



Canadian Centre
on Substance Abuse
Centre canadien de lutte
contre les toxicomanies

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Collaboration. Connaissance. Changement.

Systems Approach Workbook

System Mapping Tools

April 2014

Who should read this brief?

- Leaders and decision makers in the substance use and mental health fields, such as regional directors and program managers.
- Managers, service providers and diverse partners involved in system planning exercises.

How is mapping relevant to the Systems Approach?

- This brief is part of the Systems Approach Workbook, which is intended to assist those using *A Systems Approach to Substance Use in Canada: Recommendations for a National Treatment Strategy* as a guiding framework for improving the accessibility, quality and range of services and supports for substance use in Canada.
- System mapping provides a structured approach to identifying and presenting the components of a system. This tool will help you understand the various components of a comprehensive system and how to use them to map the services available in your area.
- System mapping is an important step in planning system development that will improve the accessibility, quality and range of services and supports for substance use in Canada.

Systems Approach Workbook

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System Mapping Tools

Introduction

System mapping is an approach to identifying and presenting components of a system¹ in a structured way. It can be text-based or it can use tables, flow charts or graphics to represent the different components or interactions between them. It can identify gaps, duplication, strengths and opportunities, and can inform decision making such as resource allocation (or reallocation), set goals and track change.

Mapping makes complex systems more approachable, which is particularly valuable given the scope of services and supports involved in a comprehensive continuum of treatment. This module introduces the mapping process and its potential applications within the context of improving the accessibility, quality and range of substance use services and supports.² It presents key concepts to help determine whether the full continuum of services is available, to provide information on the nature of those services, or to focus on a specific population group, function or service for more detailed analysis. This module also provides tools to help you develop a map suited to your specific needs, including a reference map on page 5 and sample templates in the Appendices.

Making a System Map

The basic steps for developing a system map are outlined in the following paragraphs.

Identify leadership: Will an individual or a planning group lead the mapping process? The mapping process might be part of a broader system change led by an existing management team, for example, or it might be project specific and assigned to a particular individual. Regardless, clear leadership or a designated “point person” provides the necessary coordination to bring together and make sense of varied sources and information. Leadership should be skilled in problem solving, strategic thinking and facilitation.³

Define the problem: Mapping exercises are generally conducted to address a problem — perhaps lengthy wait times, poor client outcomes or simply a gap in information — or to conduct a system evaluation. Defining the problem involves expressing what prompted the mapping exercise and helps to broadly define success. For example, mapping might be part of a response to recognition that youth must travel out of province to access services in a timely way. In this case, success could be defined as providing youth with services within a specific timeframe. Consider the context when defining the problem. Details could include, for example, budget trends and resources available, system changes, and trends and patterns in population, substance use and service access. Also identify what research is available to provide this information and to contribute to the mapping process. (See Appendix D for more information.)

Clarify goals: What is the intended outcome of the system mapping process? How will the information be used? The goals or purpose should inform the approach. For example, if the goal is to

¹ A system is broadly defined as a set of interconnected components and relationships with patterns of behaviour and interactions. In the context of the Systems Approach materials, systems refer to the organizational, regional, provincial/territorial, national and multi-sectoral bodies involved in the administration of substance use services and supports.

² Refer to the 2008 A Systems Approach to Substance Use in Canada: Recommendations for a National Treatment Strategy for additional information.

³ Refer to the Systems Approach Workbook: *Leadership for a Systems Approach* brief for information and tools to support effective leadership.



determine gaps in service, the focus will be on service components. However, if the goal is to improve service quality, the focus will be on standards of care and client satisfaction. If the map is part of a long-term planning or visioning process, it might help to start by mapping the ideal system informed by best practices and then comparing that ideal to the current system. If the purpose is short-term priority setting, mapping the current system might be enough to identify the most significant gaps.

Two broad approaches to system mapping can be used: mapping what is already there or mapping what could or should be there. Both are useful and serve different functions:

Current system

Understand what is in place
Identify apparent gaps
Identify strengths

Future or ideal system

Identify a model system
Develop strategic plans
Promote brainstorming and visioning
Conduct resource planning

Determine what information to collect: What information is required to populate the map? Start with a complete list of information needs rather than immediately limiting the list to what is available. This can be helpful in identifying information gaps, and can result in finding out about or creating new information sources. For example, if looking at service needs for a given age group, survey data such as the Canadian Alcohol and Drug Use Monitoring Survey might be helpful to identify patterns and trends in substance use. If considering better allocation of resources across service categories, data from the National Treatment Indicators reports might be helpful.⁴ You should also identify and use benchmarks when they are available.

Determine how to collect information: For each piece of information to be gathered, identify who has the information, in what form and how it is accessed. Information for the system map can be collected by, for example, conducting interviews, holding focus groups, doing individual research and administering surveys. Each approach has benefits and drawbacks based on the scope of data and perspectives available, timeframes, cost and expertise required. Consider how valid and reliable different information might be, always keeping mind that the results the map reveals are only as good as the information that goes into it. Sometimes no information is better than information that might produce biased or misleading results. (See Appendix D for a list of potential data sources.)

Identify who will be involved: Reflecting a number of perspectives in the development of the map will help to ensure that it is comprehensive; however, involving too many people in a group discussion can be counterproductive. Bringing together representative parts of the system creates an opportunity for people who might not normally interact to share ideas and promotes broader engagement in and ownership of the changes that could flow from the mapping process. The Change Management Modules and Working with Teams guide⁵ in the *Systems Approach Workbook* discuss the value of working with a small team that can play an advisory role and connect to a broader audience to discuss ideas and provide feedback. An advisory group can also validate the information presented and clarify roles and responsibilities within the system.

Make the map: Bring together the people and the information to develop a map that meets the identified goals. The scope and complexity of the information should inform the time and resources allocated. Setting aside dedicated time and space helps focus attention and communicates the importance of the exercise.

⁴ The National Treatment Indicators reports provide an annual snapshot of treatment use in Canada.

⁵ The Change Management Modules and Working with Teams guide provide support to any organization considering or undergoing change, or seeking guidance in effectively working with teams.



No two systems are the same. No two changes are the same. Therefore, no single map will meet the planning needs of every system. Appendices A and B provide sample templates to help structure a comprehensive system map that focuses on substance use services. A brief description outlines each template's purpose and suggests applications and contexts in which the template could be especially helpful. Each template can be further customized to meet individual needs. Appendix E provides a number of additional resources that are broadly applicable to health systems.

Interpret the results: What does the map say? Where are the gaps or duplications in service? How close is the current system to an ideal one? Did the results satisfy the original goals? Were unexpected findings discovered along the way? What are the priorities that will most impact the ability to meet population or individual client needs? Remember that results are only as reliable as the information on which they are based and be cautious about over-stating conclusions.

Communicate the results: Communication of the final map results should contribute to meeting its original goals. If the map is part of an informal brainstorming exercise, flip-chart notes might be sufficient. If the map will inform system-level resource decisions, the final map and process should be communicated clearly to stakeholders to ensure transparency. Ensure that results are communicated in a way that is relevant to the target audience. This could include, for example, emphasizing to service providers the impact on client outcomes, and to system planners the application of results to strategic directions and funding decisions.

Set a follow-up date: System maps present a snapshot in time. Regular updates track changes as systems develop and context changes. Integrating new or enhanced information sources can improve information quality. Ensuring that the map is current and accurate ensures that any decisions it informs reflect the best quality evidence available. Follow-up is an essential part of using mapping as an evaluative tool.

A Comprehensive System Map

A comprehensive system map builds upon the principles of the Systems Approach and encompasses the range of services in the tiered model. To illustrate a robust system map, Table 1 has been developed as a reference tool. Appendix A provides an example of how the table can guide a very straightforward mapping exercise. Appendices B and C provide additional templates that expand particular components within the table based on specific approaches and priorities.

Uses

- A reference in narrowing the scope or focus of a planning process;
- A visual illustration of the complexity of the system; and
- A checklist to ensure that all relevant considerations have been taken into account through the mapping and planning process.

Description

The map presented in Table 1 is divided into four broad categories. Ideally, working through the map would involve first identifying a **starting point**, assessing the corresponding **system operations**, evaluating according to one or more of the suggested **quality review** criteria, and finally considering the factors in place or required to support **implementation**.

- **Starting Points:** These columns represent the usual categories according to which system maps are prepared, or the lens through which the system is being analyzed. For example, is



the system being mapped according to its ability to meet the various levels of risk and harm experienced in the population, to perform the core functions that make up a comprehensive system or to identify the services and supports involved in delivering those functions? How does the system respond to the needs of different populations?

- **System Operations:** These columns explore in greater detail the “who, what, where, why and how” of the system. Ensuring a comprehensive system includes using appropriate, evidence-based approaches across a range of accessible settings and by different types of providers; and leveraging collaborations between different community, specialized and multi-sectoral partners.
- **Quality Review:** These columns involve a review of system operations that goes beyond the basic nuts and bolts to ensure a client-centred, effective system. Quality review considers the Guiding Concepts presented in the Systems Approach report and the determinants of health that influence the type and extent of needs experienced in the population.
- **Implementation:** These columns ensure that factors necessary for the system to function are taken into account. System supports ensure that elements are in place to monitor and improve service quality; consideration of resources is necessary to inform scope, prioritization and sustainability for any planning initiative.

Completing this comprehensive map in full would be a valuable exercise; however, the time and resources involved might be beyond the scope of your current objectives and capacity. Detailed explanations of the considerations (columns) and categories (rows) are provided after Table 1 to help with customizing and completing a system map.



Table 1. Reference Map

1. Starting Points		2. System Operations						3. Quality Review		4. Implementation			
Analytical Consideration	Levels of Risk/Harm	Functions	Services and Supports	Population	Approaches	Settings	Providers	Collaboration	Guiding Concepts and Principles	Determinants of Health	System Supports	Resources	
	What is the level of risk and/or harm experienced by the target population(s)?	The core continuum of functions that should be present in a system	Categories of service to deliver functions	Population being considered	Through what kind of approach are the services and supports provided?	In what setting are the services and supports available?	Who is delivering or facilitating these services and supports? What competencies do they need?	What collaborations ensure a comprehensive approach to services and supports?	Criteria against which a client-centred system should be assessed	Does the system account for trends in the determinants of health?	What needs to be in place at the system level to ensure effective services and supports?	What resources are involved in providing services and supports?	
Categories	At least at minimal risk for harms from their own or someone else's substance use (population health)	Prevention and health promotion Harm reduction	Education and awareness Prevention Screening, brief intervention and referral	Examples: Age Gender Culture Ethnicity	Examples: Public health 12-step Cognitive-behavioural	Examples: Community Specialized Educational	Examples: Educators Physicians Nurses	Examples: Public health and specialized services Enforcement and community services	No wrong door Availability and accessibility Matching Choice and eligibility Flexibility	Income and income distribution Education Unemployment and job security	Evaluation Knowledge exchange Measurement and monitoring	Financial Human resources Social capital	
	At least at moderate risk for harms from their own or someone else's substance use	Early identification and intervention Information, outreach, engagement and linkage	Disease and injury prevention Overdose prevention Withdrawal management services	Family members Vulnerable populations Location	Motivational interviewing Community reinforcement and family training	Criminal justice Primary care Emergency services Mental health	Enforcement officers Psychologists Psychiatrists Outreach workers Social workers	Community and specialized services	Responsive-ness Collaboration Coordination Equity	Employment and working conditions Early childhood development Food insecurity Housing Social exclusion	Stigma and discrimination Research Workforce development Quality improvement	Physical capital Information systems	
	At least at high risk for harms from their own or someone else's substance use, including associated harms such as BBVs	Problem identification, assessment and planning Specialized interventions	Community services Residential services			Housing Social services	Specialized service professionals Peers, family and caregivers Elders		Population-informed				
	Experiencing moderate harms from their own or someone else's substance use	Complexity-enhanced interventions	Internet and mobile services Mutual aid										
Experiencing severe harms from their own or someone else's substance use	Continuing care and recovery monitoring												



1. Starting Points

The first stage of the mapping process involves deciding how the map will be structured. The following starting points provide perspectives from which to look at the substance abuse treatment system.

Levels of Risk/Harm

Including this column helps to ensure the system is able to respond to the full spectrum of substance use risks, harms and needs found in the population.

This first consideration looks at the system from a population-based perspective, recognizing that substance use involves varying levels of risk and harm that can be met by different system components. The different categories indicate these varying levels of risk and harm in the population, and correspond to the Systems Approach Tiered Model.

1. **Minimal risk:** People who are at minimal risk of harm from their own or someone else's substance use. This category generally refers to population health.
2. **Moderate risk:** People who are at moderate risk for harms from substance use. This could include people consuming alcohol in excess of the Low-Risk Alcohol Drinking Guidelines, for example.
3. **High risk:** People who are at high risk for experiencing harms from their own or someone else's substance use. This could include people using injection drugs or consuming alcohol in ways that could cause injury.
4. **Moderate harm:** People who are experiencing harms from their own or someone else's substance use. These harms can occur in many areas, including health, injury, employment or family.
5. **Severe harm:** People who are experiencing severe harms from substance use. These people are differentiated from those in the "moderate harm" category because alcohol or other drug use is causing harms that are chronic or complex (e.g., concurrent disorders, homelessness, severe illness).

Functions

Including this column helps to ensure the full continuum of services and supports is available to meet the broad range of needs associated with reducing the harms of substance use.

This second consideration assesses the full continuum of services and supports that form a comprehensive approach to addressing problematic substance use, from prevention through to continuing care.⁶ A comprehensive system should have the capacity to perform all of these functions to some degree, although the system components (e.g., services, service providers, approaches) will vary to suit individual context. One service or service provider could also provide a range of functions. For example, a community service might provide specialized day treatment, host 12-step meetings and run a mobile outreach team that provides harm reduction supplies. This consideration is ideal for a high-level overview of the system, whereas breaking out services and supports in the next column provides a more detailed picture.

⁶ See Rush et al, 2014, *Development of a needs-based planning model for substance use services and supports in Canada*, for more detailed definitions.



1. **Prevention and health promotion:** These activities prevent substance use problems and improve overall health. These include population-level initiatives to address stigma and discrimination and improve awareness of and ability to avoid substance use problems. This function also includes self-help activities in which non-specialists mobilize resources at the individual or community level.
2. **Harm reduction:** These activities reduce the harms associated with substance use without necessarily requiring that use stops. These activities can be at the individual level (e.g., a reduction in alcohol consumption) or community level (e.g., needle exchange programs).
3. **Early identification and intervention:** These activities identify risky or harmful substance use, and take place in an opportunistic way (e.g., during a regular medical examination) or in an open-access format (e.g., online survey) rather than as part of targeted service delivery (e.g., during a treatment program intake).
4. **Information, outreach, engagement and linkage:** These activities provide clients or potential clients with information about treatment services, seek to engage and maintain engagement in services or link clients to other services, within the substance use or other health and social systems.
5. **Problem identification, assessment and planning:** These activities provide targeted use of evidence-based tools and procedures to screen, assess, diagnose and develop treatment plans for an individual's substance use problems.
6. **Specialized interventions:** These activities encompass the specialized interventions that most people think of as “substance use treatment” such as cognitive-behavioural interventions and pharmacotherapy. These activities might apply to the individual with the substance use problem or those affected by the problems of a family member, spouse or close friend.
7. **Complexity-enhanced interventions:** These activities address substance use problems as well as significant concurrent mental health or co-morbid medical conditions (i.e., those with a level of severity or duration of problem that requires additional specialized care).
8. **Continuing care and recovery monitoring:** These activities provide ongoing contact or service following formal treatment completion. They can be part of the program or offered at the community level, such as self-help groups. They can also be delivered in a number of ways, from face-to-face sessions to telephone-, web- or mobile-based activities.

Services and Supports

Including this column helps to identify the services available to deliver the full continuum of treatment functions.

The third consideration identifies the full spectrum of service categories that should be in place to deliver the continuum of functions listed in column two.⁷ Note that ensuring that all services are available to a community or population could require partnership with external agencies or jurisdictions. To be clear, services **deliver** the functions and one service can deliver many functions. For example, an overdose prevention service can deliver harm reduction, problem identification, and information, outreach, engagement and linkage functions.

⁷ See Rush et al, 2014.



1. **Education and awareness:** These programs provide information about substance use and associated risks and harms, and can be stand-alone or part of a broader public health initiative.
 - a. **Public:** Information is provided at the broad, public level.
 - b. **Targeted:** Information is tailored to the needs of particular groups (e.g., healthcare providers, social service providers, employee assistance, students, parents and families).
2. **Prevention:** These programs are intended to prevent the initiation, escalation (i.e., frequency or poly-substance use) or experience of harms associated with substance use.⁸
 - a. **Universal:** Initiatives target the broad population level or larger sub-groups (e.g., school or community-based programs for youth).
 - b. **Targeted:** Initiatives target sub-groups (selective) or individuals (indicated) who are at particular risk of engaging in or experiencing harms owing to substance use (e.g., youth-at-risk, families-at-risk, people with past experience with problematic substance use).
3. **Screening, brief intervention and referral:** These services identify people who have or are at risk of developing substance use problems, and refer higher-risk individuals to more thorough assessment and intervention. Services are administered broadly at the population or targeted population level in non-specialized settings (e.g., primary care, schools, correctional facilities).
4. **Disease and injury prevention services:** These services reduce harms associated with substance use (e.g., the transmission of blood-borne viruses, soft tissue infection due to injection drug use, unsafe disposal of used drug paraphernalia).⁹
5. **Overdose prevention services:** These services prevent or reduce illness, injury or death owing to overdose among those engaging in substance use.
6. **Withdrawal management services:** These services support withdrawal from substances. They can be subdivided into three levels of care:
 - a. **Home-based or mobile:** The client can visit a specialized service centre, but resides at home or in other safe accommodations during the withdrawal process.
 - b. **Social or community residential:** The client resides in a specialized, non-hospital setting during the withdrawal process; treatment might involve medical supervision and medication.
 - c. **Complexity-enhanced or hospital-based:** The client resides in a hospital or other highly structured healthcare setting during the withdrawal process; treatment usually involves medication.
7. **Non-residential/community services:** These services are specialized to address substance use problems and may be offered in the community or at specialized facilities.¹⁰ They are

⁸ CCSA's Canadian Standards for Youth Substance Abuse Prevention provide evidence-based standards and guidelines to support planning, implementing and evaluating prevention initiatives.

⁹ Note that Rush et al (2014) categorize disease and injury prevention services as well as overdose prevention services under community services. They are separated here to ensure consideration in the service continuum.

¹⁰ A residential facility might offer non-residential services.



non-residential and provided on a regular basis. These services can be divided into three levels of care along a continuum of structure and intensity:

- a. **Minimal:** Programs include a limited number of substance-use specific sessions or are formatted in an unstructured way.
 - b. **Moderate:** Substance-use-specific sessions are delivered in a structured format involving a regular but not intrusive schedule (e.g., weekly or bi-weekly one- to two-hour sessions); this category includes opioid replacement services with counselling.
 - c. **Intensive:** Substance-use-specific sessions are delivered in a structured format involving a considerable time commitment (e.g., several days or evenings per week).
8. **Residential services:** These services require that the client reside at the facility (e.g., hospital inpatient services, 28-day programs) for the primary purpose of addressing substance use problems.¹¹ These services can be subdivided into three levels of care along a continuum of structure and intensity:
- a. **Supportive recovery:** The focus is on a substance-free, stable environment; residents can access programming such as life skills coaching and mutual aid, but specialized programming is generally located off-site.
 - b. **Residential treatment:** Clients are actively engaged in structured, specialized programming on-site.
 - c. **Complexity-enhanced:** Structured programs include individualized medical or psychiatric services for clients with concurrent mental health or co-morbid medical conditions.
9. **Internet and mobile-based services:** These services are delivered remotely online or through mobile devices, and can include services in other categories (e.g., mutual aid, screening and brief intervention, e-mental health).
10. **Mutual aid:** These services include peer-based support (i.e., people with lived experience of substance use who come together to support one another) and 12-step programs.

Population

Including this column helps to identify whether the system is responding to the needs of a specific population.

This fourth consideration examines different populations that bring varying needs and characteristics to the treatment system. The system should be able to respond to these unique needs in order to provide effective service. Examples include:

- Age
- Gender
- Culture
- Ethnicity
- Family members (i.e., those with family members in treatment)

¹¹ Programs provided in settings such as correctional facilities or group homes where clients receive substance use services but do not reside primarily for the purpose of receiving those services would fall under the non-residential category.



- Vulnerable populations (e.g., homeless, incarcerated)
- Location (e.g., urban vs. rural, a broad region, a very specific area)

2. System Operations

The second stage of the process encompasses what most people think of when they hear the term “mapping”: defining what the pieces of the system are and how they fit together. The system operations described below provide a framework for mapping a system’s details. Listing these operations according to one or more of the above “starting points” will help to illustrate the structure of the system and its strengths as well as gaps or areas of duplication. Making comparisons across columns is also helpful in understanding how the system is working. For example, consider the different types of service providers that are accessible in a given setting, perhaps a hospital. What collaborations might be helpful in increasing the number of those providers who offer support for substance use problems (e.g., training emergency nurses in screening and brief intervention)?

Approaches

Including this column helps to ensure the service approaches or models are evidence-based and provide options to meet a range of client needs.

This consideration should list the range of approaches through which services and supports are or could be provided.¹² Populating this list can be done by first mapping out services, then identifying the approaches that each takes. Examples include:

- Public health;
- Cognitive-behavioural;
- Motivational interviewing;
- Community reinforcement and family training (CRAFT);
- Traditional healing;
- 12-step facilitation;
- Psychotherapy;
- Pharmacotherapy; and
- Case management.

Settings

Including this column helps to illustrate the range of settings that are or could be used in service delivery.

This consideration should list the settings in which services are or could be provided. Very few services across the continuum require specialized settings and recognizing the range of settings in which services might be delivered can be useful in reaching a broader range of individuals in a more efficient way. This consideration can also be useful in determining the capacity of the system by identifying the individual capacity of each respective setting and then combining for an overall total.

¹² See Appendix E for a list of resources with information about the evidence base for various service approaches.



Examples of settings in which services might be available include:

- Community (e.g., community centres, public spaces);
- Education system;
- Criminal justice (e.g., courts, police, corrections);
- Primary care;
- Hospitals;
- Emergency services;
- Housing services;
- Specialized facilities;
- Social service offices; and
- Workplace.

Providers

Including this column helps to map out who is doing or could be doing what to provide a broad range of substance use services.

This consideration should list the types of service providers who are or could be involved in delivering substance use services. Depending on the function or type of service, delivery might require a high level of specialization or none at all. For example:

- Educators;
- Enforcement or probation officers;
- Physicians;
- Nurses;
- Psychologists and psychiatrists;
- Outreach workers;
- Social workers;
- Specialized addiction professionals; and
- Peers.

Collaboration

Including this column helps to identify ways in which working together with other sectors or service providers can improve the availability or quality of substance use services.

No single individual, profession or sector can solve the complex problem of substance abuse by working alone. This column should list the collaborations that are (or could be) in place to reach a broad population, perform functions across the continuum and respond to diverse client needs.

Collaborations can also be an effective way to leverage limited resources and bring together diverse areas of expertise to promote innovation. They can take place at the individual practitioner, service or system levels. Collaborations between substance abuse services are an essential part of an



effective continuum, but they should also extend across sectors. Examples of common multi-sectoral partners in substance use collaborations include:

- Public health;
- Enforcement;
- Community services;
- Mental health;
- Primary care;
- Education; and
- Social services.

3. Quality Review

Quality review is the third stage of the mapping process. Moving beyond the structure of the system, the considerations at this stage are checkpoints to ensure the system or system component being mapped reflects a comprehensive, client-centred approach.

Guiding Concepts and Principles

Including this column helps to ensure the system and services within it are taking a client-centred approach.

This consideration should indicate the extent to which the system reflects the Systems Approach's Guiding Concepts, which serve as the foundation for the Tiered Model of Services presented in the *Systems Approach to Substance Use in Canada*. The Guiding Concepts are as follows:

1. **No wrong door:** Individuals seeking treatment can access the full continuum by entry at any level and link to those services and supports that fit their needs.
2. **Availability and accessibility:** Services and supports are available and accessible within a reasonable distance and travel time.
3. **Matching:** Services and supports match to an individual's needs and strengths.
4. **Choice and eligibility:** Individuals may select among options should there be more than one available that meets his or her needs.
5. **Flexibility:** Individuals move upward or downward through tiers as needed.
6. **Responsiveness:** Effective treatment should ultimately help individuals to move to lower tiers as their needs change.
7. **Collaboration:** There should be collaboration between all levels of services and supports to ensure quality treatment and facilitate the individual's journey through the tiers.
8. **Coordination:** There should be easy sharing of information between systems.

Two additional principles are vital in ensuring a client-centred approach at the service level:

1. **Equity:** The extent to which population sub-groups have equal access to services (Babor & Poznyak, 2010). This principle includes, for example, ensuring accessibility for those with varying levels of physical ability, literacy and income, as well as marginalized or criminal-justice-involved individuals.



2. **Population-informed:** The diversity of the population in the catchment area should inform the services available. This principle might include ensuring that culturally appropriate, age-appropriate and multi-lingual services are in place. It might also include services targeting populations subject to marginalization, stigma or trauma.

Socioeconomic Determinants of Health

Including this column helps to ensure the system considers the complex determinants of health associated with substance use problems.

The determinants of health outline the many life circumstances that can impact health status and behaviours, including substance use.¹³ A comprehensive approach to substance use will take these determinants of health into consideration, for example, through multi-sectoral collaborations or service approaches. The social determinants of health identified by Mikkonen and Raphael (2010) are:

- Income and income distribution;
- Education;
- Unemployment and job security;
- Employment and working conditions;
- Early childhood development;
- Food insecurity;
- Housing;
- Social exclusion;
- Social safety net;
- Health services;
- Aboriginal status;
- Gender;
- Race; and
- Disability.

If you are working with a First Nations, Inuit or Métis population, also consider that socioeconomic determinants of health vary for Aboriginal peoples.¹⁴

4. Implementation

The final stage of the mapping process recognizes that a system is only effective to the extent that it can actually be put in place. Mapping implementation therefore involves taking a step back to look at the system-level supports and resources required to ensure the effective delivery of services and functions.

¹³ The Systems Approach's Socioeconomic Determinants of Health brief further explores this topic in the context of substance use services.

¹⁴ The National Collaborating Centre for Aboriginal Health provides helpful resources in this area, such as [Health Inequalities and Social Determinants of Aboriginal Peoples' Health](#) (Loppie & Wien, 2009).



System Supports

Including this column helps to ensure processes and structures are in place to support an evidence-based, effective approach to substance use. While no “magic number” of system supports exists, mapping them out can help ensure proportional attention is paid to each.

The *Systems Approach to Substance Use in Canada* report identifies a number of areas where supports are needed to ensure that the system is evidence-based and functions effectively:

1. **Evaluation:** Mechanisms to determine the impact of the system and its services.
2. **Knowledge exchange:** Mechanisms to ensure that “what we know” shows in “what we do” – getting the right information to the right people at the right time and in the right format.
3. **Measurement and monitoring:** Mechanisms to provide current, relevant and consistent information about system operations and population needs.
4. **Stigma and discrimination:** Mechanisms in place to reduce the stigma and discrimination that occurs at systemic, community, professional and individual levels.
5. **Research:** Capacity to identify and address research priorities to continually improve service quality and evidence base.
6. **Workforce development:** Mechanisms to ensure that individuals providing substance use services have the training, tools and other supports required to do so effectively.¹⁵
7. **Quality improvement:** Mechanisms to ensure that systems are operating with both efficiency (i.e., the most appropriate mix of services to address population needs) and economy (i.e., the efficient use of available resources to reduce the prevalence of substance use disorders) (Babor & Poznyak, 2010); these mechanisms might include accreditation or structured approaches such as Lean.¹⁶

Resources

Including this column helps to determine the concrete economic implications of substance use systems and services, whether maintaining status quo, expanding or looking at ways to achieve greater efficiency.

This final consideration should indicate the resources involved in providing the services identified in the system map. The level of detail provided will reflect the purpose of the mapping exercise. For example, if the mapping is part of a budgeting exercise, resources should be listed in as detailed and comprehensive a way possible; if the mapping is part of a visioning exercise, estimates may be sufficient. Resource estimates should be informed by evidence-based benchmarks when possible.

Categories of resources to consider include:

1. **Financial** (e.g., concrete budgetary impacts);
2. **Human resources** (e.g., staffing, including paid professionals, support staff and volunteers);

¹⁵ CCSA's Competencies for Canada's Substance Abuse Workforce are a useful tool for evaluating and supporting workforce development.

¹⁶ The Systems Approach Workbook's Quality Improvement module explains the application of Lean and other approaches in the health and substance use system context.

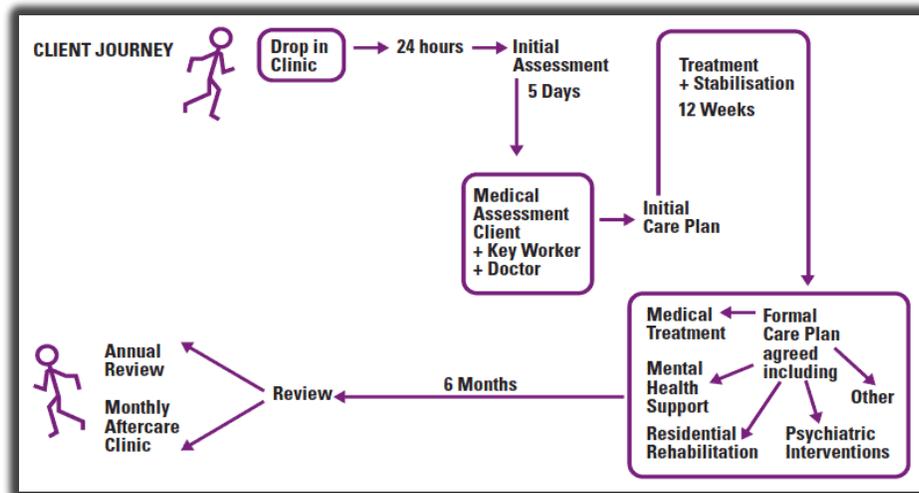


3. **Social capital**,¹⁷ which is defined by the OECD (1998) as “networks together with shared norms, values and understandings that facilitate cooperation within or among groups” (i.e., intangibles that can support service delivery through, for example, community integration and volunteerism);
4. **Physical capital** (e.g., physical location and setting, including buildings, furniture and other tangibles); and
5. **Information systems** (e.g., computer, phone and conferencing systems; information storage and management systems, both electronic and hard-copy).

Bringing the Map to Life: Client Journeys

Mapping client journeys through a system is a popular way to illustrate system function that can aid in both development and analysis stages. It is useful in identifying dead ends, duplication and unnecessary steps, which is particularly useful in the context of Lean or other quality improvement analyses.¹⁸ This approach is complementary to mapping and is a useful way to draw out further knowledge based on participants’ direct involvement with the system. Maps are typically visual, using pictograms, flow charts or simple box-and-arrow diagrams. Their visual appeal makes them useful tools for communicating mapping results. While the focus is on qualitative information, quantitative data can also be incorporated where available (e.g., number of clients entering given points in the system, amount of time between steps in the process). Figure 1 provides a simple example used to depict a client journey in the Scottish government’s addiction service. Diagrams with more detail can provide further information about how steps and the transitions between them actually work.

Figure 1. Client Journey Map



Source: Scottish Government, 2010. Retrieved from www.scotland.gov.uk/Publications/2010/06/02115503/4.

Client journey mapping can be approached in several ways. In a meeting or workshop format, participants can be provided with a case example and asked to trace a hypothetical journey through

¹⁷ The Government of Canada published a helpful resource on measuring social capital: *Measurement of social capital: Reference document for public policy research, development, and evaluation* (Franke, 2005).

¹⁸ See footnote 16.



the system. The perspective and experience of front-line workers and people with lived experience can be particularly valuable in this approach through their direct experience with system components. The journey can then be used to inform or validate the information in the broader mapping template. For example, while a system might have referral processes in place, walking through the journey from the client perspective might reveal that the interim referral steps are in fact cumbersome (e.g., if repetitive assessments are involved or if a lag exists to obtain an appointment with the referral team).

Alternatively, if the mapping process does not allow for the integration of an interactive client journey exercise, the project team could collect and illustrate experiences from current or past clients, then provide them as a source of information leading into the mapping process.

Next Steps

System mapping can play an important role in developing a comprehensive, evidence-based system of substance use services and supports. It can identify gaps, duplications, priorities, strengths and opportunities. System mapping can also generate fresh ideas by providing a new perspective and enhance collaboration by bringing people together. It is, however, only one stage in the process. Recall that interpreting, communicating and acting on the results are all vital to ensure that the process has the desired impact.

Other components of the Systems Approach Workbook provide support for the broader system change that mapping is intended to inform, including situating mapping within a change management process, effective approaches to communication, and strategies for working with teams that can support the mapping process itself.

The Systems Approach Workbook and the mapping tools found within this module are web-based and will therefore be updated to reflect emerging evidence. The Canadian Centre on Substance Abuse welcomes suggestions for templates or approaches that provide additional tools that can be added as links or examples.



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Appendix A: Sample Mapping Process

The following summary outlines a simple, fictionalized mapping process, based on actual exercises that CCSA facilitated during the development of this workbook. The example follows the “Making a System Map” steps outlined at the beginning of the workbook.

Context

The Greater Mapville Health Authority recently established an addictions working group. The working group consists of representatives from a range of agencies involved in planning and delivering substance use services. The working group would like to start by developing a better understanding of what the current system looks like in order to identify priority areas and inform its activities. The working group is holding a one-day face-to-face planning meeting, and would like to incorporate a mapping exercise into the agenda.

Process

Identify leadership: The Greater Mapville Addictions Working Group has taken leadership of the mapping process. The Greater Mapville Health Authority is providing a secretariat role for the working group. The Addictions Specialist within the health authority is chairing the group and coordinating the mapping exercise.

Define the problem: The health authority covers a large geographic area with a diverse urban and rural population. The working group has noted several concerns that have been brought forward by clients and stakeholders. Two notable examples are whether all residents, particularly youth in smaller communities, have equal access to the services they need, and the presentation of increasingly complex mental health and housing profiles among clients in urban areas.

Clarify goals: The working group has only recently been established. They hope to use the mapping exercise to inform priorities and activities for a workplan that will make an impact on client services within the next one to three years. The goal for the map is to inform discussion at this stage rather than to inform detailed system planning.

Determine what information to collect: Mapping the availability of services will require a complete list of available services, as well as information about the type and number of clients they serve. Information about population needs and/or service demand will be required to identify and prioritize gaps. Finally, identifying actions will require information about resource implications and availability.

Determine how to collect information: At this preliminary stage in its activities, the working group will be using existing data. Working group members completed an initial list of agencies that provide substance use services to health region residents, including those that are contracted out or provided at other municipal, provincial or federal levels. This list will inform the mapping process. Working group members are also bringing to the exercise operational reports from the various services, where possible, that provide information on client numbers and profiles as well as services offered.

Identify who will be involved: The working group members will complete the mapping exercise. The group has geographic and multi-sectoral representation, including multiple levels of government, but also recognizes that follow-up with other agencies might be required after the meeting to fill in service details.

Make the map: The chair modified Table 1 to develop a simplified template that met the group’s needs. To promote discussion between working group members, she broke the mapping process into



two parts. First, working group members circulated around the room to populate flip charts with information. Each flip chart represented one category of services and supports, with space provided for working group members to fill in the services available as well as details on approaches, settings, providers and collaborations. Information could be written directly onto the flip chart or first onto sticky notes that they can place and move when appropriate. This first part took place just before lunch so that, during lunch, the note taker could compile the information from the chart paper into the following template:¹⁹

Category	Service	Clients Served	Approach, Description	Setting	Providers
Education and awareness	Say “I Know”	Public	Information campaign	TV and radio	Province and municipality
Prevention	DARE	Students	Workshops	Schools	Police
	Anti-DUI campaign	Adults 19+	DD program	Bars	Municipality
Screening, brief intervention and referral	Regional central intake	Public	GAIN-SS – self-administered	Health clinic	Clinic staff
	Pilot physician screening project	Public	GAIN-SS – self-administered	Physician waiting rooms	Nurses
Disease and injury prevention	“Bevel up”	Injection drug users	Information campaign	Needle exchange and outreach van	Public health nurses and volunteers
	Safer Bars	Adults 19+	Shatter-proof beverage glasses	Anywhere alcohol is served	Bar/restaurant owners and health region
Overdose prevention	XChange	Injection drug users	Needle exchange	Drop-in clinic and outreach van	Public health nurses and volunteers
Withdrawal management services – home-based/mobile	CareClinic	Adults	Daily nurse visits	Home	Public health nurses
	CareClinic	Adults	Doctor-supervised	Home and clinic	Family doctors
Withdrawal management services – social/community residential	CareClinic	Adults	Medically assisted	Clinic	Nurses under physician supervision
	HealthView Treatment Centre	Youth	Medically assisted	Residential treatment centre – out of province	Addictions workers

¹⁹ Note that the table has been populated with fictional examples for illustrative purposes and is not meant to represent the scope of services that would be present in most systems.



Category	Service	Clients Served	Approach, Description	Setting	Providers
Withdrawal management services – complexity-enhanced	Mapview Regional Hospital	Adults & Youth	Medically assisted	Hospital	Physicians and nurses
Community services – minimal	Let's Talk About It	Adult males	Weekly drop-in meetings – group	Church	Clergy and volunteers
Community services – moderate	Salvation Army	Adult male and female programs	12-session weekly evening program – group, CBT	Salvation Army centre and satellite locations	Addiction workers
	RenewU Treatment Centre	Adult males	Bi-weekly continual intake program, group CBT & MI	Semi-rural treatment centre	Addiction workers
	Mapville Methadone Clinic	Adults	Opiate replacement	Clinic	Pharmacists
Community services – intensive	RenewU Treatment Centre	Adult male & female programs	Bi-weekly continual intake program, group and individual MI and coaching	Semi-rural treatment centre	Addiction workers
	Youth Services	Youth	Structured day program, group and individual CBT and MI	Urban youth drop-in centre	Youth workers, addiction workers
Residential services – supportive recovery	Resolution House	Adult males	Treatment centre	Sober-living house	Peers
Residential services – treatment	Salvation Army	Adult males	28-day CBT, MI, coaching, aftercare	Salvation Army centre	Addiction workers
	RenewU Treatment Centre	Adult males	28 & 90-day programs, CBT, MI, coaching	Semi-rural treatment centre	Addiction workers
	HealthView Treatment Centre	Youth	28-day program, MI and coaching	Residential (out of province)	Addiction workers



Category	Service	Clients Served	Approach, Description	Setting	Providers
Residential services – complexity-enhanced	Mapview Regional Hospital	Adults and youth	Medically assisted psychiatric services and counselling	Hospital – mental health ward	Nurses, addiction workers and psychiatrists
Internet and mobile services	Youth Services	Youth	Text-based “check-ins”	Mobile devices	Youth workers
Mutual aid	AA & NA	Adults	12-step	Churches and community centres across region	Peers

Interpret the results: The working group reviewed and discussed the results of the mapping exercise. The findings that stood out included:

- Limited education and prevention programs;
- Limited programs targeted to youth;
- No culturally specific programs; and
- No programs targeting the needs of the homeless population.

These preliminary results provided the working group with priority areas to address, meeting the goal of the exercise. In the process of completing the information, working group members also discovered that they were not as familiar with the services in their region as they first thought, and clarified information needs. For example, members were not certain of the accessibility criteria for all of the services listed.

Communicate the results: The working group prepared a written report including the completed map, the key observations made and the information needs identified. They also completed a preliminary workplan that identified first steps in the priority areas listed, including reviewing and applying CCSA’s Prevention Standards, inviting Youth Services to participate in the working group, and looking for resources available to support an initiative to develop a space for providing services to homeless individuals.

Set a follow-up date: The working group agreed to verify the information currently reflected in the map and to seek out additional information to ensure that the map is truly inclusive of the services available. The group divided responsibility for this among the membership based on existing networks and capacity. All members will bring the results to the next monthly meeting for collation and discussion.



Appendix B: Template – Mapping Services and Supports

Purpose

This template provides a system map based on the core services and supports that should be included in any comprehensive system.

Uses

- A tool in creating a text-based description of a system;
- A way to determine whether individuals have access to a full continuum of services and supports; and
- A way to identify both strengths and gaps in the current system.

Explanation

The template uses a staged approach to analysis, working through the system operations associated with the various services and supports. Some considerations will be of greater relevance than others depending on the context. For example, an urban system might have a range of specialized providers whereas a rural system might rely on a small set of providers with multiple or integrated roles.

The template can be completed on paper or electronically as presented on the following pages, adding rows as required; if being done in a workshop format, it could be completed on flip-charts to promote group discussion. It can also include varying levels of detail, from checking off boxes where services are present to providing a description of those services.

The template can be modified to remove columns or sections that are beyond the scope of the current discussion. For example, resources might not be included in a brainstorming or visioning exercise.



Education and Awareness (can be further broken down into universal and targeted)						
Service(s)	Brief description (optional)	Approaches: What approaches are used?	Settings: In what settings?	Providers: By who?	Collaboration: Through what collaborations?	Resources: What resources are needed?
Prevention (can also be broken down into universal and targeted)						
Service(s)	Brief description (optional)	Approaches: What approaches are used?	Settings: In what settings?	Providers: By who?	Collaboration: Through what collaborations?	Resources: What resources are needed?
Screening, Brief Intervention and Referral						
Service(s)	Brief description (optional)	Approaches: What approaches are used?	Settings: In what settings?	Providers: By who?	Collaboration: Through what collaborations?	Resources: What resources are needed?
Disease and Injury Prevention						
Service(s)	Brief description (optional)	Approaches: What approaches are used?	Settings: In what settings?	Providers: By who?	Collaboration: Through what collaborations?	Resources: What resources are needed?
Overdose Prevention						
Service(s)	Brief description (optional)	Approaches: What approaches are used?	Settings: In what settings?	Providers: By who?	Collaboration: Through what collaborations?	Resources: What resources are needed?
Withdrawal Management Services (can be further broken down into home-, social-community- and hospital-based)						
Service(s)	Brief description (optional)	Approaches: What approaches are used?	Settings: In what settings?	Providers: By who?	Collaboration: Through what collaborations?	Resources: What resources are needed?



Community Services (can be further broken down into minimal, moderate and high-intensity)						
Service(s)	Brief description (optional)	Approaches: What approaches are used?	Settings: In what settings?	Providers: By who?	Collaboration: Through what collaborations?	Resources: What resources are needed?
Residential Services (can be further broken down into supportive recovery, residential and complexity-enhanced)						
Service(s)	Brief description (optional)	Approaches: What approaches are used?	Settings: In what settings?	Providers: By who?	Collaboration: Through what collaborations?	Resources: What resources are needed?
Internet and Mobile Services						
Service(s)	Brief description (optional)	Approaches: What approaches are used?	Settings: In what settings?	Providers: By who?	Collaboration: Through what collaborations?	Resources: What resources are needed?
Mutual Aid						
Service(s)	Brief description (optional)	Approaches: What approaches are used?	Settings: In what settings?	Providers: By who?	Collaboration: Through what collaborations?	Resources: What resources are needed?



System Summary					
System Supports	Y/N	Description			
Evaluation					
Knowledge exchange					
Measurement & monitoring					
Stigma & discrimination					
Research					
Workforce development					
Quality improvement					
Guiding Concept	Y/N	How?			
No wrong door					
Availability & accessibility					
Matching					
Choice & eligibility					
Flexibility					
Responsiveness					
Collaboration					
Coordination					
Equity					
Population-informed					
Social Determinant of Health	Y/N	How?	Social Determinant of Health	Y/N	How?
Income & income distribution			Early childhood development		
Unemployment & job security			Employment & working conditions		
Education			Food insecurity		
Housing			Social exclusion		
Social safety net			Health services		
Aboriginal status			Gender		
Race			Disability		



Appendix C: Template – Population-Targeted Map

Purpose

This modified template provides a system map based on a targeted population and service type.

Uses

- A means of responding quickly and in an informed way to an identified gap or problem in the system;
- A tool to guide a focused exercise or discussion as part of a broader agenda; and
- A way to demonstrate the utility of system mapping through a targeted pilot.

Explanation

This modification of the broad template presented in Table 1 focuses on a specific issue of interest, assuming the target population and service have been identified (e.g., youth residential services, withdrawal management for people with unstable housing). A mapping exercise on this scale can be conducted quickly and would be useful, for example, to provide timely policy advice or develop a proposal for a time-limited funding opportunity.

With any mapping exercise, the quality of the information will determine the quality of the outcome. If the template is being used in the context of group discussion or brainstorming estimates may be sufficient; however, if being used to inform policy or funding decisions every effort should be made to ensure that individuals who have access to the best information are involved.

The template can be completed on paper or electronically as presented on the following pages, adding rows as required; if being done in a workshop format, it could be completed on flip-charts to promote group discussion. It can also include varying levels of detail, from checking off boxes where services are present to providing a description of those services.

The template can also be modified to remove columns or rows that are beyond the scope of the current discussion. For example, resources might not be included in a brainstorming or visioning exercise. Conducting a quality review could also be out of scope in a brainstorming or discussion exercise with a non-expert group.



Population & Service Type				
Approaches: What approaches are used?	Settings: In what settings?	Providers: By who?	Collaboration: Through what collaborations?	Resources: What resources are needed?

System Summary					
System Supports	Y/N	Description			
Evaluation					
Knowledge exchange					
Measurement & monitoring					
Stigma & discrimination					
Research					
Workforce development					
Quality improvement					
Guiding Concept	Y/N	How?			
No wrong door					
Availability & accessibility					
Matching					
Choice & eligibility					
Flexibility					
Responsiveness					
Collaboration					
Coordination					
Equity					
Population-informed					
Social Determinant of Health	Y/N	How?	Social Determinant of Health	Y/N	How?
Income & income distribution			Early childhood development		
Unemployment & job security			Employment & working conditions		
Education			Food insecurity		
Housing			Social exclusion		
Social safety net			Health services		
Aboriginal status			Gender		
Race			Disability		



Appendix D: Gathering Information

The following table provides a list of possible sources of information to support the mapping process. It is not meant to be exhaustive; it is intended to provide a guide and some key references. The varied information listed can be applied in a number of ways: for example, provided to mapping participants in advance to inform dialogue, used by the project team to develop and evaluate options, or used to provide context for proposals and action plans.

Source	Type and Access	Application and Limitations
Peer-reviewed literature	<ul style="list-style-type: none">• Reviewed by experts in the field prior to publication• Presentation of academic or clinical research• Can also include meta-analyses (i.e., summaries of existing research)• Most commonly found in academic or professional journals• Also available through research collaboratives such as Cochrane or Campbell• Accessed through databases (e.g., PsycINFO)	<ul style="list-style-type: none">• Identify the evidence base or best practices for different services, approaches, etc.• Obtain contextual information (e.g., on similar approaches or populations in other areas)• Basis against which to evaluate current or proposed initiatives• May not directly reflect/incorporate local context or resources• Time required to produce may result in limited information available on new and emerging practice
Grey literature	<ul style="list-style-type: none">• Published outside standard academic journal process• Government or organizational reports• Academic theses• Unpublished scientific reports	<ul style="list-style-type: none">• Information on research that takes place outside the academic context• Access to operational or process-type information (e.g., conducted in an evaluation or reporting context)
Experts in the field	<ul style="list-style-type: none">• Academics• Clinical researchers• Holders of traditional knowledge	<ul style="list-style-type: none">• Knowledge of current or specialized research or other targeted information• Informed advice, guidance or ideas• Can be faster to consult than going to the research literature• No one source can be expected to reflect the broad evidence base
Frontline experts	<ul style="list-style-type: none">• Clinicians, directors, staff• In the specialized and non-specialized sectors (e.g., mental health, primary care, enforcement)• Policy makers	<ul style="list-style-type: none">• In-depth knowledge of how the system actually works• Can be difficult to set aside personal bias/experience when required
Lived experience	<ul style="list-style-type: none">• People with experience of substance use problems and/or contact with the substance use	<ul style="list-style-type: none">• In-depth knowledge of how the system actually works, including barriers



Source	Type and Access	Application and Limitations
	<ul style="list-style-type: none">systemIncludes both direct individuals and impacted family/friendsPeer associations, support groups, advisory groupsAdvocacy groups	<ul style="list-style-type: none">Important to ensure that appropriate support is provided (e.g., briefing/debriefing)Important to address stigma and ensure all voices are valuedDanger of “tokenism”
Numeric data²⁰	<ul style="list-style-type: none">Numeric records (e.g., client data collected for reporting or monitoring)Statistical analyses conducted for reports or evaluations (e.g., annual reports)Survey data (population or targeted)	<ul style="list-style-type: none">Tracking system operation, including establishing benchmarks and monitoring progressIndicate system scope and function (e.g., capacity, flow through, access)Indicate trends (population or service)Quality can be limited by collection (e.g., lack of compliance with protocols), comparability (e.g., between organizations or systems) and currency
Operating documents	<ul style="list-style-type: none">Mandate, policies, service protocols, standards, guidelines, etc.Past reports, project proposals, strategic planning exercises, evaluations, etc.	<ul style="list-style-type: none">Understand current practiceUnderstand organizational contextIdentify lessons learned from previous initiativesTrack progress or change
Evaluations	<ul style="list-style-type: none">System or project-levelOutcome (final) or process (interim)Organizational records	<ul style="list-style-type: none">Obtain guidance through recommendationsBuild on past successes and learn from past challenges

²⁰ Examples of online data sources include: Statistics Canada’s [Canadian Community Health Survey](#), Health Canada’s [Canadian Alcohol and Drug Use Monitoring Survey](#), Ontario’s [Drug and Alcohol Treatment Information System](#), British Columbia’s [Alcohol and Other Drug Monitoring Project](#), the [Canadian Institute for Health Information](#), Public Health Agency of Canada’s [Health Behaviour of School-Aged Children](#), and CCSA’s [National Treatment Indicators](#) reports and [Cross-Canada Report on Student Alcohol and Drug Use](#). International sources include the [Annual Report](#) of the European Monitoring Centre for Drugs and Drug Addiction on the State of the Drug Situation in Europe, the [World Drug Report](#) of the United Nations Office on Drugs and Crime and CICAD’s [Multilateral Evaluation Mechanism](#).



Appendix E: Additional Resources

Mapping

The **Ontario Health Program Planner** is a free, online resource that uses an interactive website to walk through making evidence-informed planning decisions. It also offers an online business case creator and project management tools. The planner provides tips and worksheets to support key points in the process. It is available at <http://www.thcu.ca/ohpp/home.cfm>.

Concept maps provide a more visual approach to mapping. The Florida Institute for Human and Machine Cognition offers a free online report titled *The Theory Underlying Concept Maps and How to Construct and Use Them*. It is available at <http://cmap.ihmc.us/publications/researchpapers/theorycmeps/theoryunderlyingconceptmaps.htm>.

Process mapping involves tracking and illustrating the steps within a given process. Australia's Victorian Quality Council provides a useful guide to process mapping developed specifically for health service staff. It is available at http://www.health.vic.gov.au/qualitycouncil/downloads/process_mapping.pdf.

Sources of Evidence for Service Approaches

Canadian Centre on Substance Abuse: CCSA has produced a series of toolkits intended to provide practical resources for the substance use workforce.

Centre for Addiction and Mental Health: CAMH provides a list of [clinical practice guidelines and clinical pathways](#), organized by topic and source.

Cochrane Library: Cochrane Reviews are systematic reviews conducted according to a strictly defined methodology. These reviews answer specific questions, with several addressing substance use treatment issues.

Drug and Alcohol Findings: Drug and Alcohol Findings give service providers access to evidence in the field by publishing research summaries with key findings and practice implications.

Substance Abuse and Mental Health Services Administration: SAMHSA provides a range of publications on substance use treatment, prevention and recovery. The [Treatment Improvement Protocols Series](#) (TIPS) provides guidelines for substance use treatment developed in consultation with expert consensus panels, and drawing on evidence from both practice and research literature.