

OVERVIEW OF INTERVENTION MAPPING

Intervention Mapping (IM) is a planning approach that uses theory, evidence, and community and partner engagement as foundations for the design and evaluation of multilevel health promotion programs and implementation strategies. IM applies an ecological approach to planning by examining the personal, interpersonal, organizational, community, and societal determinants of health and designing interventions to influence them. In doing so, it ensures that planners address the full spectrum of multilevel influences on behaviors and environmental conditions. The purpose of IM is to provide health promotion program planners with a framework for effective decision-making at each step in the process of intervention design, implementation planning, and evaluation. In this chapter, we present the perspectives underlying IM and a preview of this robust program-planning framework that is used worldwide.

Health promotion is the process of enabling individuals and communities to increase control over and improve their health. It involves creating supportive environments, strengthening community action, developing personal skills, and reorienting health services to address the broader determinants of health—not only individual behavior (World Health, 1986). It has also been defined as “combinations of educational, political, regulatory, and organizational supports for behavior and environmental changes that are conducive to health” (Green & Kreuter, 2005). In this book, we use the terms “program” and “intervention” interchangeably to broadly refer to various types of health promotion interventions. These include more traditional health promotion and education programs (e.g., an eight-course diabetes self-management program), as well as quality improvement initiatives (e.g., improving the delivery of health services), and interventions aimed at policy, systems, and environmental change as part of a community health improvement plan

(e.g., The North Karelia Project) (Springer et al., 2024). This book also uses the terms **health educator**, **health promoter**, and **program planner** interchangeably to mean someone who is planning a health promotion intervention meant to produce health outcomes. Since health promotion program planning often occurs as a team, we also use the term “planning group.”

How Intervention Mapping Compares to Other Planning Frameworks

Across the field of health promotion, planning models such as PRECEDE-PROCEED (Green et al., 2022), MAPP (NACCHO, 2023), and others share several core phases: engaging stakeholders, assessing needs and assets, identifying priorities, designing interventions, and planning for implementation and evaluation. This common structure reflects a long-standing consensus about the essential components of systematic health promotion planning. Intervention Mapping (IM) builds from this shared foundation yet offers a deeper level of operational guidance for planners who want to integrate theory, empirical evidence, and community expertise into actionable, multilevel intervention plans. Unlike models that simply describe *what* to do in each phase, IM (through the integration of Core Processes and its step-by-step tasks) provides detailed processes for *how* to carry out intervention design phases in ways that are theory-driven, evidence-informed, culturally responsive, and ecologically aligned.

In this way, IM helps bridge a long-recognized gap in the planning literature: practitioners often understand that theory, empirical evidence, and community engagement are essential, yet lack a practical route for integrating these elements in a systematic and effective way. Knowing where you are (i.e., having identified the health problem, its behavioral and environmental determinants, and the populations most affected) is necessary but not sufficient. Likewise, simply possessing the right tools (theory, epidemiology data, community input) does not guarantee that they will be used well. What planners need is a clear, step-by-step pathway that shows how to apply these tools, in what sequence, and for what purpose. IM provides that route, mapping out the concrete directions that guide planners from problem understanding to the design of a coherent, multilevel intervention with the potential to produce meaningful and lasting improvements in health and quality of life.

IM also advances several innovations that distinguish it from other planning approaches. First, while many models begin with broad population health assessments, IM requires a more focused needs and assets assessment built around a specific health condition, behavior, or environmental influence. This enables planners to move beyond identifying problems toward understanding the behavioral, environmental, and socio-structural determinants that must change to improve health. Second, IM

strengthens ecological thinking by guiding planners to specify both individual-level and environmental change objectives, identify environmental agents, and design multilevel strategies aligned with settings and systems. Third, IM integrates a robust set of planning tools including logic models of the problem and of change, matrices that link determinants to performance objectives, and processes for selecting and translating theory-based change methods into practical applications, thus providing more rigorous and transparent planning than most frameworks. Finally, IM embeds equity considerations and community engagement throughout the process. Through the needs and assets assessment and linkage system concepts, planners are guided to identify populations most at risk, activate community assets, and meaningfully engage members of the priority population and local implementers in co-creating feasible and culturally relevant interventions. Together, these features make IM not only consistent with other models in its overall structure but also uniquely powerful in offering planners a clear, detailed, and equitable pathway from problem identification to effective intervention design, implementation, and evaluation.

Theory, Evidence, and New Data

IM is grounded in a set of foundational procedures called the *Core Processes*, which guide planners in systematically using theory, empirical evidence, community insights, and new data to understand and address health and social problems. These Core Processes, composed of posing questions, exploring possible answers, reviewing existing evidence (published literature as well as existing data), identifying theoretical support, determining the need for new data, and assessing the completeness of the information gathered, are used across all steps of IM and ensure that planning decisions are well-reasoned and transparent. Chapter 2 describes each Core Process in detail and illustrates how they function throughout the planning process.

The Core Processes can be particularly helpful for planners using theory for understanding and addressing health problems. We agree with Kurt Lewin's well-known assertion that *nothing is as useful as a good theory* (Hochbaum et al., 1992). Theory is essential in evidence-informed health promotion because it helps explain why behaviors and environmental conditions occur and guides the selection of appropriate methods for change. Scholars have emphasized the need for clearer guidance on how theory can be effectively used to understand and address complex public health and social problems (Fernandez et al., 2019; Glanz et al., 2024; Kok et al., 2017; Ruiter & Crutzen, 2020; ten Hoor et al., 2025). In IM, theory is applied pragmatically: planners draw from multiple theoretical perspectives rather than relying on a single model, which includes applying one or more causal/etiological theories to understand the problem and change theories to guide solutions.

In addition to theory, empirical evidence plays a central role. In addition to published data, identifying existing evidence from previous (unpublished) studies, evaluations, surveillance systems, and practice-based experience provides critical information about determinants, contextual influences, and strategies that have been effective or ineffective in similar situations. However, theory and existing evidence are not always sufficient. In many cases, planners need new data (often both qualitative and quantitative) to fill gaps, test assumptions, understand context, or explore determinants that have not been adequately examined. In IM, the decision to collect new data is intentional and arises after reviewing the available theory and evidence, consistent with the Core Processes. This ensures that new data collection is targeted, efficient, and justified by the planning questions at hand.

Although community participation is not defined as its own Core Process, it is foundational across all Core Processes and all steps of IM. Community members, implementers, and other stakeholders contribute essential knowledge about local conditions, priorities, feasibility, and acceptability. Community-engaged planning often provides essential tacit knowledge that neither theory nor published evidence alone can provide. Their perspectives help shape the questions planners pose, the way evidence is interpreted, the identification of gaps needing new data, and ultimately the decisions made about intervention design. A later section in this chapter elaborates on the importance of community participation in health promotion planning and its central role in IM.

Through the systematic use of the Core Processes and by integrating theory, existing evidence, new data, and community perspectives, IM strengthens the rigor, completeness, and relevance of planning decisions. This approach ensures that interventions are grounded in a comprehensive understanding of the problem and its context and increases the likelihood that resulting programs will be both effective and feasible in real-world settings.

Ecological Models and Systems Thinking

The social ecological model, an underpinning for IM, has been used extensively in health promotion and is related to and encompassed by systems thinking (Bronfenbrenner, 1989; Bronfenbrenner & Ceci, 1994; Crielaard et al., 2025; McLeroy et al., 1988). In the social ecological model, health is a function of individuals and of the environments in which individuals live, including family, social networks, organizations, communities, and societies (Eriksson et al., 2025; Golden & Wendel, 2020; Springer et al., 2024; Stokols, 1996).

The social ecological paradigm focuses on the interrelationships between individuals (biological, psychological, and behavioral characteristics) and their environments. These environments include physical, social, and cultural aspects that exist across the individual's life domains and social

settings. A nested structure of environments allows for multiple influences both within levels and across levels. Throughout the book, there is a focus on identifying and planning interventions that influence *environmental agents* (decision-makers or role actors) at each ecological level: interpersonal (e.g., parents), organizational (e.g., managers of school food services), community (e.g., newspaper editors), or societal (e.g., legislators). Interventions at the various levels focus on agents (individuals or groups, such as boards or committees) in positions to exercise control over aspects of the environment. For example, adolescent uptake of smoking might be influenced by peers and parents at the interpersonal level of the environment and by regulations and access at the social and community levels of the environment. The picture that emerges is a complex web or system of causation as well as a rich context for intervention.

A system consists of interconnected activities, actors, and settings that influence or are influenced by, a particular problem situation (Green, 2006; Leischow & Milstein, 2006). Systems perspectives and approaches can be used to assess the needs and strengths of the population, to understand a health problem and its multilevel and mutually influencing determinants, to select the most effective leverage points to address the problem, and to form a representative group of key actors and interested parties to plan, conduct, implement, and disseminate an intervention. Since interventions are events in systems, other factors within a system can reinforce or dampen the impact of an intervention on the specific behavioral and/or environmental changes being targeted (Douglas & Stamatakis, 2012; Kok et al., 2017).

Systems thinking can also inform implementation planning. For example, Whelan et al. (2023) found that combining systems thinking with implementation science constructs helped build stronger community-based prevention systems. Similarly, Zamantakis et al. (2024) identified key determinants of successful linkage-to-care systems in HIV prevention, emphasizing the role of organizational and interpersonal linkages.

We present, as a beginning point, a template for simple, linear logic models focusing on the presumed cause–effect pathways related to health problems and their solutions articulated from theory and empirical research (Bartholomew Eldredge & Mullen, 2011; Green et al., 2022). However, we encourage the reader to adapt the logic model template to the complexity of the problem being analyzed, and we assume that the intervention, the system activity being targeted, and the proposed outcome are part of a complex multilevel system. An intervention at one environmental level can influence causal factors at multiple levels (Lengnick-Hall et al., 2021; McLeroy et al., 1988).

Participation in Health Promotion Planning

Involving the priority population and interested community partners in the design, implementation, and evaluation of health promotion programs is foundational to the IM process and is rooted in a long history and current practice in the field of health promotion and public health. The right for

people to individually and collectively participate in the planning of their health care is a key principle set forth by the *Declaration of Alma Ata*, which originates from the first International Conference on Primary Health Care in 1978 that set forth the goal of “Health for All” (Rifkin, 2018). A decade later, the Institute of Medicine (IOM) published *The Future of Public Health*, which outlined a strategy for improving population health that moved from a sole focus on individual-level medical care to addressing determinants of health based in the community via collective action (IOM, 1988). Subsequent IOM reports further advanced the concept of *intersectoral responsibility for health*, which underscored the importance of community participation, as well as participation from key sectors within a given community (clinical care delivery system, employers and business, the media, and the education sector) (IOM, 2003, 2011).

Involving the priority population and community partners, including potential implementers, in co-creating health promotion interventions brings multiple benefits. First, inclusive community participation helps to ensure that the program focus reflects community concerns and values while also increasing the cultural relevance and potential impact of an intervention (Wallerstein et al., 2018). Broad participation also brings a greater breadth of skills, knowledge, and expertise to a project, and can improve external validity of interventions and evaluation by recognition of the local knowledge of community members and practitioners (Israel et al., 2018; Kok et al., 2017; Springer et al., 2024). Co-creating change with project partners and community partners and stakeholders furthermore allows the planning of interventions within local resource capacity, which holds promise for increasing the sustainability of a given intervention (Hawe, 2015). Evidence-based health promotion interventions may also be more acceptable to communities and potential participants when the research that has produced the evidence does not originate under special circumstances in distant places (Green & Mercer, 2001). Importantly, engaging the priority population and community stakeholders in health promotion planning is based on ethical principles of health promotion practice (Grabowski et al., 2017; Springer et al., 2024). “Nothing about us without us,” a quote with a long history that formed the rallying call for the UN Convention on the Rights of Persons with Disabilities, underscores the idea that no policy or program should be decided without the full and direct participation of members of the group(s) affected (see also the section “Ethical Practice of Health Promotion”).

To inform a community-engaged approach for health promotion planning, implementation, and evaluation, Community-Based Participatory Research (CBPR) principles provide helpful guidance (Wallerstein et al., 2018) (Box 1.1). In supporting these guiding principles, planners now have access to a growing menu of resources for engaging groups in participatory planning, implementation, and evaluation, including Facilitating Intentional Group Learning (Preskill et al., 2017), Community Tool Box (CCHD),

BOX 1.1. COMMUNITY-BASED PARTICIPATORY RESEARCH PRINCIPLES

- Recognizing a partner community as a unit of identity
- Building upon community strengths and resources
- Facilitating collaborative, equitable decision-making in which partners negotiate desired roles in all project phases and attend to social inequalities
- Fostering colearning among partners
- Balancing knowledge generation with community benefit
- Focusing on ecological perspectives, local problems, and multiple determinants of health
- Developing systems using an iterative process
- Disseminating information, results, and benefits to all partners
- Developing a commitment and long-term process
- Addressing issues of race, ethnicity, racism, and social class, and embodying “cultural humility”

Adapted from Wallerstein et al. (2018).

Liberating Structures (Lipmanowicz & McCandless, 2014), Participatory Learning and Action (Nelson, 2023), and Participatory Methods (Institute of Development Studies, n.d.), among other resources.

Embracing Cultural Humility and Reflexivity as Part of the Planning Group Process

One goal for health promotion planning is developing a perspective of cultural humility, defined as “...a lifelong commitment to self-evaluation and critique, to redressing power imbalances ... and to developing mutually beneficial and non-paternalistic partnerships with communities on behalf of individuals and defined populations” (Tervalon & Murray-García, 1998). Despite ongoing discussion about the use of the terms *cultural humility* versus *cultural competence* within the field of public health, we embrace Greene-Moton and Minkler’s (2020) call to move beyond the false choice between these terms to embracing their core purpose as they relate to the:

...recognition of the need for public health, medical, social work, and other professionals to reflect on and address our own biases and actively seek to understand and assess the cultural and social realities of the diverse individuals, groups, and communities with whom we and our groups and organizations interact. (Greene-Moton & Minkler, 2020)

In developing cultural humility and in designing more culturally relevant interventions, there is growing emphasis on the importance of practicing *reflexivity* for health promotion practitioners, researchers, and community health improvement teams (Alexander et al., 2020; Aronowitz et al., 2015; Garney et al., 2017). While definitions abound, we embrace a definition of reflexivity as an intentional activity that consists both of an exploration of one's own beliefs, judgements, and practices—which may include one's own social positionality and social and racial biases (Finlay, 1998; Johnson & Duberley, 2003)—as well as examination of the broader social forces that shape health inequities and power imbalances that can unintentionally be perpetuated via the health promotion research and practice process (Alexander et al., 2020; Aronowitz et al., 2015). Below we briefly explore how health promotion practitioners can begin to work toward embracing cultural humility and reflexivity as part of the intervention planning process and also introduce a brief overview of how culture is incorporated into each IM planning step.

Exploring Personal Ethnocentricity

Engaging and involving members of a planning group starts at the onset of the planning process; this principle of inclusivity extends to the personal development of group leaders and group members to help all group participants work both across and within cultures. This personal work involves listening deeply to the people with whom one is working as well as actively exploring one's personal ethnocentrism (Sue, 2003). Locke (1986, 1992) offers the following set of questions, tailored for our field of health promotion, as first steps in developing cultural self-awareness:

- What is my cultural heritage? What was the culture of my parents and grandparents? With what cultural group do I identify?
- What values, beliefs, opinions, and attitudes do I hold that are consistent with the dominant culture? Which are inconsistent? How did I learn these?
- How did I decide to be a health promotion planner and practitioner? What cultural standards were involved in the process? What do I understand to be the relationship between culture and health promotion?
- What unique abilities, aspirations, expectations, and limitations do I have that might influence my relations with culturally diverse individuals?

Through a process of suspending and then observing one's habitual ways of relating to other groups and then observing one's typical ways of seeing and relating to others, a person can move through stages to attain

greater cultural awareness, sensitivity, or even humility. The stages may include:

1. Feelings of fear, hostility, defensiveness, and superiority
2. Denial of cultural differences
3. Cultural acceptance and respect
4. Empathy
5. Integration, multiculturalism, and social justice (Bennett, 1993; Rios et al., 1998)

As next steps, one might structure opportunities for *reflexivity* in the planning group to disclose personal backgrounds, including those related to privilege and power (Tervalon & Murray-García, 1998; Wallerstein et al., 2018). Alexander et al. (2020) provide a helpful framework for guiding reflexivity within health promotion practice that is organized by three domains: *reflexivity in action* (e.g., mobilizing knowledge during action), *reflexivity on action* (e.g., exploring ways to improve future action after an action was implemented), and *reflexivity underlying action* (e.g., exploring the power dynamics, cultural values, and other underlying assumptions about the larger systemic change process that can encourage alternative perspectives for action and evaluation). Practical ways to incorporate reflexivity into the planning process may include “pause and reflect” activities that are incorporated in team meetings as part of a *learning agenda* (Nightingale et al., 2018).

Exploring and Working in Another Culture

In addition to becoming aware of one’s ethnocentric lens, another prerequisite for planning groups is the ability to identify and embrace the positive aspects of that culture (Airhihenbuwa & Liburd, 2006). The *PEN-3 model* provides a framework for guiding communication about culture and integrating culture into health intervention design (Airhihenbuwa, 1995, 1999; Iwelunmor et al., 2014; Kannan et al., 2009). In this model, the planning group considers three domains of culture:

- *Cultural identity*: Defining the priority population through a consideration of extended families and communities, as well as individuals;
- *Relations and expectations*: Considering aspects of the culture that can affect health and behavior, including perceptions, enablers (community, societal, and structural factors), and nurturers (social support networks such as family, friends, and community);
- *Cultural empowerment*: Building from the cultural beliefs and practices that are positive in relation to the health topic before tackling the practices that may be harmful and have negative health consequences (Airhihenbuwa & Webster, 2004; Iwelunmor et al., 2014).

The Role of Culture in Intervention Planning

A theme that appears in each step of IM is the need to create culturally relevant programs for diverse groups. While there are several important reasons for planners to be able to develop effective programs across cultures, including expanding diversity of populations within countries, globalization, and global health promotion practice, perhaps among the most pressing considerations for culturally relevant health promotion interventions is the critical need to address health disparities that disproportionately affect specific racial and ethnic groups, sexual and gender minority groups, populations of lower socioeconomic position, and other vulnerable populations (Baah et al., 2019; Braveman et al., 2011, 2022; Chu & Leino, 2017; Fernandez et al., 2025; Fiscella et al., 2000; Heim & Kohrt, 2019; Highfield et al., 2015). A recent global report by the World Health Organization underscores the alarming inequities among vulnerable subpopulations in access to quality housing, education, job opportunities, and other social determinants of health that are driving health disparities and shortening lives by decades (WHO, 2025). In the United States, the US Healthy People 2030, like the 2010 and 2020 versions before it, highlights the importance of addressing health disparities in the wake of the COVID-19 pandemic, with eliminating health disparities and addressing the social determinants of health being two of the five overarching goals (NIH, 2019). These disparities and health and social inequities underscore the need for both health promotion planners who bring cultural humility and sensitivity for working with diverse groups and the need for planning approaches that can guide the development of culturally relevant and supportive interventions aimed at reducing disparities and advancing the health of our most vulnerable neighbors.

In developing and implementing interventions aimed at reducing health disparities and advancing health equity, IM provides a helpful framework. As health planners, we first need to be intentional in growing our cultural humility and sensitivity to groups different from our own, as discussed in the section above. Involving the priority population and community partners who know the conditions and challenges experienced by a given population in health promotion planning is a first step toward helping planners become more culturally sensitive while also informing the development of culturally relevant interventions. In *IM Step 1—Needs and Assets Assessment*, we begin with engaging the priority population and other community partners and stakeholders in a planning group, as guided by the linkage system and highlighting the need for both positive group facilitation and participatory planning methods (see Chapter 5). In Step 1, the planner is also guided to consider the roles culture can play in both the causation and the outcomes of health problems, while also highlighting the importance of learning about the community and resources in the community that can be activated for the proposed health promotion intervention.

Importantly, planners complete Step 1 by identifying both program goals and the groups and subgroups most at risk for a given health problem and who merit further intervention and support. Identifying the groups most at risk builds from an equity orientation that is “predicated on the ethical principle of distributive justice; one that requires our decisions regarding the allocation of resources, benefits, and burdens across society be informed by the social conditions of individuals and communities” (Parsons et al., 2021). In *Step 2—Program Outcomes and Objectives*, culture is further explored as an important aspect for defining performance objectives and for understanding a priority population’s determinants for engaging in behavior and for engaging environmental agents in implementing environmental change.

Planners are further guided to incorporate culture in *Step 3—Methods and Practical Applications* and *Step 4—Intervention Design and Production*. In Step 3, planners explore theory-based change methods and identify or develop practical applications that align with the priority population, intervention setting, and community of interest—with involvement of the priority population key to informing methods and applications (Chapter 7). In Step 4, planners further incorporate cultural considerations into the production of their intervention via the concepts of *surface and deep culture* (Resnicow et al., 1999), as well as the *mechanisms for increasing cultural relevance* (see Chapter 8). In Step 4, planners are guided to specifically assess cultural relevance of their intervention via processes such as pretesting and pilot-testing.

In *Step 5—Implementation Plan*, culture is further considered via the lens of implementation and involvement of key stakeholders who understand the settings and conditions of the priority population. In *Step 6—Evaluation Plan*, we further consider culture via the audiences for whom the evaluation is being developed, while aiming to advance culturally responsive evaluation approaches that aim to “center” evaluation within the community for which evaluation is being conducted (Kushnier et al., 2023). Lastly and importantly, partnering with underserved communities who experience disproportionate disease or health risk burden holds promise to build community power that can affect change for the advancement of individual and community health and quality of life (Iton et al., 2022).

Ultimately, equity must be a foundational principle in IM, not an afterthought. To achieve meaningful and sustainable change, equity must be embedded intentionally from the earliest stages of program planning and design through to implementation and evaluation. This involves prioritizing the voices and leadership of those with lived experience, especially from historically marginalized communities, and ensuring that diverse perspectives are safely and meaningfully included. Equity-focused IM requires planners to reflect on their own biases, power dynamics, and assumptions, and to use culturally responsive and

community-driven approaches. Theories and frameworks that address social determinants of health, structural racism, intersectionality, and post-colonialism provide essential guidance for designing interventions that are just and inclusive.

Effective equity-centered IM also demands multi-sectoral collaboration across health, social care, and education, sectors that are deeply engaged with underserved populations. Strategies such as investing in community-defined evidence, dismantling power structures, and tailoring interventions to local contexts are critical (Gooley et al., 2026). Building capacity through equity-specific education and training, funding community-led initiatives, and improving access to services are practical steps that support equitable outcomes. Efforts to increase explicit guidance for planning that integrates equity perspectives can enhance intervention impact. For example, Intervention Mapping – Equity is the focus of a large program of research led by Monash University in collaboration with the authors of Intervention Mapping among others (O'Connor et al., 2026). The Strengthening impleMentation Practice and Research with Equity (SEMPRE) program is generating new knowledge across theory, methodology, and practice in collaboration with lived experience experts (Griffith et al., 2025). Ultimately, equity must be explicitly planned for, continuously reflected upon, and actively pursued throughout every phase of intervention development and implementation to ensure that programs do not perpetuate existing disparities but instead contribute to transformative, systemic change.

Ethical Practice of Health Promotion

A systematic, thoughtful planning process can provide part of the road map required to establish ethical health promotion practice. Kass (2001) has presented a framework for evaluation of public health programs against standards of ethical integrity as have the American Association of Public Health (APHA, 2019) and the World Health Organization (WHO, 2011). The Society for Public Health Education (SOPHE) has developed specific ethical and professional guidelines for public health educators (CNHEO, 2020) and the International Union for Health Promotion and Education (IUHPE) details ethical values that underpin the health promotion core competencies (Battel-Kirk et al., 2024). Combined, these sources suggest the following guidelines for interventions:

- **Program goals should always be related to the health of the public.** Furthermore, health educators should be proactive in confronting issues that can adversely affect health of persons and communities and should provide services equitably. IM supports this principle by directing planners to focus on health issues and to begin planning with a full appraisal of the health problem and its causes.

- **Interventions should be based on thorough evidence to increase the chance of effectiveness.** IM supports this principle by basing programs on clear evidence of effectiveness. The IM steps help planners systematically consider the following types of evidence: importance, causes (including behavior and environment), and consequences of the health problem; effective approaches to behavioral and environmental change; and useful approaches to implementation.
- **Design and production of interventions should include diverse participation.** As the SOPHE suggested, IM directs planners to involve communities in program development and implementation, consider and accommodate diverse perspectives and values in program development, encourage informed decision-making among individuals, and be transparent in disclosure of all program aspects, including benefits, other outcomes, unexpected consequences, and burdens.
- **Intervention planners should consider the rights of persons and take action to protect them.** Furthermore, public health practitioners are expected to support the worth, dignity, and uniqueness of all people and ground their practice in the ethical principles of respect for autonomy, promotion of social justice, promotion of good, and avoidance of harm. They must address the known and potential burdens of the program, including risks to privacy and confidentiality, liberty, self-determination, and justice. IM suggests that planners consider burdens to participants and minimize them by adopting alternate approaches.

The emphasis on participation helps ensure that communities have input into judgments about appropriate levels of intervention and evaluation burden, as well as an acceptable balance of burden-to-risk based on community values. Members of communities will not necessarily agree on risks and benefits, and a participatory planning process enables disclosure, discussion, consensus, and plans for moving forward through disagreement. Another way that the IM approach helps protect against inequitable burden is the focus on an ecological approach to both problem analysis and intervention. Most problems have contributions from the at-risk group or persons with the problem and from factors and agents in the environment. All significant contributors to the problem should comprise the focus for interventions, and planners should avoid the temptation to blame the victim by burdening the persons with the problem with full responsibility for its solution (Hailu et al., 2024; Tomiyama et al., 2018).

Intervention Mapping Steps

Each step of IM comprises several tasks (Figure 1.1). The completion of the tasks included in a step creates a product that is the guide for the subsequent step. Completion of all steps creates a blueprint for designing,

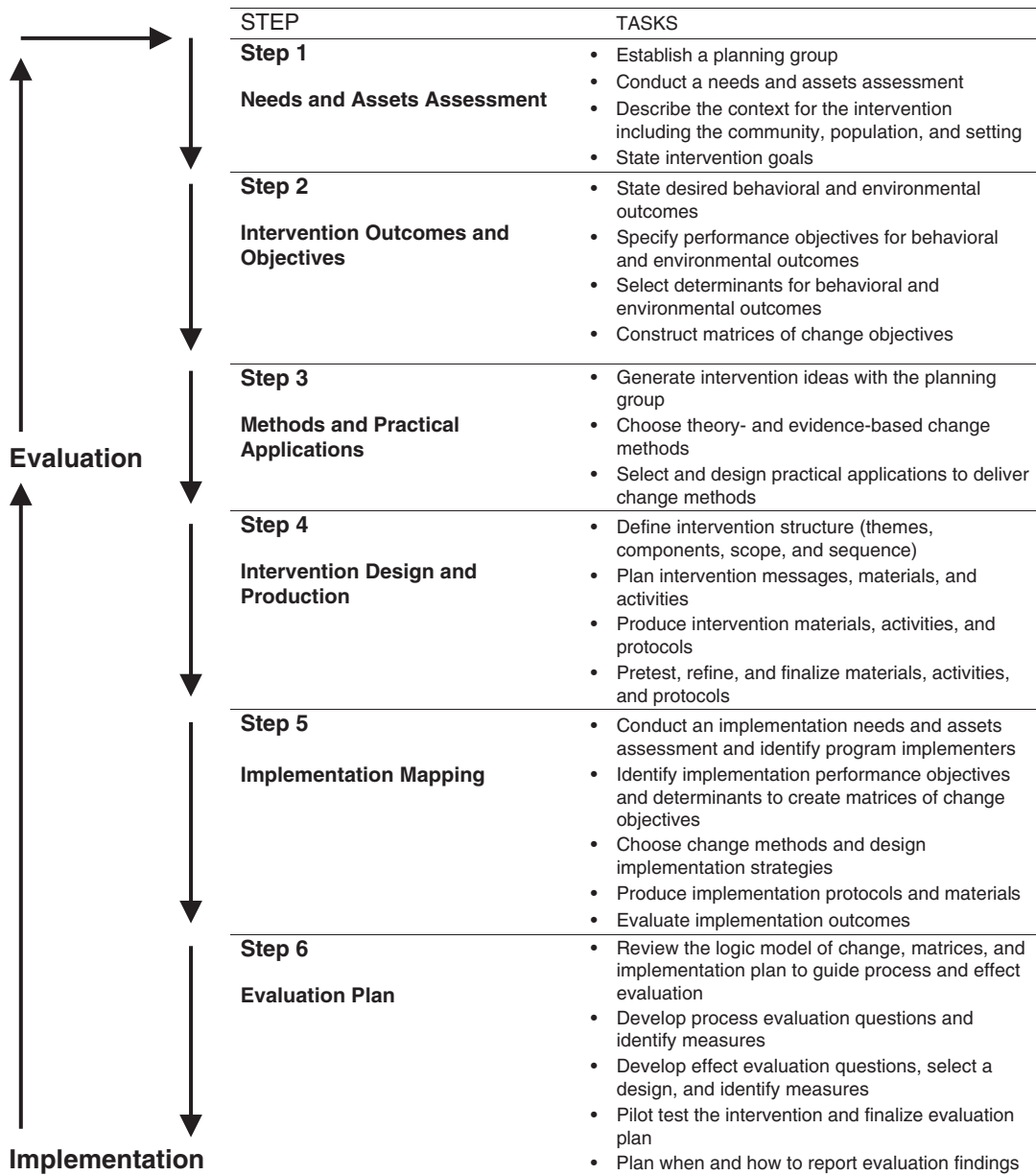


Figure 1.1 Intervention Mapping Steps

implementing, and evaluating an intervention based on a foundation of theoretical, empirical, and community information. Even though IM describes six steps, the process is iterative rather than completely linear. Program developers move back and forth between tasks and steps as they gain new information and perspective. However, the process is also cumulative; planners base each step on the previous steps, and inattention to a step can jeopardize the potential effectiveness of the intervention by compromising the validity of the foundation on which later steps are conducted. Sometimes planners can get carried away by momentum in the process of

the planning group and forget a step, or they may perform a step with less-than-optimal rigor. Fortunately, most of the time planners can backtrack and include, repeat, or elaborate on a neglected step.

The six steps of the IM process are the following:

1. **Needs and Assets Assessment:** Establish a detailed understanding of the health problem, the population at risk, the behavioral and environmental causes, and the determinants of these behavioral and environmental conditions; and assess available resources
2. **Intervention Outcomes and Objectives:** Describe the behavioral and environmental outcomes, create objectives for changes in the determinants of behavior and environmental causes, and specify the targets of the intervention program
3. **Methods and Practical Applications:** Identify theory- and evidence-based behavior change methods that influence the determinants and translate these into practical applications that fit the intervention context
4. **Intervention Design and Production:** Combine the intervention components into a coherent program that uses delivery channels that fit the context
5. **Implementation Mapping:** Develop implementation strategies to facilitate adoption, implementation, and maintenance of the program
6. **Evaluation Plan:** Plan both process and outcome evaluation to assess program implementation and efficacy or effectiveness.

Step 1: Needs and Assets Assessment

In Step 1 (Chapter 5), the program planner does the following:

1. Establish a planning group
2. Conduct a needs and assets assessment
3. Describe the context for the intervention, including the community, population, and setting
4. State intervention goals

Before beginning to actually plan an intervention, the planner puts together a team to assess the health problem, behavioral and environmental causes of the problem, and determinants of behavioral and environmental causes. We strongly recommend depicting these relations on a logic model diagram, also called *theory of the problem* and *theory of change* (Chen, 2014; Connell & Kubisch, 1996; Frechtling, 2007; Kirby, 2004; Rossi et al., 2004; Weiss & Coyne, 1997). IM introduces a logic model (theory) of the problem in Step 1 and a logic model (theory) of change in Step 2. Logic models are indispensable guides for program development and evaluation,

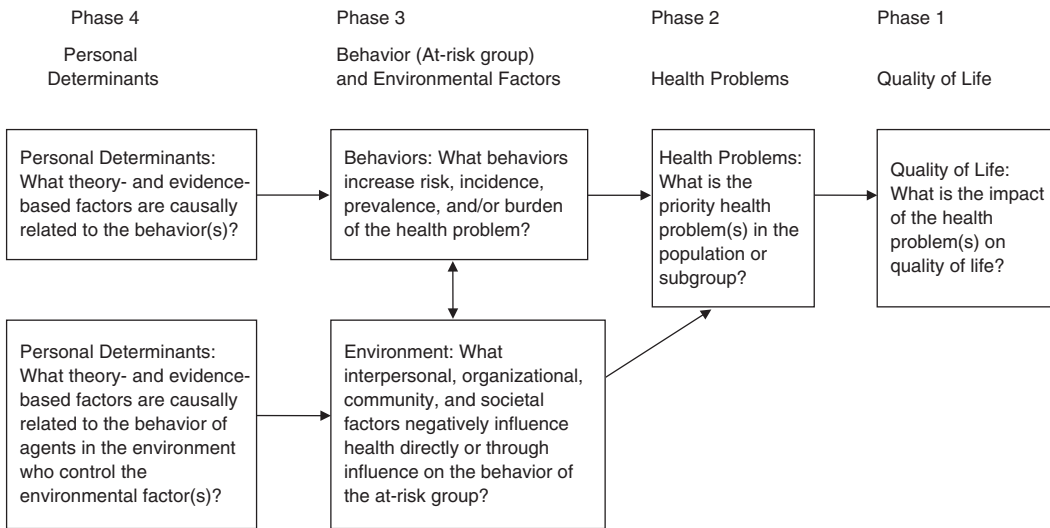


Figure 1.2 Logic Model of the Problem

are an increasingly common requirement in applications to funding agencies, and are taught and supported by the Centers for Disease Control and Prevention as the fundamental framework for program evaluation (ActKnowledge & Aspen Institute Roundtable on Community Change, 2003; CDC 2011; W. K. Kellogg Foundation, 2006, 2010).

We suggest the PRECEDE model as a framework for creating a logic model (theory) of the problem—graphic representations of the causal relations between health problems and their causes (whether demonstrated or hypothesized) (Green et al., 2022). See Figure 1.2. To develop this model beginning with a health problem, the planning team addresses the questions of: What is the problem and who has it? How many people have it or will get it? Moving to the right, in the model, the planner addresses what quality-of-life effects occur because of this health problem. Moving to the left of the health problem, the questions are about causes. What behaviors among the priority population may cause the health problem or make it worse? What environmental factors contribute to the health problem either directly or through behavior? Finally, we address the *why* questions. Why do people in the priority population do the behavior (risk behavior)? Why do people in the environment create the conditions that contribute to the health problem directly or through behavior of the priority population?

In addition to developing the logic model of the problem, an equally important, continuous effort is to understand the character of the community, its members, its strengths, and its knowledge of the health problem and potential solutions. Finally in this step, the planning team sets goals for intervention, including behavioral and environmental change, as well as health and quality-of-life outcomes.

Step 2: Intervention Outcomes and Objectives

In Step 2, the planner completes the following tasks:

1. State desired behavioral and environmental outcomes
2. Specify performance objectives for behavioral and environmental outcomes
3. Select determinants for behavioral and environmental outcomes
4. Construct matrices of change objectives

Step 2 (Chapter 6) specifies who and what will change because of the intervention. A logic model (theory) of change shows what change is needed to prevent, reduce, or manage the health problem, and it depicts the relationship between determinants and behavioral and environmental outcomes that will address the health problem (Figure 1.3). The planner begins this step using the logic model of the problem (Step 1) as a guide. The questions to ask are: What needs to change in the behavior of the priority population (behavioral outcome) or in the environment (environmental outcome)? Then, moving to the right: What impact will these changes have on the health problem? Moving toward the left, the *why* questions become: Why would the priority population make these changes? Why would agents in the environment make these changes? In Step 2, the tasks focus on what needs to change by specifying the program outcomes and objectives. The logic model is expanded at each step and ultimately depicts the proposed mechanisms of action that describe how the intervention is proposed to lead to the health and quality of life outcomes.

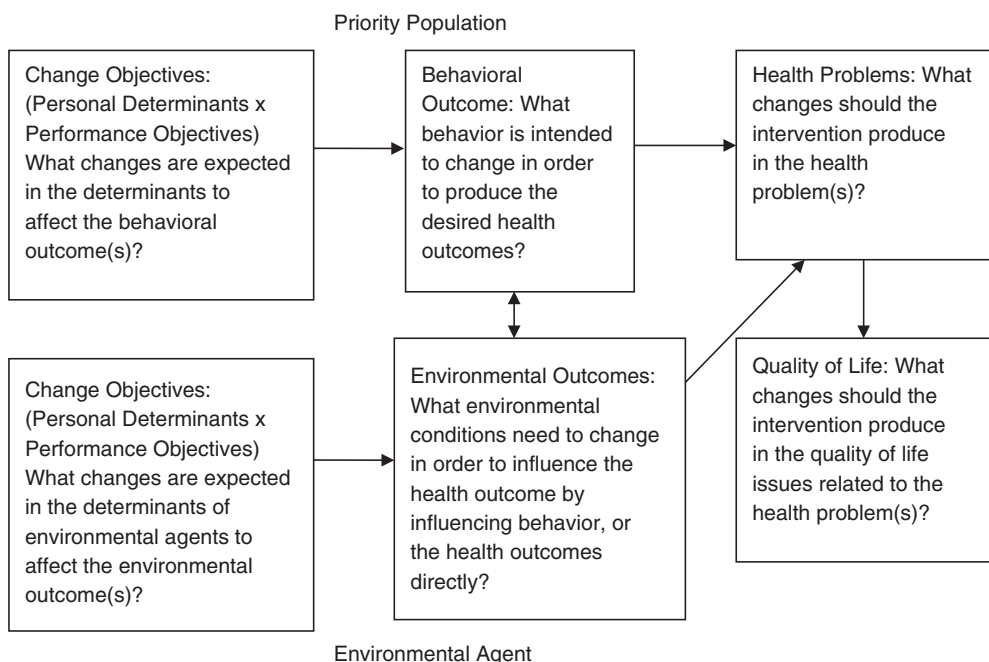


Figure 1.3 Logic Model of Change

Once the planning team has identified the health-promoting behaviors, environmental conditions, and their determinants, the next task in Step 2 is to develop matrices of change objectives. Performance objectives are the description of the specific behaviors that the at-risk group or the environmental agents have to perform to achieve the desired change. The change objectives are created by combining determinants and performance objectives (asking what has to change in the determinant in order to accomplish the performance objective). Change objectives then inform the rest of the design including the selection of theory- and evidence-based change methods and program content. The matrices represent detailed changes at relevant ecological levels (individual, interpersonal, organizational, community, or societal) and are the most immediate targets of an intervention.

To develop performance objectives for environmental outcomes, planners identify roles of environmental agents at each relevant ecological level. For example, superintendents, principals, and teachers may have roles for school environmental change. Statements of what must change at each ecological level and who must make the change are more specific intervention foci than are traditional program goals and objectives. For example, in a program to increase fruit and vegetable consumption by children in elementary school, matrices would be created for both the child and the food service personnel. The food service matrix might contain more than one role: for example, the manager's purchasing practices; the dietitian's menu development, and the cooks' food preparation. When Step 2 is completed, planners can think explicitly about the intervention in Step 3.

Step 3: Methods and Practical Applications

In Step 3 (Chapter 7), the planner completes the following tasks:

1. Generate intervention ideas with the planning group
2. Choose theory- and evidence-based change methods
3. Select and design practical applications to deliver change methods

In this step, the planning team works from the logic model of change and matrices (Step 2) to design a coherent, deliverable intervention. In Step 3, the logic model of change is expanded with the *how* of change by identifying the theoretical methods for change and the practical applications of selected change methods.

Designing the intervention means first matching theory- and evidence-based methods to the change objectives they are meant to influence and selecting or devising practical applications to deliver the methods to the various priority populations. An intervention change method is a defined process by which theories postulate and empirical research provides evidence for how change may occur. Whereas a method is a theory-based

technique to influence determinants, an application is a way of organizing, operationalizing, and delivering the intervention methods. Examples include a meeting with community members (application) to encourage community participation (change method), role model stories (application) for modeling (change method), and signing a public pledge (application) for commitment (change method). The planning team will strategize practical applications that will reach the priority population and that the population will find acceptable. For example, a planning group might want an intervention that influences parents' outcome expectations regarding human papillomavirus (HPV) vaccination so that they get the vaccination for their children. Change methods might include cultural similarity, modeling, verbal persuasion, and anticipated regret. One application for all of these methods could be a videotaped testimonial by parents who have made the decision to have their children vaccinated for HPV and can model positive aspects of their decision.

Once the planning group has a basic plan of methods and applications, it will be able to describe intervention themes, components, scope, and sequence. All of these tasks are done with the full planning group, but perhaps it is particularly important to listen carefully to practical program ideas from community members who may implement the intervention or participate in it. Also, throughout these tasks, reference to the matrices is important to ensure that the final applications will address the change objectives adequately.

Step 4: Intervention Design and Production

In Step 4 (Chapter 8), the planner completes the following tasks:

1. Define intervention structure (themes, components, scope, and sequence)
2. Plan intervention messages, materials, and activities
3. Produce intervention materials, activities, and protocols
4. Pretest, refine, and finalize materials, activities, and protocols

The products in this step are all of the support materials needed in an intervention. This step gives specific guidance for designing communications that convey the intent and form of the intervention as planned in Step 3. It also describes pretesting and pilot testing of applications, activities, materials, and messages before they are finally produced. The most common scenario for producing a new intervention is that most of the needed materials will have to be developed *de novo*. Nevertheless, some materials may be available and can be adapted to address change objectives, methods, and applications. Only after completing IM Steps 1–4 can a planner adequately evaluate whether existing materials fit the program objectives.

Step 5: Implementation Mapping

In Step 5 (Chapter 9), the planner completes the following tasks:

1. Conduct an implementation needs and assets assessment and identify program implementers
2. Identify implementation performance objectives and determinants to create matrices of change objectives
3. Choose change methods and design implementation strategies
4. Produce implementation protocols and materials
5. Evaluate implementation outcomes

The purpose of this step is to design a plan to promote program implementation, beginning with conducting an implementation needs assessment and identifying implementers through to evaluating implementation outcomes (Figure 1.4). Although Figure 1.4 presents the five tasks of Implementation Mapping in a linear sequence, they are, like all IM steps, iterative in practice.

In cases where Step 5 (Implementation Mapping) is used to plan initial implementation of an intervention developed using IM, consideration of implementation actually begins in Step 1 (needs assessment), and then continues in this step. To design the implementation strategies, the planning team will develop new matrices (distinct from those in Step 2) in that these matrices address performance objectives and determinants of program adoption, implementation, and maintenance. Linking of each performance objective with a determinant produces a change objective to promote program use. The team then matches change methods and applications to these objectives to develop theory-informed plans for program adoption, implementation, and maintenance.

In this step, the planning team would ask, “Who is responsible for program adoption, implementation, and/or maintenance?”; “What specific

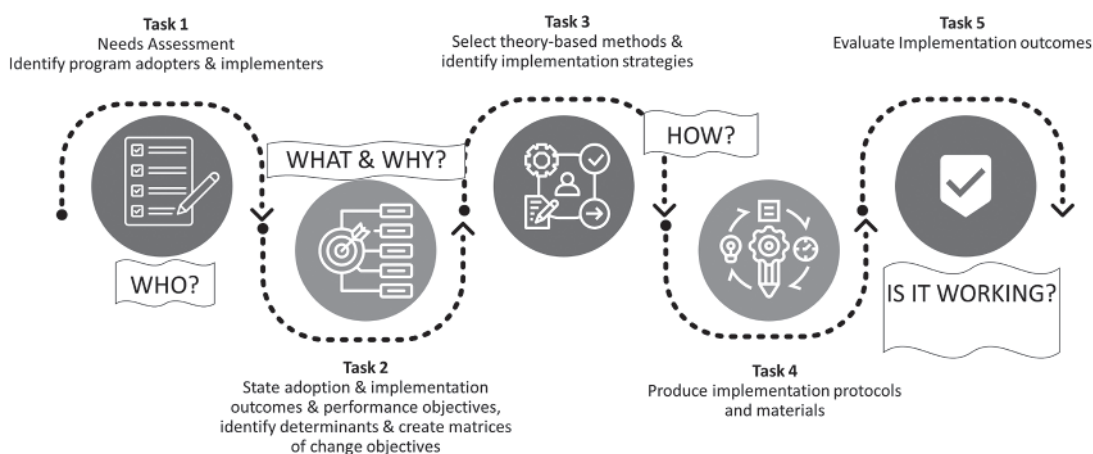


Figure 1.4 Implementation Mapping Tasks

performance (implementation actions or tasks) would be necessary at each stage?"; and "What would motivate performance?"

The planner then uses theory and evidence to define the adoption, implementation, and maintenance performance objectives (implementation tasks) and the factors influencing implementation (determinants). The product for Step 5 is a detailed plan for accomplishing program use by influencing behavior of individuals or groups who will make decisions about adopting and using the program.

Step 6: Evaluation Plan

In Step 6 (Chapter 10), the planner completes the following tasks:

1. Review the logic model of change, matrices, and implementation plan to guide process and effect evaluation
2. Develop process evaluation questions and identify measures
3. Develop effect evaluation questions, select a design, and identify measures
4. Pilot test the intervention and finalize evaluation plan
5. Plan when and how to report evaluation findings

An evaluation plan is actually begun in the needs assessment (Step 1) and is developed throughout each step. In the process of IM, planners make decisions about goals to change behavior, environment, health and quality of life, change objectives, change methods, applications, and implementation. The decisions, although informed by theory and evidence from research, still may not be optimal or may even be completely wrong. Through effect and process evaluation, planners can determine the impact of the intervention and can begin to understand the influence of decisions that were made at each planning step (Grant et al., 2013; Patton, 2008, 2012; Rossi et al., 2004; Steckler & Linnan, 2002; Windsor et al., 2003).

To evaluate the effect of an intervention, researchers analyze the change in health and quality-of-life problems, behavior and environment, and their determinants. Optimally, planners have defined these factors in a measurable way during the preceding steps. Effect evaluation may show positive, negative, or mixed effects or show no effect at all. Planners want to understand the reasons behind the effects that were achieved, regardless of what those effects were. They need to know more about the process and the changes in intermediate variables. They ask such questions as the following: "Were the behaviors and determinants well specified?" "Were change methods well matched to influence determinants?" "Were practical applications appropriate to deliver the change methods and did they reach the populations?" and "Was the implementation complete and appropriate?"

Beyond Traditional Health Promotion

Although IM originated as a health promotion planning framework, it has also been applied successfully to design interventions outside the traditional health promotion domain, particularly within social care, early childhood education, and organizational change. For example, Skouteris and colleagues in Australia used IM to guide the development of programs in early childhood education and care (ECEC) settings aimed at strengthening children's social and emotional development, educator–family engagement, and pedagogical practices (O'Connor et al., 2018). These programs sit squarely within the education and social-care sectors, not health behavior change (O'Connor et al., 2018).

IM has also been used to develop trauma-informed organizational change initiatives in ECEC systems, a social-care application that focuses on improving organizational climate, staff practice, and systemic responsiveness to childhood trauma, rather than promoting specific health behaviors (Sun et al., 2024). These examples demonstrate IM's flexibility for structuring interventions in settings where the primary goals are educational, developmental, or organizational, not health-focused.

It is also important to note that many applications of IM arise through the use of Implementation Mapping, which is Step 5 of Intervention Mapping. Implementation Mapping extends IM into the design of multi-level implementation strategies, often for system or workforce change. Although many examples occur in health systems, several involve organizational behavior change, professional practice, and structural redesign rather than health promotion per se. For instance, Durks et al. (2017) conducted a systematic review showing that IM has been used to plan interventions focused on organizational practice change and professional behaviors such as modifying workplace routines, decision-making, and implementation processes (Durks et al., 2017). These applications illustrate IM's usefulness for designing organizational and systems-level change interventions, which can extend beyond classic health behavior outcomes.

Navigating the Book

The process of IM is essentially unchanged from the fourth edition text. However, we have rearranged the presentation of some aspects of the process. We also have tried to simplify some explanations and discard terms that have caused confusion.

Organization of the Book

The book has two sections. The first section, overview and foundations (first four chapters) provides foundational content critical for program planning. It includes an introductory chapter, an overview of Core Processes for using theory and empirical evidence in practice, and two chapters that

are reviews of theories often used in health education and promotion. Chapter 3 provides an overview of behavior-oriented theories, and Chapter 4 provides an overview of environment-oriented theories. The next six chapters explain the IM steps and include a case study example using For Our Children/Por Nuestros Hijos, an intervention to improve HPV vaccine uptake that runs at the end of each chapter. The final chapter explains how to use IM ADAPT, or Intervention Mapping for Adaptation, for evidence-based interventions in new populations and settings.

Changes from the Previous Editions

Although Core Processes were described in previous versions of this book, we felt that it would be valuable for the reader to have a chapter dedicated to these processes. Chapter 2, therefore, focuses on how and when to use community engagement, evidence, theories, and new research to plan health promotion interventions and refers to available tools that are useful when applying Core Processes in various steps of IM.

No major structural changes were made to the behavioral and environmental theory chapters; however, content has been streamlined and updated with more recent literature. The chapters continue to cover largely the same theories at both the individual and environmental levels, but with enhanced support from contemporary sources.

In building from previous versions, enhancements to Step 1 include: further highlighting of the key planning processes, methods, and tools as well as participatory processes for implementing Step 1; further emphasis on assessing assets as part of the Step 1 tasks as well as guidance for conducting an assets assessment (Step 1-Task 2); additional description for defining one's community of interest as well as the inclusion of an organizing table for describing the context for the intervention, including the community, population, and setting (Step 1-Task 3); and updated examples.

Step 2 enhancements include additional guidance on “doing the flip”—using findings from Step 1's logic model of the problem to identify important, changeable behaviors and environmental outcomes based on priority populations and settings. It clarifies distinctions between environmental agents (responsible for overseeing outcomes) and program implementers (responsible for delivering interventions in Step 5), provides real-world multilevel environmental examples, and expands matrices of change objectives with a broader range of determinants. The chapter reinforces the importance of validating performance objectives prior to intervention development and introduces a new process, Confidence Interval-Based Estimation of Relevance (CIBER), to help select determinants for behavior change.

For Step 3, content remains largely unchanged, reflecting the stability of the core tasks associated with Step 3. However, one structural adjustment has been made: the previous Task 3.1 has been relocated to Step 4, returning to its placement in earlier editions of Intervention Mapping, where we believe it is more appropriately situated.

In comparison to earlier versions, more attention in Step 4 is paid to the first task of defining intervention structure. This is a crucial point of departure for describing the intervention and when there is contact with each group of intervention participants. A participatory approach has always been fundamental to IM and in this new version we describe in more detail how this relates to approaches such as co-creation, human-centered design, and agile methods. Finally, the process of pretesting, refining and finalizing materials, activities, and protocols is described in a more structured way.

Step 5 of IM, now called Implementation Mapping, has changed to better accommodate the use of the process during initial planning of an intervention (and, in Step 5, its implementation strategies) as well as for planning strategies for existing evidenced based interventions. The field of implementation science has evolved substantially since the last edition of the book as has the uptake of Implementation Mapping for planning implementation strategies following the publication of an article describing the process by the IM authors and other colleagues (Fernandez et al., 2019). The process was adopted by many implementation scientists globally providing excellent examples of how Step 5 can be used even beyond the initial IM planning process. While the essential process has not changed, the tasks have changed slightly (again to ensure that the entire process of planning implementation strategies is included even in cases when the other steps have not been used). The comparison of the tasks from the previous Step 5 version and the version presented in this new edition are in Table 1.1.

The fifth edition of Step 6 emphasizes the integration between program evaluation and program planning by framing the logic model of change, matrices, and implementation plan as the critical foundation for both process and effect evaluation. The updated edition introduces sequential tasks that link each stage of evaluation directly to the program's design and implementation plan. Methodologically, this version broadens its scope with a more expansive description of process evaluation methods

Table 1.1 Changes to Step 5 Tasks

Intervention Mapping, 4th Edition (Bartholomew Eldredge et al., 2016)	Implementation Mapping Process (Fernandez et al., 2019)
Task 1. Identify potential program implementers	Task 1. Conduct a needs and assets assessment and identify adopters and implementers
Task 2. State outcomes and performance objectives for program use	Task 2. Identify adoption and implementation outcomes, performance objectives, and determinants; create matrices of change
Task 3. Construct matrices of change objectives for program use	Task 3. Choose theoretical methods; select or create implementation strategies
Task 4. Design implementation interventions	Task 4. Produce implementation protocols and materials
	Task 5. Evaluate implementation outcomes

and a more comprehensive description of evaluation designs, including comparison group designs, natural experiments, and regression discontinuity studies, and features more robust measurement approaches including mixed methods and cost assessments. It also refines effect evaluation planning by highlighting further considerations for design selection, unit of assignment, and external validity.

Chapter 11, Intervention Mapping for Adaptation (IM ADAPT) has been updated substantially. First, the adaptation tasks are refined through more explicit labeling of tasks and subtasks to align consistently with the latest IM ADAPT framework. We more clearly incorporate Task 2 for situations in which an EBI has already been selected. In addition, several IM ADAPT steps are expanded to explicitly include the use of EBI Mapping (Walker et al., 2022), Implementation Mapping (Fernandez et al., 2019), and more detailed evaluation-related subtasks. We also expanded content related to adaptation decision-making, including the discussion of the types and timing of adaptations, key adaptation challenges, and adaptation at multiple levels. The background section of the chapter has been substantially updated as have the sections on perspectives of cross-cutting topics such as adaptation and health equity.

Important Repeating Concepts in the Book

Throughout the book, several key concepts are repeated in different contexts. These are planning matrices, iterative planning, logic models, and evaluation.

Matrices as a Foundation for Intervention Planning

In IM, matrices that combine performance objectives with their determinants are the basis for program development. They are used in both planning a program (Step 2) and planning its implementation (Step 5). If a change method or practical application used in an intervention is not intended to change the objectives in the matrices, then either it does not belong in the program or the matrix is not adequate and should be revisited.

Planning as an Iterative Process

To describe program development, we have laid out a series of steps. This orderly presentation may suggest to the reader that every step is completed only once and in a rigid order. This is not the case. Each step provides the basis for the next; each step also generates new information that may suggest revision or embellishment of a previous step. With increasing ideas about the program, knowledge about the intended beneficiaries, community participation, and research and theory, a planner often needs to revisit and fine-tune a previous step. In addition to the process of revisiting prior

steps, some processes are repeated in many of the steps. For example, using the Core Processes to access relevant theory and evidence, planning evaluation, involving stakeholders, and thinking about implementation all begin in the needs assessment and continue in each step. Also, each step provides information for generating an evaluation plan.

Logic Models

We described the use of logic models above in the descriptions of Steps 1 and 2. In the process of IM, the planner will build a logic model of the health problem causation in Step 1 and begin a logic model of change in Step 2. In Step 3, the planner will add change methods to the logic model of change. These are the only logic models that are necessary components of IM. However, in addition to the logic model that is pieced together as intervention development progresses, we present a number of models to help clarify relations among concepts, such as theoretical constructs (Chapters 3 and 4). We also use other graphic devices that do not imply causal relations, such as Figure 1.1, a depiction of the steps involved in IM. When a figure is a logic model, that is, implies causal relations, we clearly label it as such.

Program Evaluation

Program evaluation begins with a thorough description of the program to be evaluated and its proposed causal pathways for change. This description is accomplished step-by-step in IM. First, in the needs assessment, the planner begins to formulate goals for intervention outcomes. These become part of the plan for evaluating effects (Chapter 10). In Step 2, the planner specifies desired changes in behavior and environment as well as their determinants, which again become further outcomes for evaluating effects. Steps 3, 4, and 5 guide the specification of program components and implementation plans that link closely to process evaluation. Step 4 also contains discussion of pretesting and pilot testing or formative evaluation of the program.

Planning with Limited Resources

Finally, we encourage health promotion planners to use IM regardless of the time or resources available. We point this out because we often hear people say that IM is not practical for use in the “real world.” We have also seen people belabor the importance of following the IM steps sequentially and to the “letter of the law” at the cost of losing constituent buy-in. To avoid these pitfalls, the planning group’s health promotion practitioner often works behind the scenes to draft end products for each IM step, for example, the matrices of change objectives. This can take an afternoon, a weekend, or a month, depending on the time available. Other time- and

resource-saving strategies include using a rapid assessment approach to complete the needs assessment in Step 1, or having longer workshop-type meetings so that planning groups do not forget what has been accomplished between meetings. Above all, simply posing the key questions for each IM step, for example, “Why do adolescents have sexual intercourse without using condoms?” will result in a more well-defined program based in theory and evidence and will increase the potential for effective behavioral and environmental change.

Summary

IM is a series of steps, tasks, and processes to help health promotion and health education planners develop theory- and evidence-based health promotion programs and interventions. Well-designed and effective interventions should be guided by theory and informed by empirical evidence regarding the targets for change. For example, a meta-analysis of physical activity interventions in breast cancer survivors found that larger effect sizes are achieved when interventions are based on theory (Bluethmann et al., 2017). However, no one theoretical model completely predicts or explains health behaviors or environmental changes (Bartholomew Eldredge & Mullen, 2011; Rimer, 2002). Therefore, a system is needed to help intervention developers choose useful theories and integrate relevant constructs from multiple theories to describe health problems and develop health promotion and health education solutions (Fernandez et al., 2019; Springer et al., 2024; ten Hoor et al., 2025). IM ensures that theoretical models and empirical evidence guide planners in two areas:

- The identification of determinants of behavioral and environmental causes related to a health problem
- The selection of the most appropriate change methods and applications to address the identified determinants to achieve changes in behavioral and environmental outcomes related to a health problem

IM has been used to develop many health promotion programs and interventions, and Table 1.2 presents some examples. IM is also being used to further the description of intervention characteristics and to deconstruct why interventions were effective or not; that is, clarifying the mechanisms of interventions and their implementation strategies (Durks et al., 2017; Fernandez et al., 2019; Walker et al., 2022). Further, IM is being used to help health promoters find and adapt evidence-based interventions (see Chapter 11; Highfield et al., 2015) and to evaluate the quality of planning that has been used to create interventions (Kok et al., 2016), and others have used IM as a checklist to evaluate the quality of program planning of existing programs (Fassier et al., 2019; Lamort-Bouché et al., 2018; Stutterheim et al., 2025).

Table 1.2 Programs Developed Using Intervention Mapping

Topic	Intervention Title	References
Adolescent Reproductive Health	Project Community-Embedded Reproductive Health Care for Adolescents (CERCA)	Decat et al. (2013)
Alcohol Abuse Prevention	What Do You Drink mHealth Intervention	van Keulen et al. (2022)
Alcohol Abuse Prevention	Preventing alcohol abuse in middle school-aged children	de Visser et al. (2020)
Asthma Self-Management	Management and Interventions for Asthma (MIA) Project	Lakhanpaul et al. (2020)
Breast Cancer Screening & Chemotherapy	Increase Breast Cancer Screening & Chemotherapy Adherence	Sacca et al. (2020)
Breast and Cervical Cancer Screening	<i>Salud en Mis Manos</i>	Savas et al. (2023)
Breast Cancer—Medication Adherence	Medication Self-Management for Breast Cancer Survivors	Moon et al. (2021)
Breastfeeding	Promotion of Breastfeeding among Infants with Asthma	Mesters et al. (2018)
Blood Pressure Management	Intervention for Prevention of High Blood Pressure	Guzman-Tordecilla et al. (2022)
Cancer	Interventions for Cancer	Lamort-Bouché et al. (2018)
Cardiovascular Disease Prevention	Community-engaged Cardiovascular Disease Prevention Intervention	Kang et al. (2025)
Childhood Obesity Prevention	Interdisciplinary Theory- and Evidence-Based Intervention to Prevent Childhood Obesity	ten Hoor et al. (2017)
Childhood Obesity Prevention	Hoosier Sport Intervention	Major et al. (2024)
Childhood Obesity Prevention	Niño Sano Adulto Sano	Zacarias et al. (2019)
Chronic Disease	Chronic Disease Supportive Work Environment via Occupational Physicians	Bosma et al. (2020)
Chronic Disease Management	MyGoals	Kang and Foster (2023)
Chronic Disease Management	Health Promotion for Chronic Conditions among Adults	Herbert et al. (2025)
Chronic Disease Management for Stroke Survivors	The Stroke Coach	Sakakibara et al. (2017)
Chronic Musculoskeletal Conditions	Coach2Move	Thackeray et al. (2022)
Colorectal Cancer Screening	Salud por la Vida	Serra et al. (2017)
Colorectal Cancer Screening	CRC Screening Intervention in Egypt	Nawwar et al. (2022)
COVID-19 Vaccination	Virtual Immersive Communication Training on Recommending Immunization COVID-19	Real et al. (2025)
Dementia	STAYING ACTIVE (STAYing well and active—scheduling meaningful and enjoyable activities to promote vitality and well-being in mild dementia)	Orgeta et al. (2022)
Diabetes Distress	Platform O	Halliday et al. (2021)
Diabetes Self-Management	Powerful Together with Diabetes	Vissenberg et al. (2017)
Diabetic Retinopathy	Kilimanjaro Diabetic Programme	Hall et al. (2022)
Doctor Prescribing	Multicomponent Intervention to Improve Antibiotic and NSAID Prescribing	Reese et al. (2023)
Doctor Prescribing	Multicomponent Intervention to Improve Antibiotic and NSAID Prescribing	Shegog and Begley (2017)
Fruit and Vegetable Promotion	Increase Fruit, Vegetable, and Water Intake among Mothers and Teachers of Infants	Mérida Rios et al. (2019)

Table 1.2 (Continued)

Topic	Intervention Title	References
Depression	Intervention for Depressive Symptoms in Nursing Home Residents	van Venrooij et al. (2019)
EMS Activation for Stroke	HOBIT: school-based stroke awareness program	Volevach et al. (2025)
Healthy Lifestyle Promotion	Prescribe Vida Saludable	Sanz-Guinea et al. (2017)
Hepatitis B Screening	HBV Screening Programme Aimed at Turkish Immigrants	van Der Veen et al. (2012)
HIV Care	Medical-legal partnership for organizations providing HIV care	Muñoz-Laboy et al. (2025)
HIV Prevention	HIV Linkage Intervention	Ravicz et al. (2022)
HIV Prevention	Reducing HIV/AIDS Transmission	Chen et al. (2024)
HIV Prevention	HIV Risk Reduction Program	Li et al. (2020)
HIV Stigma	Reducing the Risk of HIV/AIDS Transmission	Stutterheim et al. (2025)
HPV Vaccination	Interactive Web-based Tailored Intervention Promoting HPV-Vaccination Acceptability	Pot et al. (2018)
HPV Vaccination	Parent-Centered HPV Vaccination Intervention	Rodriguez et al. (2018)
HPV Vaccination	Provider-Centered HPV Vaccination Intervention	Austin et al. (2020)
Low Back Pain	Decision Support System–Based Smartphone App (selfBACK)	Svendsen et al. (2022)
Liver Cirrhosis	Liver Education About Pain	Rogal et al. (2022)
Mammography Screening	Implementation Intervention to Increase Mammography Among Low Income Women	Highfield et al. (2018)
Medical Communication Skills	Communication Skills Training Programme for Specialists With Patients With Medically Unexplained Physical Symptoms	Weiland et al. (2013)
Medication Adherence	Adherence to Adjuvant Endocrine Therapy among Breast Cancer Survivors	Labonté et al. (2020)
Mental Health	Psychosocial service to support youth experiencing mental illness	Savaglio et al. (2025)
Movement	GOAL-Intervention	van Grootel et al. (2023)
Neonatal Clinical Trial Recruitment	Better Research Interactions for Every Family (BRIEF) Intervention	Weiss et al. (2025)
Occupational Health	Return to Work (RTW) Intervention	Varela-Mato et al. (2023)
Pain Management	Chronic Pain Treatment & Management in Breast Cancer Survivors	Slaghmuylder et al. (2023)
Parent–Child Communication	What Should We Tell the Children About Relationships and Sex?	Newby et al. (2011)
Physical Activity	Physical Activity Routines After Stroke (PARAS)	Moore et al. (2022)
Physical Activity	MOVE12	Barene et al. (2025)
Physical Activity	ParticipACTION	Flood et al. (2023)
Physical Activity	Physical Activity Intervention for Physically-Disabled Individuals	Krops et al. (2018)
Physical Activity	Physical Activity Post Cervical Cancer Treatment	Millet et al. (2022)
Pre-Adolescent Health	The ClrCLE of Life Initiative	Arthur et al. (2020)
Return-to-Work	Return-to-work Intervention for Cancer Survivors	Fassier et al. (2018)
Sexual Harassment Prevention	Benzies & Batchies; Boys interventions	de Lijster et al. (2019)

(continued)

Table 1.2 (Continued)

Topic	Intervention Title	References
Sex Education	A comprehensive and gender-transformative sex education program in Latin America	Torres-Cortés et al. (2024)
Smoking Cessation	Tobacco Cessation Intervention	Domlyn et al. (2022)
Smoking Prevention	Media literacy-based smoking prevention program (MLSP)	Kim (2021)
STI Testing	Self-sampling STI/HIV Testing	Leenen et al. (2021)
Stroke Prevention	Emergency Medical Services Activation for Stroke	Volevach et al. (2024)
Sun Protection	Improve Adherence of Sun Protection	Walburn et al. (2019)
Teen Dating Violence Prevention	Me & You: Building Healthy Relationships	Peskin et al. (2018)
Work Safety	Occupational Risk Prevention and Health Promotion	Bakhuys Roozeboom et al. (2021)
Worksite Wellness	Physical Activity RCT Intervention	Sun et al. (2020)

Even though IM has not been directly compared to other processes for developing interventions, planners of the referenced projects and others considering guidance for intervention development think that the systematic process has been useful and flexible and that continued use will strengthen future program development (Bartholomew Eldredge & Mullen, 2011; Springer et al., 2024).

Discussion Questions and Learning Activities

1. Why is it important to apply a systematic approach to the development of health promotion programs? What are the risks if a systematic approach is not used for health promotion program development?
2. Explain what is meant by ecological and systems approaches to intervention development. Give examples of how factors at different ecological levels can have an impact on health.
3. Discuss why it is important for health promotion programs to go beyond a focus only on behavior change of individuals at risk for a health problem and instead also address environmental influences.
4. Using tobacco control as an example, describe the types of interventions that have been used at the individual, organizational, community, and societal levels.
5. Access the website for Evidence-Based Cancer Control Programs (EBCCP) at <https://ebccp.cancercontrol.cancer.gov/index.do> (National Cancer Institute, 2024) and select three different health promotion/prevention intervention programs to review. Determine which ecological level the program is addressing for change, and describe how the intervention will make a change to improve health or prevent a health problem.

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