

Supplementary file 6**Definitions and descriptions of environmental scan**

Author	Definition/Description
Baesconde-Garbanati et al., 2017 [1]	“Although environmental scans originated in the business sector, they have come to be used in public health to collect data that can be used to develop health programs and interventions tailored to the unique needs of specific communities [2] Environmental scans can help assess strengths, weaknesses, challenges, and opportunities for improvement. They may help to refute or confirm common perceptions within the community. The methodology for environmental scans vary depending on the needs of the organization or community. However, they often include multiple sources of internal and external data (e.g., literature review, surveys, interviews with key stakeholders, internal documents, focus groups, technology), various target populations, and program planning [3] Environmental scans can be a valuable tool to raise awareness of issues, plan for the future, develop interventions, assist in health decision-making, and provide information for the development of evidence- based policies” [3] p. 4931
Bakhrui et al., 2015 [4]	“An environmental scan is defined as a review of current structures, processes and outcomes of care, and barriers to the new process understood in the context of the ecosystem (in this case, the ICU)” [4] p. 2361
Bednar et al., 2018 [5]	“An ES is a mixed-methods tool used in business, government, and public health to collect information, identify risks and opportunities, tailor strategic plans, or design programs in a flexible, rapid, comprehensive, low-cost manner” [2,3,6] p. 1483
Blackman, 2018 [7]	“There has been an increasing interest in environmental scans in public health practice, as they are now recognized as a valuable assessment and data collection tool by federal funding agencies and other health-related organizations. [8] Environmental scans originated in the business world as a tool for retrieving and organizing data to facilitate with strategic planning and decision-making.[3] Within the arena of public health, environmental scans have been used to collect, organize, and analyze information to guide the direction of new public health activity, raise awareness of health disparities, or initiate a project or funding opportunity [8]... As Rowel et al. [2] posited, the realities of the 21st century with regards to new technologies and diversity in sources of information have forced public health to

reconsider traditional approaches to knowledge generation. It has been recognized that in a health environment that experiences challenges such as scarcity of resources, innovative approaches to public health research and practice is needed to maximize existing resources, ensure timely responses to health crises, and build on established knowledge. [2] Environmental scans incorporate nontraditional methods in searching for evidence that include exploring the Internet and directly contacting or surveying other programs, organizations, or experts. [9]

An advantage to an environmental scan approach is the allowance for organizations to account for diverse types of knowledge, which includes codified from statistics, policy documents, or clinical reviews) and tacit knowledge (data from interviews or focus groups). [3] There are multiple strategies for information collection that include, but are not limited to, focus groups, in-depth interviews, surveys, literature assessments, chart reviews, personal communication, and policy analyses.[8] The goal of environmental scans is to use the information attained to design health programs that meet the needs of the target population. Intrinsically, they are designed to help the process of planning for the future by guiding health organizations and projects, thereby leading to evidence-based solutions for health care issues [3]... A noted limitation of environmental scans is the inconsistent approach to conducting them, resulting in ambiguity of the process. [3,8] pp. 9-11, 30

Fong et al.,
2018
[10]

“A built environmental scan is an objective review of the environmental factors that influence an organization; those factors can include programs, policies, and physical features (for example, the availability of visible, safe, and clean stairs for walking) within an organization” [2] p. e366

Glurich et
al., 2017
[11]

“Ad hoc environmental scans are cross sectional surveys undertaken at unspecified frequency, for the purpose of reviewing the current relevant evidence base across a range of sources in an attempt to ascertain the current state of the art surrounding the specific topic under focus. Such scans are conducted to collect information that may inform future planning of various vested stakeholders” [11] p. 22

- Leiva Portocarrero et al., 2015 [12] “Environmental scans were developed as tools for retrieving and organizing data from a wide variety of fields in order to identify contexts and shifts in planning for the future. They can include internal (memos, notes from meetings with stakeholders, etc) as well as external sources (e.g., newly available technologies)” [3] p. 3
- Luke et al., 2018 [13] “An environmental scan was used to generate a map of paediatric PN models of care in Canada. Originating in the business context, environmental scans are useful tools to develop insight into the utilization of health services [2,3]. Environmental scans allow for the assessment of trends, status, policy initiatives and strategies within a specific area [14,15] and have the advantage of identifying and avoiding potential problems and implementing useful solutions” [16] p. e47
- Medstar et al., 2017 [17] “An environmental scan is an integral process for identifying, retrieving, and organizing information to enable health decision making and has been used to foster knowledge translation in primary care.” [3,18] p. 2
- Mew et al., 2017 [19] “We used an environmental scanning (ES) approach to consolidate information from community leaders, frontline practitioners, and publically available sources [3,20]. The first phase of our ES employed an active approach by gathering information from primary sources such as perspectives of First Nations health leaders and relevant stakeholders [3]. The second phase employed a passive approach by gathering information from secondary sources, such as publically available information, to supplement the results obtained from the active approach” [3] p. 3
- Moore et al., 2015 [21] “An environmental scan has been defined as the acquisition and use of information about events, trends and relationships in an organization’s external environment, the knowledge of which would assist management in planning the organization’s future course of action” [20] p. 303
- Naumann et al., 2013 [22] “In comparison, environmental scans are emerging as an effective tool to collect evidence pertaining to healthcare service delivery gaps...Originating within the business context as a valuable method for retrieving and organizing needs assessment data, the environmental scan methodology has been growing in use and complexity, recently emerging as a popular method of effectively determining the health care needs of communities. Similar to the scoping study, both external and internal sources of data are utilized during an environmental scan. External sources of data include corporate media and sources, government data, and academic literature; internal

sources include the informal records and knowledge held by individuals or organizations, personal communications, minutes of meetings, memos, and other internal documents.” [3,23] p. 32, 35

- Porterfield et al., 2012 [24] “An environmental scan examines unpublished literature and publicly available program information” [24] p. S164
- Richard et al., 2016 [25] “Environmental scanning is a research approach that uses wide-scope screening methods to identify the new, the unexpected and the emerging interventions, issues and challenges in health” [3] p. 2
- Rowel et al., 2005 [2] “The environmental scan is a tool that can be utilized to collect data to design health programs uniquely tailored to the needs of communities.” [2] p. 527 “Environmental scanning is the acquisition and use of information about events, trends and relationships in an organization's external environment, the knowledge of which would assist management in planning the organization's future course of action.” p. 529 [20] and “environmental scanning as "a systematic and continuous effort to search for important cues about how the world is changing and how these changes are likely to affect your organization.” [26] p.529
- Scime et al., 2018 [27] “Despite origins in a business context a tool for gathering information to enable strategic action p. 203 [3,20] ... Specifically, environmental scans are suitable for the identification and synthesis of evidence about existing resources, organizational processes, barriers and facilitators to action, and/or knowledge and practice gaps pertaining to the topic under study. [2] p. 203
- Shahid et al., 2008 [28] “Environmental scanning is a method most commonly used in business but is quite popular in the health care sector around the world [29,30,31], and is used to identify emerging issues within the broader economic and political environment. [32] It is similar to situational analysis in which a review is undertaken of health strategies and policies, institutional support systems with the aim of strengthening health reform and health systems. It differs from audits which generally evaluate performance and are aimed at ascertaining the validity and reliability of information as part of quality control processes. Morrison argues that environmental scanning is a method that enables decision makers both to understand the external environment and the interconnections of its various sectors and to translate this understanding into an institution ’s planning and decision-making processes.” [33] “...The advantage of environmental scanning for

organizational leaders is that knowing the internal and external environment in which the organization operates is helpful in planning their future course of action.” [20] p. 57

- Tark et al., 2019 [34] “Environmental scanning is a research method in which publicly available information is gathered systematically and is used to evaluate both internal and external environments of organizations, organizational practices, and health programs. It produces important insights on current trends and occurrences based on existing resources and can assist with the development of evidence-based policies in future practices” [34] p. 1033
- Wittich et al., 2018 [35] “In healthcare research, the environmental scan is often employed as a needs-assessment tool for the purposes of improving and developing the efficiency of health service programs and evidence-based policies. In using this approach, environmental or contextual factors are evaluated by reviewing existing data or actively collecting new data in the form of surveys or interviews, including a diversity of views and information, to determine the benefits, needs and efficiencies of practices within that environment” [2,3] p. 2-3
- Wurz et al., 2019 [36] “Environmental scans are one way to identify and collate a large body of information seeking to achieve such an aim. [20,37] Moreover, they are a useful way to inform strategic planning, provide evidence about the direction of a field, and raise awareness about gaps in program/service availability” [3,38] p. 1154
- Yurick [39] “Environmental scans are considered a rapid review of information. The information gathered is considered incomplete until validated, but gives a snapshot of current work, as well as the breadth of depth of information available” [39] p. 94
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