problem exists and to test different policy solutions and implementation strategies.

Resources also offer guidance on how to think through change processes that can support the selection of policy instruments. The *Government as a System* model (Siodmok, 2020) categorises a broad set of levers that can be used in combination by policy makers to address complex problems. These cross local and national government, and are placed on a scale ranging from more collaborative power (e.g. nudging, devolving decisions, advising) to more formal government power (e.g. legislating, setting standards, scrutinising).

Public Health England’s (West et al., 2020) guide provides a structured approach to diagnosing what is needed to achieve behaviour change in support of policy objectives. It is based on the Behaviour Change Wheel (Michie, van Stralen and West, 2011). The approach starts by identifying the behaviours of relevant populations and groups required to achieve policy objectives, and what will bring them about. The key assumption is that Behaviour is shaped by individual Capability, Opportunity and Motivation (COM-B). This behaviour diagnosis then informs the selection of intervention types best suited to influencing behaviour (e.g. education, persuasion, incentivisation, coercion) and the identification of policy options most capable of delivering interventions (e.g. guidelines, legislation, regulation, fiscal measures, service provision). The resource by Fagan, Cornejo and Cushing (2021) equally emphasises understanding people’s motivations to embrace change, and contemplate

incentives and nudges, given that a level of resistance to change is to be expected for any policy.

Resources suggest that problem and context analysis and the selection of policy instruments and strategies is likely to draw on different sources of evidence. These include, for instance, user research, ethnographic research, behavioural science, implementation science, evaluations and evidence about what works (Horodyska et al., 2015b, GO Science, 2022a, West et al., 2020; Nguyen et al., 2021).

Common across resources is the emphasis on involving stakeholders and collaboration in systems analysis, to bring to light and understand different ways of viewing the problem (Norris et al., 2014; GO Science, 2022a), analyse the context, and anticipate potential barriers. The views and knowledge of the people in the system can also help to reveal overlaps with other policies (Norris et al., 2014). The importance of including a wide spectrum of perspectives is highlighted, including those who may be against a proposed policy intervention (GO Science, 2022a).

The Open Policy Making Toolkit (Cabinet Office, 2016) sets out a process for working through initial stages of diagnosis (understanding the policy problem), discovery (understanding user's needs), development (generating and prototyping policy solutions) before moving to delivery. The Toolkit provides guidance and tools and techniques to support collaborative approaches throughout these stages. It encourages co-design with users, ethnography and the agile project management approach where iterative rapid design "sprints" are used to design and test policy solutions. Prototyping is put forward as an approach to help make policy more deliverable by identifying feasible policy solutions early in the process.

Ejler et al. (2018) mention the CFIR framework (see Introduction) and the Organisational Readiness to Change Assessment (ORCA) tool to help guide analysis of the organisational context in which a policy is to be implemented. The latter includes a scale to assess the organisational context, including culture, leadership and readiness for change.

Although not a strategy that was noted in the resources we reviewed, elements of implementation mapping (Fernandez et al., 2019) may be a valuable approach to include as part of problem and context analysis. This process would involve identifying who the implementers at different levels will be, what they need to do differently to implement the policy, and how these behaviours can be initiated, supported and monitored. Scoping work or

stakeholder engagement might be needed to fully understand this. Evidence about previous change efforts may be helpful, along with analysis of the existing capacity and capabilities to enact the needed changes. Ideally, these strategies should result in policy content that includes a plan for implementation with clarity about roles and responsibilities at different levels, or which outlines how implementation processes will be established, supported and coordinated in the future.

Box 1. Examples of tools to support problem and context analysis

Source: Government Office for Science, 2022a

Pig model: Provides a framework to explore and understand the views, perspectives and roles of different stakeholders in relation to a problem/policy/system (p. 19).

Context diagram: To help gain a shared understanding of the system that the problem sits within – its boundaries and the factors that can be influenced (p. 24).

Causal loop diagram mapping: To understand the factors and relationships within the system. It builds up a map of the relationships and interdependencies within a system, by using an understanding of cause and effect within the system to create feedback loops (p. 33).

Causal loop analysis and narrative: To analyse and develop a compelling and accessible narrative of the causal loop diagram (p. 41).

Stock and flow diagram: To understand the dynamics within the system and inform planning of future interventions and changes to the system. Stock and flow diagrams map the dynamics of a system and can be used to create a simulation of the system (p. 48).

Stakeholder engagement

Stakeholder engagement is widely suggested as a strategy to support alignment with the policy and implementation context as well as the perceived needs and priorities (Kennedy et al., 2019; Ronto et al., 2020; Ng et al., 2022; Colgan, Kennedy and Doherty, 2014; , Viennet and Pont, 2017; Haddad et al., 2022; Fagan, Cornejo and Cushing, 2021; Nguyen et al.,

2021; Weiss, Lillefjell and Magnus, 2016). Texts discuss the need to bring together stakeholders to collaborate in policy design and implementation.

Various purposes and benefits of stakeholder engagement are described:

- *To strengthen understanding of problem causes and build a shared vision for change* including by facilitating a greater alignment to stakeholder needs and priorities (e.g. GO Science, 2022a; Siodmok, 2020; Kennedy et al., 2019; Colgan, Kennedy and Doherty, 2014).
- *To support identification and co-design of policy solutions:* Harnessing skills, expertise and insights across stakeholder groups is seen as important to allow innovation and solutions to emerge, and can help validate or test assumptions (e.g. Haddad et al., 2022; Kennedy et al., 2019; Australian National Audit Office, 2014).
- *To identify potential implementation barriers and plan implementation strategies:* Bringing stakeholders together is also seen as valuable to raise concerns, ensure appropriate contextualisation, identify potential challenges, and plan and design implementation strategies to harness potential enablers and address potential barriers (e.g., Australian National Audit Office, 2014, Viennet and Pont, 2017; Ejler et al., 2018; Weiss, Lillefjell and Magnus, 2016; Kennedy et al., 2019)
- *To achieve buy-in and support:* Engagement is viewed to help build and mobilise support for policies, create awareness or 'educate' stakeholders, build legitimisation, help address negative attitudes about the policy, or overcome resistance (e.g., Ng et al., 2022; Kennedy et al., 2019; Viennet and Pont, 2017; Nguyen et al., 2021; Centre for Public Impact, 2018).

Policy resources recommend involving relevant stakeholders from an early stage and then throughout, while the objective of their engagement needs to be clearly defined (Australian National Audit Office, 2014; Colgan, Kennedy and Doherty, 2014; Centre for Public Impact, 2018; Norris et al., 2014). Stakeholder engagement is pertinent throughout all phases of the policy process. Modes of engagement and consultation may hence vary accordingly, ranging from information provision to involvement in policy decision-making (Kennedy et al., 2019). The capacity and time of different actors to engage should be considered, including potential differences in frames of reference (Haddad et al., 2022; Kennedy et al., 2019). Policy design may require more time when more actors are involved (Kennedy et al., 2019), so implications for policy timelines and resources should be considered.

Resources also recommend involving all stakeholders whose work, involvement or cooperation is vital for the successful implementation depends of the policy (Colgan, Kennedy and Doherty, 2014; Australian National Audit Office, 2014). Stakeholder groups can be individuals or organisations, and could include management of implementing agencies, front-line delivery personnel, representatives of service users, community and opinion leaders, regulatory bodies, employers, and industry representatives. It is important to include actors who may be less supportive of a policy (Horodyska et al., 2015a; Ng et al., 2022). Early involvement of relevant support services within government (e.g., legal, finance, communication) is advised to help avoid implementation design gaps (Australian National Audit Office, 2014). Harnessing the input of people with experience of delivery in other settings and with implementation knowledge and experience is also recommended, as their engagement can help determine the acceptability and feasibility of the implementation plan (Viennet and Pont, 2017; Colgan, Kennedy and Doherty, 2014).

Norris et al. (2014) highlight that cross-party engagement can mitigate the uncertainty that political transition can introduce in implementation. While they note that this runs counter to the instincts of many ministers and to political incentives, identifying where there is even the slightest agreement can help keep a policy on the agenda of decision makers. Creating opportunities for visible endorsement and consistent communication about the change involved is also deemed valuable (Colgan, Kennedy and Doherty, 2014).

Approaches and tools

As noted, stakeholder engagement is a core part of the Open Policy Making Toolkit (Cabinet Office, 2016), and viewed as central to policy design. Box 2 provides further examples of the tools that can support policy design.

The toolkit developed by Fagan, Cornejo and Cushing (2021) suggests stakeholder mapping as an activity to identify and assess support and opposition (internally and externally) for a policy initiative. This involves an assessment of each stakeholder's interest and degree of power and influence. Colgan et al. (2014) also recommend mapping the stakeholders whose work impacts on successful implementation of whole of government policy initiatives (no specific tool is recommended in either resource).

The Australian National Audit Office (2014) provides a checklist to help senior leaders in government assess whether arrangements for stakeholder engagement have been

adequately addressed. Items relate to the selection of stakeholders, organisation and management.

Box 2. Examples of Open Policy Making tools to support policy design

Source: Cabinet Office (2016)

Diagnosis: finding the policy problem. Tools and techniques that bring together existing knowledge, evidence and people to share understanding and define the policy challenge include: challenge setting, data tool cards, evidence safari, hope and fear cards, journey mapping, personas, policy canvas, user segmentation.

Discovery: understanding user needs. Tools and techniques that help understand user needs and to diagnose the policy problems and challenges that the policy needs to address include: data science, data visualisation, deliberative dialogue, ethnography, interviews, social media engagement, user research, guerrilla testing, idea days and policy jams, open data, social media and data analysis.

Development: generating ideas. Tools and techniques that help in the creation of ideas that will respond to the needs of users include: change cards, crowdsourcing, hack days, idea days and policy jams, idea development sheet, sketching. Development would involve moving from a wide spread of innovative ideas to a few, well thought out ideas that can be prototyped and tested with users in delivery.

Delivery: prototyping and improving ideas. Prototyping involves trying out an idea to see it might work, to build up confidence in a proposed solution before the piloting stage. It can take many forms, and possible types include: tabletop prototyping, touchpoint prototyping, experience prototyping.

Identifying and planning implementation resources and capabilities

Identification of the resources required, and analysis of existing resources as part of planning, can help to overcome barriers related to inadequate resources and avoid

destabilising implementation efforts (Havers et al., 2020; Ronto et al., 2020; Australian National Audit Office, 2014; Colgan, Kennedy and Doherty, 2014; Kennedy et al., 2019).

Ensuring sufficient resources for implementation is crucial. If necessary, additional resources should be made available by the government to facilitate policy implementation, for example, by providing extra funding (Jankhotkaew et al., 2022; Ng et al., 2022). Successful implementation is not only influenced by the availability of resources, but also by how those resources can be maximised, utilised or shared (Ng et al., 2022; Horodyska et al., 2015b; Weiss, Lillefjell and Magnus, 2016) and if there is a plan or strategy in place to use them (Viennet and Pont, 2017). For example, a strategy for increasing access to resources for implementing food policies in schools is to collaborate across jurisdictions in coordinating school food procurement (Mclsaac et al., 2019). Support can be given to implementers to develop implementation plans that align with their available resource constraints (e.g. Mclsaac et al., 2019; Nguyen et al., 2021; Australian National Audit Office, 2014).

Early consideration of required capabilities and skills to undertake implementation, in both government and implementing agencies, is also key (Havers et al., 2020; Australian National Audit Office, 2014; Colgan, Kennedy and Doherty, 2014). Implementing teams need to have the necessary capabilities by identifying and securing staff with the relevant expertise, knowledge, skills and experience of implementation. It is recommended to work backward from how a policy would be implemented to identify the required teams and capabilities (Norris et al., 2014).

Capability development needs will vary according to pre-existing levels of experience and expertise, and will be greater when new roles and procedures are required (Colgan, Kennedy and Doherty, 2014). Key strategies for overcoming these gaps and supporting implementation include providing guidance, training, technical assistance, tools and materials (Jankhotkaew et al., 2022; Mclsaac et al., 2019; Nguyen et al., 2021; Horodyska et al., 2015b). Training should also be complemented with workplace activities such as coaching, feedback and formative assessment of compliance in order to be effective (Ejler et al., 2018). Training and skill development requires investment from implementing organisations, which needs to be considered.

When policy implementation requires collaboration between implementing bodies, such as in whole of government initiatives, the importance of relationship and collaborative skills has been noted (Colgan, Kennedy and Doherty, 2014; Australian National Audit Office, 2014).

Moreover, Colgan, Kennedy and Doherty (2014) set out that this boundary spanning work requires cultural characteristics and capacities such as networking skills, empathy, reciprocity, trust, seeing multiple perspectives, and managing by influence, and that these are important to consider in implementation processes. Support for boundary-spanning capacities can be provided by developing practice guidelines, providing joint training, setting up employee exchanges, and starting networking initiatives (Colgan, Kennedy and Doherty, 2014).

Several texts also highlight the importance of setting realistic timeframes for implementation. Introducing changes gradually in a phased manner may help avoid stakeholders being overwhelmed with sudden changes and it can increase the chances of achieving objectives (Weiss, Lillefjell and Magnus, 2016; Ronto et al., 2020; Nguyen et al., 2021). However, if implementation is too slow, there may be a loss of momentum or drain of resources (Viennet and Pont, 2017). Viennet and Pont's (2017) review concludes that the effects of timing and pace on the implementation process are uncertain, and that they depend on implementation capacity and the degree of acceptability of the policy.

Overall, ensuring that resource and capability barriers are addressed requires a sufficient planning stage to determine what infrastructure and capability the implementation of a policy would require, as well as what resources would be needed so that these can be developed, if they do not already exist.

Involving stakeholders can enhance understanding of existing and needed resources and capabilities, leading to better implementation strategies. Without sufficient research and collaboration with those on the ground, it will be difficult to determine the capabilities of implementers. Input may be sought from front line staff, support services, management, and delivery partners (Kennedy et al., 2019; Fagan, Cornejo and Cushing, 2021; Australian National Audit Office, 2014; Viennet and Pont, 2017).

Approaches and tools

The Australian National Audit Office (2014) sets out a checklist of considerations for senior leaders in determining whether arrangements for implementation resources have been adequately addressed. Among those eight points on the checklist are points covering whether the implementing body has sufficient resources to complete implementation within the given timeframe, whether the resources align with the implementation activities required, and whether resources need to be adjusted. Additionally, whether the implementation team

is sufficiently skilled and experienced, and whether the team members' roles in implementation are properly understood by them are both key.

The Readiness Thinking Tool (from the Wandersman Center), although not explored in our resources, may be a useful resource for assessing, building and mobilising readiness for change needed. Readiness for change in organisations has been described as consisting of the motivation to adopt an innovation, the capacity to incorporate or adopt the policy change ('innovation specific capacity'), and the extent to which organisational processes, leadership, networks, culture and infrastructure make it a well-functioning context ('general capacity') (Scaccia et al., 2015). General capacities include organisational considerations such as: culture, climate, organisational innovativeness, resource utilisation leadership, structure and staff capacity. Innovation-specific capacities include: innovation-specific knowledge, skills and abilities, having a programme champion, specific implementation climate supports (which links to communication and management around implementation), and interorganisational relationships. Readiness assessment can be used to identify where and how policy change is misaligned with implementation contexts and to inform the selection of strategies to improve readiness and alignment.

Additionally, although not included in one of the texts that we reviewed, elements of implementation mapping (discussed above) may be a valuable approach in identifying the resources and personnel necessary for implementation (Fernandez et al., 2019).

Governance and collaboration

Robust governance arrangements are vital for successful implementation (Australian National Audit Office, 2014). Effective coordination between different levels of government and implementing agencies is viewed as a facilitator to policy implementation (Forberger et al., 2022; Australian National Audit Office, 2014; Probst et al., 2018; Mclsaac et al., 2019). Conversely, undefined or unclear roles, responsibilities and accountabilities in implementation are cited as barriers (Mclsaac et al., 2019; Wright, 2019; Jankhotkaew et al., 2022). Resources, therefore, advise the establishment of clear governance and accountability arrangements (Australian National Audit Office, 2014; Colgan, Kennedy and Doherty, 2014).

Governance structures need to align with their purpose (Colgan, Kennedy and Doherty, 2014; Norris et al., 2014). While short-term initiatives may rely on informal arrangements,

initiatives aimed at achieving long-term change may require more permanent structures, including provision in legislation (Colgan, Kennedy and Doherty, 2014). Forberger et al. (2022) concludes, in relation to the implementation of physical activity policy, that authorities must have a common goal and a desire to work together for coordination to be effective. Past informal and formal structures were found to facilitate coordination. (Forberger et al., 2022).

Multi-faceted policy intervention encompassing multiple policy domains and sectors require more extensive coordination and potentially different forms of governance. It requires vertical coordination (between different levels of government and implementing agencies) and horizontal coordination (between different policy areas) (Weiss, Lillefjell and Magnus, 2016; Haddad et al., 2022; Colgan, Kennedy and Doherty, 2014). In relation to the implementation of transformative innovation policies, Haddad et al. (2022) note that some studies emphasised the need to complement or replace 'top down' governance with 'bottom up' approaches, combining centralised direction and guidance with delegated responsibility and embedded, decentralised governance that leaves space for self-organisation and networking. They introduce the concept of a "governance mix" which combines bottom up and top down governance modes.

Collaborations between implementers and cross-sectorial collaboration (e.g. health and social services) is an enabler for successful implementation (Horodyska et al., 2015a; Horodyska et al., 2015b; Weiss, Lillefjell and Magnus, 2016; Ronto et al., 2020; Wright, 2019). Weiss, Lillefjell and Magnus's (2016) review identifies collaboration as the most common factor in achieving intended health promoting goals and objectives across local settings. Jankhotkaew et al. (2022) recommends multisectoral collaboration at the policy formulation stage to handle conflicting goals among different sectors in relation to alcohol control policy (i.e. public health and economic interests).

Included reviews and resources outline pointers on how collaboration and coordination could be strengthened. Weiss, Lillefjell and Magnus (2016) note that collaboration '*was best enabled by the use of teams, committees or forums made up of professionals from various organizations, sectors, and disciplines both within and outside of the health sector*' (p. 4). Trust is cited as an important facilitator of collaboration (Weiss, Lillefjell and Magnus, 2016), and the importance of cultures of collaboration and creating incentives to collaborate is noted in relation to whole of government work (Colgan, Kennedy and Doherty, 2014). Norris et al. (2014) found that how policy is communicated to different implementers can influence the

likelihood of joining up. Leadership is equally identified as key to promote collaboration and coordination and avoid territoriality (Australian National Audit Office, 2014).

Approaches and tools

Governance and collaboration should be considered and integrated into all stages of the policy process (Weiss, Lillefjell and Magnus, 2016; Australian National Audit Office, 2014). The Australian National Audit Office (2014) offers a checklist to help assess the adequacy of governance arrangements, for instance regarding the extent to which the legitimate interests of a range of stakeholders are considered. No other specific tools to assess or strengthen governance and collaboration were proposed in the reviewed texts.

Monitoring, evaluation, learning and risk management

Monitoring, review and evaluation processes are recommended as a strategy to support, strengthen, and drive policy implementation (Australian National Audit Office, 2014; Havers et al., 2020; Viennet and Pont, 2017; Horodyska et al., 2015a; Haddad et al., 2022; Forberger et al., 2022; Wright, 2019). These processes can provide a basis for the active management of the implementation process (Australian National Audit Office, 2014).

Monitoring data collected throughout the implementation process can help build strategic intelligence about progress and inform decisions about what needs to change (Haddad et al., 2022; Viennet and Pont, 2017; Norris et al., 2014). Monitoring insights can also assist in adjusting implementation processes to local contexts (Viennet and Pont, 2017), and to changes in the external context (Norris et al., 2014). Monitoring is particularly important when contexts are unstable and dynamic, and when dealing with complex systems that can evolve in unpredictable and unexpected ways (GO Science, 2022a).

Reference is made to how monitoring and review can incentivise those involved in implementation. The absence of a monitoring system was noted as a factor contributing to non-compliance in relation to alcohol, food and beverage policies, (Ronto et al., 2020; Jankhotkaew et al., 2022; Wright, 2019; Ng et al., 2022). Both Ronto et al. (2020) and Mclsaac et al. (2019) suggest that monitoring may be a suitable option for encouraging policy uptake and adherence in schools. Further, the review by Viennet and Pont (2017) highlights

that having higher accountability standards on education policy implementers in some contexts resulted in better implementation, though they note that accountability systems must be adapted according to the local context and phase to prevent unintended effects. Targets and indicators need to be carefully selected to avoid any distortion of incentives, such as *'teaching to the test'* (Viennet and Pont, 2017, p.38).

Successful implementation also requires identifying, managing and monitoring of risks, to help mitigate the impact on implementation of known or unexpected contextual factors that can arise during implementation (Colgan, Kennedy and Doherty, 2014; Australian National Audit Office, 2014; Fagan, Cornejo and Cushing, 2021).

It is recommended that appropriate and clear arrangements for monitoring, review, evaluation activities and risk management are established as early as possible, including feedback loops that can enable timely adjustment of components of the implementation process (Norris et al., 2014; Australian National Audit Office, 2014). Objectives, expected outcomes, and targets of the policy and implementation process need to be defined to guide this work (Colgan, Kennedy and Doherty, 2014; Australian National Audit Office, 2014; Viennet and Pont, 2017). Clarity about roles and responsibilities for monitoring and evaluation is especially relevant in whole of government initiatives. Processes should be proportionate and key users identified (Viennet and Pont, 2017). In case of capacity constraints, the government may decide to outsource monitoring functions. Case studies by the Norris et al. (2014) found that involvement of ministers in routines for tracking progress was beneficial.

Learning approaches are also seen as important. Dynamic and flexible approaches to policy development and implementation are recommended in several of the reviewed texts (Haddad et al., 2022; Fagan, Cornejo and Cushing, 2021; GO Science, 2022a). The reviews propose a cyclical methodology over linear planning and sequencing, with short feedback loops between implementers and government enabling rapid flow of information, and embedding policy makers in collective learning (Haddad et al., 2022; Weiss, Lillefjell and Magnus, 2016; Norris et al., 2014). Such an approach can foster adaptation to changing social, political and environmental contexts. Early awareness of how contexts might change and building in contingencies to support rapid adjustment is encouraged (Norris et al., 2014). The value of piloting policy implementation to support refinement of policy design and implementation, and learn from variation, is also emphasised (Fagan, Cornejo and Cushing, 2021; Ejler et al., 2018; GO Science, 2022a). Evaluation approaches that foreground

learning and reflexivity rather than accountability and control are recommended, while formative evaluation should be prioritised over summative evaluation (Haddad et al., 2022).

Setting up formal mechanisms for capturing implementation experience and good practice and shared learning is also proposed (Colgan, Kennedy and Doherty, 2014; Australian National Audit Office, 2014; Norris et al., 2014). Encouraging and facilitating the transfer of knowledge from past initiatives to new implementation teams to support iteration and learning is necessary (Norris et al., 2014; GO Science, 2022b). Creating an environment where implementation can openly share insights and experiences, including failures, and build an understanding of mechanisms through which actors learn, is an important part of this (Norris et al., 2014). Haddad et al. (2022) highlight how policy learning and adaptive policy can be challenged by weak leadership, lack of absorptive capacity, conflicts of interests, and a tendency to follow routines.

Approaches and tools

Both Ejler et al. (2018) and Fagan, Cornejo and Cushing (2021) encourage the use of the Plan-Do-Study-Act cycle of iteration and improvement, which offers a framework for problem-solving implementation barriers.³ The latter also encourages the Pilot Sequence approach where a series of pilots are used to test and improve delivery, starting with the most conducive contexts and expanding to the more challenging, before scaling to all intended recipients.

The Australian National Audit Office (2014) offers a checklist to help assess whether arrangements for monitoring, evaluation have been adequately addressed. The Systems Thinking Toolkit (GO Science, 2022a) includes a template and guidance for the development of a monitoring and evaluation strategy.

Leadership

Leadership is identified as a determinant of implementation success in its own right (Nguyen et al., 2021; Horodyska et al., 2015a; Weiss, Lillefjell and Magnus, 2016; Kennedy et al.,

³ See for further details <https://nirn.fpg.unc.edu/module-1/improvement-cycles>

2019; Haddad et al., 2022; Ng et al., 2022; Mclsaac et al., 2019) and is important for facilitating processes such as stakeholder engagement, and governance and collaboration. Reviews refer to the importance of leadership among different groups (e.g. policy makers, implementers), at different levels (individual and organisational) and for different purposes (policy design and implementation) (Ng et al., 2022; Kennedy et al., 2019; Mclsaac et al., 2019; Haddad et al., 2022).

Several policy resources emphasise the critical importance of leadership for policy implementation (Ejler et al., 2018; Australian National Audit Office, 2014; Colgan, Kennedy and Doherty, 2014; Norris et al., 2014; Kennedy et al., 2019). Ejler et al. (2018), based on interviews with public sector executives, conclude that leadership is the most necessary determinant for addressing barriers to implementation. Successful implementation requires willing and capable leaders who are '*a visible proponent of the implementation*' and who foster commitment (Ejler et al., 2018, p.8). They also highlight the role of leaders in focusing, prioritising and insisting on implementation, and dealing with resistance. Similarly, the Australian National Audit Office (2014) cites the importance of visible senior leadership to signal the importance of a particular policy initiative to people in their organisation.

Reviews also discuss the role of leaders in implementation settings. Mclsaac et al. (2019) mention how leadership at the school level can facilitate implementation, for example by securing buy-in from administration, supporting planning and reinforcing connections. Organisational leadership and management commitment are frequently cited enablers for the implementation of healthy food and drink policies: '*good leadership at the policy level can also provide background support for implementation within organisations through policy prioritisation and commitment*' (Nguyen et al., 2021, p. 11).

Leadership is mentioned as especially important for cross-departmental policy initiatives and those that involve many different stakeholders or demand significant organisational change (Colgan, Kennedy and Doherty, 2014; Australian National Audit Office, 2014). Whole of government action demands a high level of leadership at the political and administrative level – from both ministers and senior public servants (Colgan, Kennedy and Doherty, 2014). Effective engagement with other government entities can help prevent organisational silos or territoriality that could hinder implementation (Australian National Audit Office, 2014). Haddad et al. (2022) highlight, in relation to innovation policy, the need for policy makers to act as brokers between different stakeholders to initiate dialogue and joint activities, build

trust and align interests, and encourage collaboration. A lack of leadership in this area may lead to difficulties in coordinating multiple actors.

Some texts cite the role of informal leaders and champions at different levels (Nguyen et al., 2021; Mclsaac et al., 2019; Ejler et al., 2018; Fagan, Cornejo and Cushing, 2021). Fagan, Cornejo and Cushing (2021) recommend engagement of opinion leaders and power brokers to leverage their support. Ejler et al., (2018) propose the identification and preparation of future champions to engage local leadership in an implementation process.

Norris et al. (2014) note the positive role that politicians can play in driving effective implementation. They conclude, based on their case studies, that the close involvement of junior ministers can support policy delivery. While ministers can provide high-level sponsorship and direction for flagship policies, junior ministers were found to generally be better placed to guide the process of translating broad policy goals into implementable policy. The involvement of junior ministers entailed formal and informal check-ins with officials and implementers to drive delivery, negotiating the boundaries between new policy and other priorities, facilitating more joined-up activity, and navigating opposition or challenges (including by using the 'soft governance' of bilateral meetings, political connections and networks). Colgan, Kennedy and Doherty (2014) recommend securing political and administrative leadership of key ministers and senior public officials at the outset and throughout the lifetime of a project.

Expectations from leadership and the type of leadership required should be clarified. Ejler et al. (2018) distinguish different potential approaches to leadership, namely hierarchical leader, holistic leader, delegating leader and co-creational leader. They note that the leadership approach should be developed in accordance with the specific implementation context and potential barriers and facilitators. The approach to implementation should consider the strength of the leadership, and there may be need for dedicated implementation activities aimed at leaders, or to broaden the scope of implementation support in case leadership is weak (Ejler et al., 2018). Colgan, Kennedy and Doherty (2014) suggest that whole of government activity requires '*a 'craftsman' style of political leadership, one that has to focus on building and sustaining relationships, managing complexity and interdependence, and managing multiple and conflicting accountabilities*' (Fafard, 2013 in Colgan, Kennedy and Doherty, 2014, p. iv).

Approaches and tools

The earlier mentioned Organisational Readiness to Change Assessment (ORCA) tool includes questions in relation to leadership. No specific tools or techniques to assess or strengthen leadership are suggested in the included texts.

Communication and framing

Communication is emphasised as an important enabling factor in policy implementation (Ronto et al., 2020). Norris et al. (2014), based on their case studies on social justice policy implementation, conclude that the narrative that accompanies a policy influences the way that policy is interpreted and delivered. Effective communication can support policy implementation by mitigating barriers relating to negative perceptions of a policy, and the lack of buy-in, acceptance and support for policy implementation (Jankhotkaew et al., 2022; Nguyen et al., 2021; Ronto et al., 2020). It can also support stakeholder engagement (although it should be noted that communication is not always distinguished from engagement in the reviewed texts) and is a critical aspect of coordination and governance.

Communication should convey several aspects, such as the policy's problem statement, objectives, underlying theories and causal mechanisms, supporting evidence, strategies for delivery and implementation, and implementation requirements and responsibilities (Horodyska et al., 2015b; Mclsaac et al., 2019; Kennedy et al., 2019; Viennet and Pont, 2017). Policy communication should clearly express the issue or (perceived) need to which the policy is responding or otherwise justify the policy (Viennet and Pont, 2017).

Communicating evidence from other contexts where a similar policy has been implemented may help mitigate concerns around adverse effects, for example around loss of revenue, and to improve policy acceptance (Kennedy et al., 2019; Ronto et al., 2020). Communication about progress and policy results achieved can also bolster implementation (Nguyen et al., 2021). The framing of a problem or policy objectives is also seen as important to address challenges around legitimisation and stakeholder support (Norris et al., 2014, Viennet and Pont, 2017). Mclsaac et al. (2019), in their review on school nutrition policies, suggest that framing nutrition as a core priority for improving educational outcomes can help align efforts and develop collective actions toward change.

Communication needs to be directed to everyone who will be impacted by the change and should begin early in the implementation process and continue throughout (Fagan, Cornejo

and Cushing, 2021; Viennet and Pont, 2017; Nguyen et al., 2021; Mclsaac et al., 2019; Australian National Audit Office, 2014; Norris et al., 2014; Colgan, Kennedy and Doherty, 2014). This will likely consist of communication across different groups (e.g. media, communities, food suppliers) and levels of the system (e.g. government, implementation settings, target population) (Mclsaac et al., 2019). Implementers should also ensure that their chosen channels of communication aligns with their existing communication strategies, and that they are cost-effective.

Approaches and tools

No specific tools or techniques to assess or strengthen communication are suggested in the included texts.

Implementation planning

This section has set out approaches for policy makers to support implementation -minded policy action. Consideration of how these approaches can support the policy implementation process is central to implementation planning. Implementation planning commonly involves the definition of implementation objectives and targets, implementation strategies and activities, resources, governance, timing, communication and engagement, risk management, monitoring and evaluation (Viennet and Pont, 2017; Australian National Audit Office, 2014). This section has discussed considerations and suggestions in relation to each of these areas.

Discussion

Our synthesis of factors that influence implementation highlights the need for implementation to be a central consideration throughout policy work. Implementation is a complex process of change involving individuals, organisations, groups, networks and coalitions at multiple and inter-connected levels, through which policy intentions are refined, supported, translated, enacted, embedded and sustained - or not. There is a recurrent message from the reviewed texts that implementation needs to be a consideration in policy work from early on. Implementation thinking needs to be considered in the development of policy content and throughout the policy cycle, and implementation needs to be understood much more fully than as the 'execution' of policy. Policy content needs to be developed with implementation in mind, taking into account potential barriers and facilitators to implementation. Policy makers are otherwise leaving the reform process too early (Viennet and Pont, 2017).

As noted in the Introduction, policy failure can arise because of bad luck, bad policy or bad execution. Our analysis does not provide much to help with bad luck - although context analysis and monitoring might help to avert or prepare for some of what might otherwise be experienced as bad luck and would aid course correction. Bad policy is also not entirely avoidable in a Welsh devolution context, nor for the individual policy maker who is charged with implementation after the policy content has been set. However, policy is refined, translated and enacted through implementation. Implementation is, in this sense, part of the process of policy making, and so offers opportunities to redeem or salvage 'bad' policy. Bad execution really can and should be minimised through implementation thinking.

In this final chapter, we highlight two key themes emerging from the previous chapters that need to be attended to in order to achieve successful policy implementation: reducing ambiguity and increasing alignment. These echo Matland's (1995) typologies (see Introduction) which foregrounds ambiguity and conflict as key influences on the form that implementation takes. Our conception of ambiguity is broadly consistent with Matland's. We replace the conflict dimension with alignment. Alignment provides a wider framing than conflict and is more consistent with the texts we reviewed, while also being a central concept in implementation science.

The implementation support approaches we describe in the previous chapter address both ambiguity and alignment, and can be used as part of policy formulation, or after policy

formulation. These approaches are likely to be relevant in many policy implementation instances, but for what purpose and how they might be deployed will differ, including depending on the policy phase.

Reducing ambiguity

Our analysis highlights that three types of ambiguity may arise, which can act as breaks on implementation, and need to be reduced:

- Ambiguity in the 'why' of policy content: the problem or perceived need that the policy responds to
- Ambiguity about the 'what' of policy content: the aims of the policy and the change intended to be brought about
- Ambiguity about the 'how' of implementation: the selection of policy instruments, the activity required to turn the policy into change on the ground, and who, at different levels in the system, needs to do what to support and enact this.

Ambiguity about the 'why' and 'what' of policy intent and content can be reduced in a number of ways at different stages in policy work, and the implementation support approaches described earlier all have a role to play. During policy formulation, using problem and context analysis, and drawing on existing evidence may help to ensure a clear understanding of the problem being addressed, the identification of potential levers, and the selection of an optimal policy solution. Stakeholder engagement may be needed to develop a shared understanding of the issue. Framing strategies may be needed to convey a clear rationale and argue for the policy solution. Ambiguity about the 'how' of implementation would need to be addressed with a different focus. Implementation mapping and assessing organisational readiness to change (discussed in the Implementation Support Approaches chapter) may be a valuable approach to include as part of problem and context analysis. The focus of using evidence or stakeholder engagement would switch from understanding the issue and assessing solutions, to figuring out how to implement the solution.

The extent to which these different types of ambiguity can be resolved will vary. For example, it may not be possible, or useful, to set out specific approaches to implementation (the 'how') in areas where the way forward cannot yet be specified and where it is necessary to leave more space for local variation or innovation. This might apply to, for instance, 'wicked problems' which have their roots in complex systems interactions and are not easily resolved

through fixed planning, but may benefit from a more iterative approach. It may also apply where there is limited evidence about what works. Where there is value in or need for local tailoring and contextualising, the optimal approach may not be to nail implementation down in the policy content, but instead to create a process and infrastructure to support, oversee and shape local implementation, with strong mechanisms for monitoring and course correction set up. There may also be more tolerance for initial ambiguity about 'how' if a policy is well aligned with the priorities and motivations of those involved in motivation and with the existing infrastructure of norms, practices, resources and relationships.

Reducing ambiguity after the policy is formulated

If ambiguity was not resolved during policy formulation, implementation support approaches can still be deployed to compensate, reducing ambiguity by developing a shared understanding of the 'why', 'what' and 'how'. This might be an activity undertaken directly by policy makers, or delegated to government agencies, arms-length bodies or non-governmental intermediaries with sector support roles. Ambiguity about 'why' and 'what' might need to be addressed through communication, stakeholder engagement, governance and leadership.

If there remains ambiguity about the 'how' after policy formulation, implementation planning might compensate for gaps, with purposeful, inclusive and comprehensive work to develop an implementation plan – work which might be led by government or by intermediary bodies. How loosely or tightly the implementation plan is defined and held centrally will vary depending on its alignment with the implementation context – see further below.

Having a clear governance system in place may also be needed to address ambiguity in 'how'. Implementation requires coordinated work at multiple levels – it is a team sport – and, therefore, governance and leadership structures may need to build collaboration between teams horizontally and vertically. Context analysis and stakeholder engagement will help to identify the types and forms of leadership needed, and for example the place of formal and informal, or central and distributed, leadership.

Finally, where the 'how' of policy cannot be or has not been established, monitoring and evaluation that is directed to iterative experimentation, learning and adaptation as well as to monitoring the progress of implementation is likely to be valuable.

Increasing alignment

Our analysis highlights the central importance of alignment of policy intent and content, with the implementation context. The features of implementation contexts around which alignment is likely to be most crucial, are:

- the policy context: the existing network of policies and how this creates areas of inconsistency, complementarity and scope for mutual reinforcement
- the priorities, goals and motivations of organisations and individuals that are implementation actors, or otherwise part of the implementation landscape, and the social norms, cultures and preferences at play
- the implementation infrastructure consisting of:
 - financial and human resources available in the system to support implementation, including the distribution and sustainment of resources, and how they can be used to support the enactment of leadership and implementation;
 - the infrastructure available to support implementation, including structures, networks and relationships; physical and geographic infrastructure; and organisational systems, processes and practices.

Complete alignment may not be achievable at the policy formulation stage for several reasons. As noted, policy may be set by Westminster without considering the Welsh political, social or institutional context. Policy is always bounded and involves choices and trade-offs that reflect political, financial and pragmatic realities. A policy may also be well aligned with some aspects of the context (e.g. with other policies and social values) but poorly aligned with others (e.g. the interests of some stakeholders and the infrastructure to support implementation). It is also important to note that the policy may have the deliberate intention of disturbing the current context or systems and changing existing power balances. For example, Probst et al.'s (2018) review of maternity protection legislation identified that it was some way ahead of social and organisational attitudes about pregnancy and work. As Probst et al. (2018, p. 919) note, in these cases the work involved to increase alignment will be substantial: *'Much thought and many actions will be needed to deconstruct representations which picture maternity and work as incompatible and to create a better, more tangible balance between them.'*

Alignment is also not fixed: it is a dynamic process, and the degree of alignment may be in flux as policies change through the process of translation and as implementation contexts change.

An important part of policy formulation is therefore to identify and address areas where policy content is not well aligned with implementation contexts. Analysing social and political environments, and engaging stakeholders, could help identify where support and resistance are likely to come from, and to identify the strengths and assets in systems (e.g. the capabilities of frontline settings, or organisational norms and social values, or intermediary organisations) that can be engaged to support implementation. Evidence about previous change efforts (including from other contexts) would also be relevant here. These strategies might lead to more refined and effective selection of policy instruments and the provision of implementation guidance, including assigning responsibilities to intermediaries, networks or other organisations that need to take on roles in implementation.

If misalignment has not been addressed when defining policy content, it can still be addressed during implementation. For example, this might involve changing or refining other policies to eliminate friction or inconsistency; using framing, communication and stakeholder engagement to influence social or organisational priorities or to narrow areas of misalignment; negotiation with other stakeholders with conflicting interests; providing financial resources; or building capacity through government or intermediaries providing technical assistance or training.

Our analysis suggests that theories, models and frameworks from implementation science may be useful for policy implementation thinking. There is a high degree of consistency between the issues raised in our synthesis and the content of implementation determinant frameworks such as EPIS and CFIR (described in the Introduction). The focus these frameworks place on features of the intervention; the motivations, attitudes and capacities of the people involved in implementation; and the features of 'inner' and 'outer' systems that may support or hinder implementation is strongly echoed in our analysis. These frameworks may therefore assist in anticipating and addressing potential barriers and facilitators.

The categories of implementation strategies outlined by Waltz et al. (2015) are also strongly resonant with the strategies proposed or described in the included texts. They may be useful in selecting implementation strategies and of support approaches. The outcomes described in the IOF (Proctor et al., 2011) may be a useful aid to direct implementation efforts and

support. Approaches from implementation science such as implementation mapping and readiness assessment (described in the Implementation Support Approaches chapter) may also be helpful.

Mutually reinforcing and compensating mechanisms

Our analysis suggests that implementation support approaches can be both mutually reinforcing and compensatory, over time, and that there are direct and indirect interactions between them. This implies that it is possible to make up ground or compensate later for approaches that were not employed, or not used sufficiently, at earlier stages. Some approaches *may* be more valuable in the policy design stage (e.g. problem and context analysis); some *may* be more relevant after initial policy design (e.g. communication and framing). However, it is likely more beneficial to remain flexible on time frames and select the approaches that best fit a given policy situation.

Implementation support approaches are mutually reinforcing in the sense that strategies may reinforce and add value to each other. For example, problem and context analysis may inform who needs to be involved in stakeholder engagement; stakeholder engagement may create supportive conditions that make distributed leadership and governance more effective. They are compensatory in that gaps in the earlier use of strategies and approaches may be addressed by subsequent deployment of the right implementation support approaches. For example, the absence of stakeholder engagement in early policy formulation may be compensated for by building it in later implementation planning; ambiguity in policy logic that is not resolved in policy formulation may be resolved by later communication and framing, or by a devolved governance structure that involves intermediaries leading collaborative sense-making activity.

The implication is that implementation support approaches need to be selected, reviewed and adjusted based on what has come before, and how well it has worked.

It is also worth noting that, although our focus has been on activity led or initiated by policy makers, the implementation support approaches may be used by other implementation actors, which may be needed or done to compensate for gaps in early policy making activity. For example, a local authority may set its own leadership structure or monitoring system to support implementation; a health board may engage with stakeholders to decide how to

implement a national policy; a school may consider how to communicate and frame a policy change, or how to engage staff and students, as part of its implementation.

Bringing more people into policy work

A strong message from our synthesis is the need to include more people into policy work – including the intended beneficiaries of the policy, the people and organisations who will be involved in leading or supporting implementation, others with vested interests, and relevant networks, coalitions and movements. Multi-level perspectives on implementation will be important, considering the activity needed at different levels in systems to turn policy into action. This may include encompassing frontline organisations; local, regional or national governance structures to which they are accountable; intermediary or sector support bodies; and arms-length government and non-governmental agencies, and other government departments. All these groups are potential implementation actors, and policy makers need to engage with these groups and act as brokers between them.

In Wales, the Well-being of Future Generations Act provides framing and support for involving more people in policy work. It encourages public bodies to do this by defining ways of working that highlight different sets of actors that have a role in policy work:

- 'collaboration' with those who have a role to play in delivering on an objective or objectives;
- 'integration' across policy domains, which requires engagement with those whose objectives overlap, support or compete with the objectives being pursued; and
- 'involvement' of those interested in, or affected by, pursuit of an objective, with particular focus on ensuring diversity.

The texts reviewed highlight that the implementation gap arises in part because of the distance between policy makers and the implementation settings, and because of the unequal status of policy making and policy makers, and those leading or involved in implementation. The implementation support approaches we have described can be used to bring policy makers closer to implementation contexts and actors.

Equity as a core implementation consideration

Equity is relevant both as a determinant of implementation (something which may facilitate or prove an obstacle to implementation) and as an important dimension of the effectiveness of implementation. It was referenced as a determinant several reviews. Norris et al. (2014) highlight that social justice policies are likely to be complex and contested; experienced differently by different people; boundary-spanning; emotive; and addressing entrenched issues. Probst et al.'s (2018) synthesis relating to maternity protection policy notes the role of workplace power dynamics and the social status of women as influences on implementation. Moreover, Mclsaac et al. (2019) note that the socio-economic status and resources of schools influenced the effectiveness of implementation of school nutrition policies.

If policy implementation does not reach and achieve intended impacts for the most marginalised within the target group, implementation will serve to increase rather than reduce relative disadvantage. This suggests the need for more consideration of how equity comes into play in a policy area, and how inequity might impact on the acceptability of a new policy, the capacity and infrastructure for implementation, the potential impacts, and the implementation strategies and implementation support approaches needed to achieve equity in outcome. Reaching and securing intended impacts for the most marginalised or disadvantaged among the intended beneficiaries requires active consideration of the specific barriers and facilitators they face, and purposeful selection or adjustment of implementation support approaches and strategies is required. This may influence the approaches to implementation needed for a policy to reach groups affected by structural inequality; who needs to be involved in stakeholder engagement; the allocation of resources and support for implementation; the flexibility for tailored, contextualised implementation; and what to monitor and evaluate.

Concluding comments

Implementation -minded policy making involves building implementation thinking into policy logic to ensure policy includes direction, guidance and resources for implementation and establishes the processes and infrastructure needed for coordinated implementation across levels. It involves addressing ambiguity in the 'what', 'why' and 'how' of policy. It involves assessing and improving the degree of alignment between policy and multi-level

implementing contexts. Implementation thinking can be brought into policy making through a number of strategies and approaches: problem and context analysis; evidence gathering, synthesis and use; stakeholder engagement; identifying resources and capabilities; governance and collaboration; monitoring, evaluation and learning; leadership; and communication and framing.

The report outlines approaches, resources and tools from policy design and implementation science that can support this work.

These support approaches can be used at different points in the policy cycle. They are mutually reinforcing and compensatory, and the earlier implementation thinking and work done (or not done) will influence what is needed in later stages of work.

What is crucial is that policy makers engage with what is required for effective implementation, that they establish and support others in establishing the conditions and infrastructure for effective implementation, and that they do not prematurely exit the reform effort,

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Note: references marked with ‘’ indicate that this was one of the policy resources included in the review. Academic reviews included are indicated by ‘**’.*

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