Independent Research project
PSYC 396

Sarah Ben-Nouna
McGill Department of Psychology

Key features of Aire Ouverte, Quebec's First Integrated Youth Services: a DELPHI study

Professor Srividya Iyer
McGill Faculty of Medicine

December 20th 2024

ABSTRACT

The Delphi study investigates indicators, performance measures, and components of Aire Ouverte, Quebec's Integrated Youth Services (IYS) with 25 hubs across the province. These hubs serve youth aged 12 to 25 who need mental health care. Specifically, the study examines perspectives from sub-groups of participants, including youth and caregivers, managers, and on-site staff, as well as decision-makers and researchers. Notably, this project focuses on the youth's perspective. It involves a descriptive quantitative analysis of the importance rates assigned to different on-site practices and a thematic qualitative analysis of open-ended questions about values, needs, principles, and impacts of Aire Ouverte. The data comprises demographic information and polls designed to understand the components prioritized in this IYS and identify how the system can be improved and better integrated. This is particularly relevant, as there is currently a lack of feedback on the implementation process and practices of IYS. The results indicate that all stakeholders strongly agree with most on-site practices, although there are mixed responses regarding family inclusion and the use of peer support. The findings for youth align with these overall trends. Furthermore, the analysis of open-ended questions reveals that Aire Ouverte addresses not only mental health challenges but also physical and overall health concerns. For young people, specific needs often relate to career and educational guidance and support for diverse issues associated with the transition to adult life. This first-ever feedback highlights high satisfaction levels from all stakeholders, demonstrating that Aire Ouverte provides quality assistance not only for mental health but also for a range of other challenges not sufficiently addressed by the current health system. In conclusion, the findings suggest that this IYS not only bridges gaps in the traditional mental health system but also fulfills various unmet needs for youth in Quebec.

INTRODUCTION

BACKGROUND

The prevalence of mental health disorders among children and young people (CYP) is estimated at 18% in Canada in the latest surveys, with similar numbers in Quebec (Government of Canada, 2023; INSPQ, 2022). Indeed, more than 50% of adult mental health problems start during adolescence, and 75% are established by age 24 (Kessler et al. 2005; Statistiques Canada, 2022). However, clinical practices in the Canadian system are often inaccessible for most Canadians. Only half of this population receives proper help for psychiatric and mental health challenges (Statistiques Canada, 2018).

Moreover, rapid, therapeutic care and preventive care are often difficult to access, particularly in settings where stigma is high, and resources are limited (Qi et al., 2023). In addition, high-quality data on mental health and care is often limited to WEIRD (Westernized, Educated, Industrialized, Rich, Democratic) populations (Henrich et al., 2010). This situation diminishes intersectionality and further encourages societal gaps, as mental health is one of the main factors later affecting socioeconomic status (Couturier et al., 2021). Today, public health recommendations therefore underline the need to provide efficient care to youth from various backgrounds, socioeconomic statuses, range, and types of mental health problems.

Notably, initiatives in Australia with Headspace or the UK's Forward-Thinking Birmingham have been pioneers in the domain (Settipani et al., 2019). Such integrated services have been developed around empirical data and innovative features. Specifically, these comprehensive youth-centered services aim to bring together mental health care, general health care, and various social supports in a single community-based setting called a one-stop shop. Similarly, a pilot project, ACCESS Open Minds, was a pan-Canadian network including youth, families, clinicians, researchers, and decision-makers. Founded in 2014 by the Canadian Institutes of Health Research (CIHR) and the Graham Boeck Foundation (GBF), this initiative aimed to develop, implement, and evaluate a transformation in youth mental health services across 16 diverse communities, including Indigenous, Anglophone, Francophone, urban, rural, visible minority, post-secondary, and unhoused youth populations (Iyer et al., 2019). Inspired by ACCESS’s success, provincial and

territorial governments in Canada have since launched their own integrated youth service initiatives. These are currently in various stages of implementation. Quebec's IYS, Aire Ouverte, was launched by the Ministry of Health and Social services in 2018 with three pilot demonstration sites. Today, 29 hubs are in operation across the province.

Based on the ACCESS Open Minds IYS model, Aire Ouverte. Aire Ouverte's guidelines and *Cadre de Références* (Macé & Weiss, 2021) are written by the *Ministère de la Santé et des Services sociaux* (MSSS), and strives to offer accessible, youth-centered care. Nonetheless, questions persist regarding the operationalization of these principles, as this IYS is delivered through publicly funded *Centres intégrés universitaires de santé et de services sociaux* (CIUSSS/CISSS), which are mandated to provide primary, secondary, and tertiary health care, social services, and child welfare services for specific regions. Each Aire Ouverte hub is affiliated with its corresponding CIUSSS and aims to complement, rather than replace, existing services by engaging youth who may be reluctant to access conventional support systems. Importantly, this integrated youth service network represents an opportunity to explore a significant change in thinking in Quebec's health and social services network approach to reaching youth (Macé & Weiss, 2021). To address the current and evolving mental health needs of youth, the launch of Aire Ouverte involves rethinking service organization, management, collaboration models, and intervention strategies (Bentayeb et al., 2022).

Current research shows that integrated youth services are effective in the short term (Settipani et al., 2019). However, these services have not been in place long enough to evaluate their long-term outcomes. While existing literature reviews have examined the integration of medical and behavioural health in primary care settings (Settipani et al., 2019), and a meta-analysis has shown potential benefits (Asarnow et al., 2015), there is still a lack of evidence for these models.

Furthermore, even though some aspects of IYS efficiency have been demonstrated in some models, the mechanisms, and methods of providing added care to traditional services remain unclear. Indeed, openness and youth-centered care found in IYS are significant factors in establishing a therapeutic alliance within the framework of these integrated services. Nevertheless, few studies have evaluated such approaches (Asarnow et al., 2015). For instance, an earlier study using systematic thematic analysis among youth and workers in a UK-integrated service highlights

practices such as school sensitization, flexible and caring assistance, and on-site monitoring, which allow services to adjust treatments to achieve an absence of mental health symptoms or disorders among youth (Howarth et al., 2019). Also, The IYS model has previously encountered challenges in operationalizing principles (Varatharasan et al., 2022), underlining the need to address coordination issues to ensure effective and collaborative youth care.

Therefore, future steps within established integrated youth services must focus on understanding on-site practices, priorities, and challenges in order to allow integrated youth services to constantly grow and adapt as a learning health system. This, in turn, would pave the way for improvements in other therapeutic areas.

CURRENT STUDY

The study aims to develop a set of agreed upon indicators that align with the principles, objectives and components of Aire Ouverte, as outlined in its *Cadre de référence*. To meet this objective, there is a need to develop expert consensus around the most meaningful assessment domains, indicators/benchmarks, and outcome/performance measures for Aire Ouverte services. These domains include patient-level (e.g., satisfaction with services), family-level (e.g., family's top concerns), and program-level (e.g., wait times) measures. Relevant domains will be assessed via indicators (e.g., referral delays); benchmarks (e.g., 100% of youth are seen within 72 hours after referral); and standardized measures (e.g., a well-validated satisfaction measure; a standardized interview for assessing key symptoms). Additionally, it is necessary to study values, principles, needs, and impacts to improve Aire Ouverte's implementation and integration. This will contribute to the collection of key data and knowledge about IYS implementation. Indeed, effective IYS requires rethinking service models, collaboration, and interventions.

As a first step towards meeting these objectives, a Delphi study with Aire Ouverte experts from across the province were recruited to achieve consensus on the key domains, indicators, and performance measures for Aire Ouverte services, in the context of developing a learning health system. The experts include youth and families served by Aire Ouverte or serving as their advisors; Aire Ouverte hub leaders (e.g., coordinators) and staff (e.g., social workers, peer workers); and decision-makers (e.g., from MSSS), researchers and community organizations managers.

RESEARCH OBJECTIVE

In partnership with youths and families, clinicians, managers, community partners, decision-makers and researchers involved in Aire Ouverte or youth-focused services, this project seeks to develop a set of agreed-upon indicators that align with stakeholders' perceptions, values, principles, needs, and desired impacts of Aire Ouverte. To achieve this, the project will investigate consensus on key best practices on-site, alongside current insights regarding the care provided at Aire Ouverte and the scope and range of practices received and delivered.

RESEARCH QUESTIONS

What are the essential components, values, needs and principles of Aire Ouverte services? To what extent do different stakeholders (youth, families, clinicians, managers, researchers, and other experts) agree on the importance of these aspects?

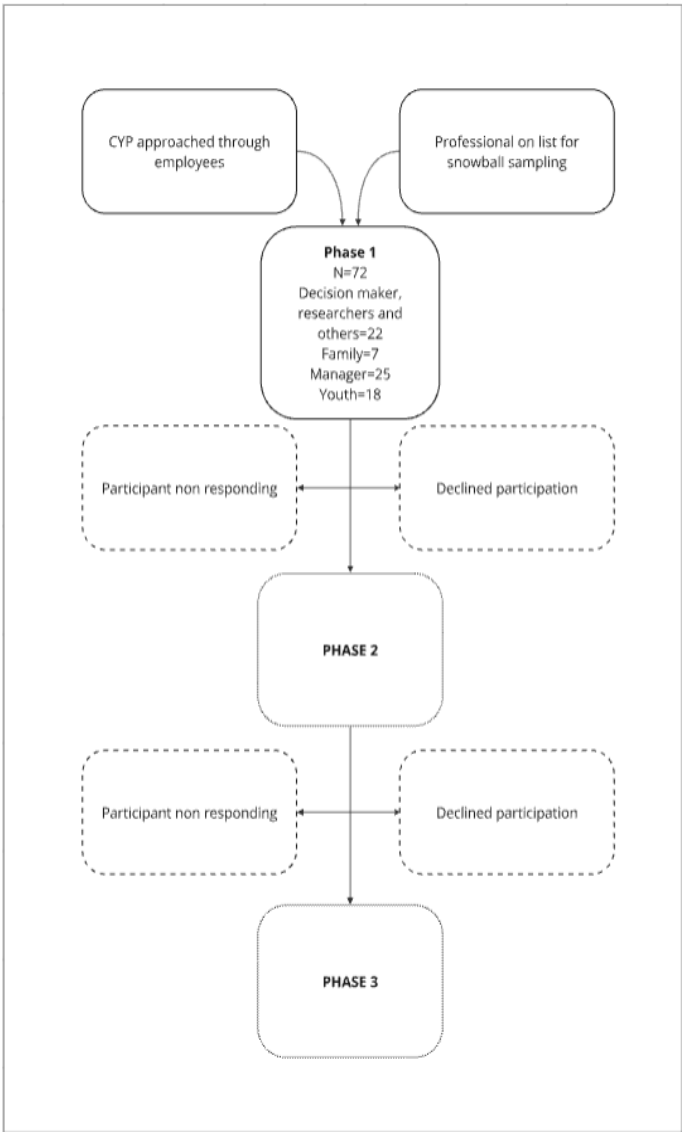

***FIGURE 1**. Overview of the full three phases of the DELPHI project, with participant data from the Phase 1.*

METHODS

A three-phase, mixed-method design is employed to (1) gather quantitative data from youth, families, and other Aire Ouverte stakeholders on key practices and components of effective and appropriate care within this integrated youth service, in order to develop consensus, and (2) assess and refine values,

principles, needs, and impacts. These findings will be synthesized further in phases 2 and 3. The study presented here focuses on the results from phase 1.

DESIGN

The full project employs complexity theory to understand the evolution and establishment of Aire Ouverte in Quebec's health system and to comprehend its integrated youth services features, particularly in how they can be improved to reach a learning health system model. By combining complexity theory (Braithwaite et al., 2018) with a learning health system approach, it becomes possible to evaluate this system beyond traditional unidirectional health system frameworks. Specifically, complexity theory, in the context of integrated youth services, helps to understand how minor changes in one part of the system can lead to significant effects, whereas substantial changes may have minimal impact. This integration thus allows for a better assessment of non-linearity, as illustrated through a three-phase model examining both qualitative and quantitative insights. The Delphi method, initially developed in the 1950s to predict the impact of technology on warfare during the Cold War, is adapted for the investigation of diverse Aire Ouverte aspects. The technique, initially used by the US military, followed by economic and financial projects, made its way into healthcare research methodologies. This method is designed to engage numerous experts through rounds of increasingly precise questions to address complex situations (Nasa et al., 2021).

Recruitment

The strategy is based on snowball sampling, where the research team first connected with youth, families, clinicians, managers, decision-makers, and researchers in their own networks, who then reached out to others. Snowball sampling was to ensure representation across Quebec. In this context, the experts were various stakeholders associated with Aire Ouverte, including decision-makers, on-site managers, researchers affiliated with the service, service providers, youth, family members, and others.

Procedure

For the Delphi process, following snowball sampling, participants who did not reply within seven days were sent the questionnaire again using their stated communication preferences. The first

questionnaire included a consent form, which described how their data would be anonymized and how it would be used in the study. Participants are informed that their participation is voluntary, and they may withdraw from the study at any time. Subsequently, the main questionnaire was delivered through the Mesydel platform. This questionnaire consisted of demographic questions, Likert questions, and open-ended questions. For the quartile and open-ended questions, participants were instructed to answer from an ideal-world perspective. Researchers analyzing the data were blinded to participant identities to ensure impartiality. Participants had the option to start the questionnaire, save their progress, and resume it later, or repeat it if technical issues arose during the first attempt. The average completion time was 30 minutes. The Mesydel platform generated a report compiling all participant responses, which could then be exported for further analysis.

Qualitative data analysis was conducted using NVIVO, performed by the research team. This preliminary analysis identified key terms and themes present in participants' answers. Using the terms identified, qualitative analysis for this project focused specifically on youth responses. Each connotated element in the answers was coded and matched with associated terms categorized into values, principles, needs, and impacts. This approach ensures alignment between stakeholder responses and youth-specific feedback, highlighting unique insights from this subgroup.

Questionnaires

This analysis focuses on the demographic data recorded from the questionnaires in Mesydel, the 11 open-ended questions exploring general perceptions of Aire Ouverte, and the 14 quantitative questions assessing aspects of Aire Ouverte’s implementation, rated on a 1-7 scale from "non-important" to "extremely important." Levels of consensus are evaluated using the semi-interquartile range, with the cutoff for consensus being 0.5 or larger, as used in other Delphi studies (Von Der Gratht, 2012). Notably, the questions remain consistent across all stakeholder groups, ensuring uniformity in responses.

Compensation

For each completed questionnaire (Phase 1, Phase 2, and Phase 3), youth and family member participants receive $30, for a total of $90 if all three phases are completed.

Data Analysis

The collection of data through the Mesydel platform ensures that responses are complete and organized by question. Questionnaires that were opened but not completed are re-sent. Consequently, missing data from opened but incomplete questionnaires was removed. Open-ended questions were answered in full by participants, including youth. Additionally, differences in language used in responses to open questions are analyzed in NVIVO. All research data is securely stored on password-protected computers, accessible only to the research team. Participant data is anonymized using ID numbers, and data will be retained for seven years before being permanently destroyed. Data was first extracted using Excel files. Descriptive analyses were conducted using R.

Results

PARTICIPANTS

The study's three participant groups include diversified stakeholders. Youth (n=18) and family (n=7); service providers and managers (n=25) and researchers, decision-makers and other experts (n=22). A total of 72 stakeholders participated in the first round with an average age of 37.2 years (standard deviation [SD] = 14.3 years), ranging from 13 to 74 years old.

Table 1. Participants characteristics for phase 1

Panel	Variable	Phase 1 data
Stakeholders	N	72
	Mean age (SD)	37.2 (14.3)
	Minimum	13
	Maximum	74
	Ratio men: women	~1:3
	Indigenous	3%
	Non-white, visible minorities	17%
	White	83%

Youth and Family Regions	Montréal	27%
	Québec	3%
	Montérégie	18%
	Lanaudière	18%
	Outaouais	3%
	Laval et Rive-Nord	9%
	Estrie	6%
	Shawinigan	6%
	Sorel-Tracy	3%
Stakeholders: Youth	N	18
	Mean age (SD)	28.1
	Mean years of postsecondary education (SD)	4.2 (2.0)
Stakeholders: Family	N	7
	Mean age (SD)	46.0 (17.7)
	Mean years of postsecondary education (SD)	5 (1.8)

The regional distribution of stakeholders across youth and family shows a slight concentration in Montréal, which accounts for 27% of participants. Additionally, other key regions include Montérégie and Lanaudière, each contributing 18% of the total, followed by Laval and Rive-Nord (9%), Estrie (6%), and Shawinigan (6%). Lesser representations are observed from Québec, Outaouais, and Sorel-Tracy, each at 3%. Youth stakeholders consist of 18 participants with a mean age of 28.1 years. Additionally, this group

Table 1 *Characteristics of participants in Phase 1, including demographic data (age, gender ratio, Indigenous and non-white representation) and regional distribution across stakeholders, youth, and family participants. Summary statistics include mean age, years of postsecondary education, and regional representation percentages.*

reports an average of 4.2 years of postsecondary education (SD = 2.0 years). In contrast, the family stakeholder group is smaller, comprising 7 participants with a mean age of 46.0 years (SD = 17.7 years) and an average of 5 years of postsecondary education (SD = 1.8 years). Notably, cultural minorities are well-represented: while 16% of Quebec's population is from visible minorities (Institut de la Statistique du Québec, 2021), this sample includes 17% of visible minorities.

QUANTITATIVE RESULTS

Participants were first asked to rate key components of Aire Ouverte service delivery, design, and implementation, as described in its *Cadre de référence* framework. These included: creating

friendly spaces on-site; offering holistic, flexible, and adapted services; utilizing peer support; employing technology among staff; serving targeted youth; reaching those in need; improving access; fostering diverse partnerships; establishing interdisciplinary teams on-site; promoting full participation in one's care; enhancing outcomes; encouraging family involvement; providing flexible services; and implementing inclusive governance. Participants were asked to rate each of these on Likert scales ranging from "very unimportant" (1) to "very important" (7). Results were categorized into four quartiles based on frequency. To evaluate levels of agreement, a semi-interquartile range was calculated for each question. If this range was smaller than or equal to 0.5, consensus was achieved; if it was larger, consensus was not reached.

For all stakeholders, the use of peer support and family involvement both showed higher interquartile ranges (semi-interquartile range = 1), as presented in Table 2. Additionally, for youth, the same results were observed regarding levels of agreement among the questions. However, the mean ratings for peer support among youth, even though they did not reach consensus, were still higher than those of all stakeholders combined. This suggests that other stakeholders, in part, reflect youth needs and opinions in their evaluations.

TABLE 2 Stakeholders ratings of practices at Aire Ouverte and their level of consensus

Question	Mean	Median	Minimum	Maximum	Semi interquartile range
Youth Friendly Spaces	6.4	7	2	7	0.5
Holistic, flexible, adapted services	6.6	7	5	7	0.5
Peer Support workers	5.6	6	2	7	1
Technology	6.4	7	5	7	0.5

Serving targeted youth	6.5	7	2	7	0.5
Outreach	6.5	7	5	7	0.5
Improving access	6.6	7	5	7	0.5
Partnerships	6.5	7	5	7	0.5
Interdisciplinary team	6.5	7	5	7	0.5
Promotion of full participation in one's care	6.7	7	4	7	0
Improving Outcomes	6.5	7	5	7	0.5
Promotion of family involvement	6	6	4	7	1
Flexible services	6.4	7	4	7	0.5
Inclusive Governance	6.2	6	4	7	0.5

Table 2 *presents the ratings provided by stakeholders on various practices at Aire Ouverte, reflecting their level of consensus. Mean, median, minimum, and maximum values for each practice are listed, along with the semi-interquartile range to illustrate the consistency of responses. Practices evaluated strong levels of agreement in majority, with variability for the peer support and family inclusion items*

While all components were scored as having high importance, the topic that demonstrated the highest overall rating was the promotion of full participation in one's care, highlighting Aire Ouverte's commitment to empowering CYP in their care journey. Except for the questions on peer support and family involvement, which did not achieve consensus on importance ratings, all other topics recorded consensus mean ratings above 6 ("very important"). This trend holds true across all stakeholders and youth, indicating that the following topics resonate as highly significant: youth-friendly spaces; holistic, flexible, and adapted services; the use of technology; targeting

specific youth populations; outreach efforts; improving access; fostering partnerships; establishing interdisciplinary teams on-site; enhancing outcomes; providing flexible services; and ensuring inclusive governance. These results underscore the alignment of these priorities among all stakeholders, including youth.

TABLE 3 Youth ratings of practices at Aire Ouverte and their level of consensus

Question	Mean	Median	Minimum	Maximum	Semi interquartile range
Youth Friendly Spaces	6.5	7	4	7	0.5
Holistic, flexible, adapted services	6.5	7	5	7	0.5
Peer Support workers	6.5	6.5	2	7	1
Technology	6.4	7	5	7	0.5
Serving targeted youth	6.5	7	4	7	0.13
Outreach	6.6	7	5	7	0.5
Improving access	6.5	7	5	7	0.5
Partnerships	6.5	7	5	7	0.5
Interdisciplinary team	6.5	7	5	7	0.5
Promotion of full participation in one's care	6.8	7	4	7	0
Improving Outcomes	6.6	7	5	7	0.5

Promotion of family involvement	6.1	6	4	7	1
Flexible services	6.3	7	4	7	0.5
Inclusive Governance	6.3	7	4	7	0.5

Table 3 *shows ratings for youth only, on practices at Aire Ouverte. Mean, median, minimum, and maximum values are calculated per item, with semi-interquartile range as a cutoff as in Table 2. The same items, peer support and family inclusion, did not meet this criterion for consensus.*

In sum, the quantitative results demonstrate important levels of agreement between stakeholders and youth on the importance of key Aire Ouverte practices. These include creating youth-friendly spaces, providing holistic and flexible services, utilizing technology, targeting underserved youth, conducting outreach, improving access, leveraging diverse partnerships, promoting interdisciplinary teamwork, enhancing outcomes, and fostering inclusive governance. Most topics achieve mean ratings above 6 ("very important") across all stakeholder groups, reflecting their shared significance. Consensus, defined as a semi-interquartile range of 0.5 or less, is most strongly achieved for the promotion of full participation in one's care, underlining Aire Ouverte's commitment to empowering youth. However, consensus is not reached for peer support or family involvement. Despite this, youth ratings for peer support are higher on average than those from other stakeholders, suggesting alignment between youth priorities and Aire Ouverte's overarching goals. These findings highlight strong support for Aire Ouverte's principles of openness, flexibility, and youth-centered care while emphasizing the service's alignment with youth needs. As per the Delphi procedure, the two items for which consensus was not reached will be brought forward into the subsequent round.

QUALITATIVE RESULTS

For the qualitative data, the questions are designed to identify potential pain points and key practices within Aire Ouverte. Despite clear guidelines, Aire Ouverte hubs across the province

differ in resources, users, and priorities, which is reflected in the answers provided (see Appendix 1). This analysis focuses on youth responses, using a systematic approach to extract common terms rated by all stakeholders. These terms are categorized into values, principles, needs, and impacts. The analysis presented here adopts a macro interpretation of the main themes identified across these subdivided terms. Regarding *the aspects of young people's lives that Aire Ouverte should improve* (Q1.1), youth responses emphasize a desire for comprehensive healthcare, particularly mental health support, delivered in a kind and youth-adapted manner. Similarly, in response to the question (Q1.2), "*What could be done to improve these aspects of young people's lives?*" The need for holistic healthcare is reiterated. Additionally, participants highlight the importance of self-development opportunities, including career and academic guidance.

For the item describing what population Aire Ouverte should serve (Q2.1), youth responses consistently emphasized that "all individuals" in need of mental, sexual, or physical health support should receive accessible and non-judgmental help. The following question (Q2.2) asked which population Aire Ouverte should specifically target. The responses reiterated the previous points while also emphasizing the need for cultural and general inclusion, along with reactive and prompt services.

Regarding the types of services offered (Q3.1), youth expressed that these should be personalized and centered on the individual's needs, addressing all aspects of their overall health. For the duration of services (Q3.2), youth suggested that help should remain available as long as the need persists.

In response to the question (Q4.1), "*What should be done to ensure that youth and families have positive experiences when seeking help and receiving services at Aire Ouverte? How should we determine if we are doing this well?"* youth highlighted a preference for competent and compassionate care centered on the individual. On the topic of what needs to be understood about young people seeking help at Aire Ouverte (Q5.1), youth advocated for inclusive, culturally sensitive support delivered in an open, rapid, and welcoming manner.

For the signals and indicators of improvement for youth receiving services at Aire Ouverte (Q6.1), respondents emphasized satisfaction with overall health support, youth autonomy, and guidance

for transitioning into adult life. Regarding the principles and values of Aire Ouverte (Q7.1), youth consistently stressed the importance of open, non-judgmental, and flexible assistance for mental, physical, and sexual health, as well as preparation for adult life through career and academic support. Additional support for stressful areas, such as housing and documentation, was also identified as crucial. Finally, for the question about the different impacts Aire Ouverte should have (Q8.1), youth responses echoed earlier themes with a focus on providing open and holistic support.

To summarize, the qualitative analysis revealed themes that reflect youth priorities and expectations for Aire Ouverte's services. Youth emphasized the importance of personalized care addressing overall health (mental, physical, and sexual), delivered in a welcoming, non-judgmental, and culturally sensitive manner. Career and academic guidance, and support for life transitions (e.g., housing and documentation), were highlighted as key avenues for self-development. Additionally, youth responses underlined the need for accessible, rapid, and inclusive services designed to meet the needs of diverse populations. Competent and compassionate care, provided for as long as required, was identified as essential for ensuring positive experiences. Indicators of success included satisfaction with holistic care, youth autonomy, and preparation for adult life. Aire Ouverte's principles of openness, flexibility, and person-centered care align strongly with the priorities and needs of the youth it serves.

DISCUSSION

First, the participant characteristics was diverse, thereby contributing insights regarding local and regional perspectives. This is important given the implementation of Aire Ouverte sites in all regions of Quebec. Collectively, the data offers a heterogeneous snapshot of stakeholders' perceptions, emphasizing the importance of including varied opinions and testimonies in this study.

Additionally, the substantial number of youths in the sample (n=18, which were sub-analyzed. Young people are the most represented group, and the analysis focuses on their results, reinforcing Aire Ouverte's mandate to address youth-specific needs. Women are overrepresented in the study, which could influence results related to individuals accessing the clinic but might also reflect the demographic composition of workers and youth accessing services at Aire Ouverte. Ratings on

key components of Aire Ouverte suggest the presence of acquiescence bias (Kreitchmann et al., 2019). Despite this, the minimal variance across ratings indicates strong consensus on most aspects. This alignment not only confirms Aire Ouverte's established framework but also fosters trust, as youth perceive that their needs are prioritized. Studies show that youth engagement not only enhances treatment outcomes but also benefits other stakeholders involved in the care process (McCabe et al., 2013).

Given that youth responses constituted 18 out of 72 total responses (25%), it is unlikely that youth ratings alone significantly influenced the consensus among stakeholders. On the matter of peer support—a topic that did not meet the cutoff for consensus—the mean ratings were 5.6 for all stakeholders and 6.5 for youth. These scores fall within the range of "quite important" (5), "very important" (6), and "essential" (7). It is possible that the mixed ratings for peer support are due to its still-evolving role, as this practice is not yet implemented uniformly across all Aire Ouverte hubs, meaning not all respondents have experience with this type of support.

A systematic analysis of peer support suggests persistent ambiguity regarding its role, including unclear responsibilities and boundaries. Despite these challenges, such analyses also indicate that users of peer support services experience better recovery and improved well-being (Cooper et al., 2014). Future research is therefore crucial to further understanding the implementation and effectiveness of peer support across different models and settings. Furthermore, a meta-analysis on peer support highlights that its efficiency depends on the context in which it is implemented. Its effectiveness has been most established in hospital settings (Egmose et al., 2023).

The matter of family involvement is inherently challenging, as it does not always apply to all youth realities. Family problems can be a source of concern and, in some cases, in difficulties that for children and young people are facing and for which they may be help-seeking. For instance, issues in family backgrounds are identified as contributing to mental health problems for 50% of youth in a recent study (Luvifa et al., 2023) Even when family is not the source of the issue that brings a young person to Aire Ouverte, certain matters—such as relationship issues or sexual health—may be sensitive or confidential, leading youth to refuse family involvement. Additionally, youth from abusive family backgrounds may be adversely affected by involving their family in treatment. Family structures vary significantly, and cultural differences in attitudes toward family

involvement during treatment might also account for divergent opinions on this matter. Aire Ouverte's openness to including family in care demonstrates its commitment to aligning practices with youth needs, emphasizing flexible and individualized care. The results from this study demonstrate that despite this openness and commitment to family involvement, its importance and the way this is operationalized is still a matter of debate and requires further attention.

As shown in the graphs below, youth responses regarding peer support exhibit greater variability than ratings on the promotion of family involvement. This may be due to differences in availability of peer support at their local sites.

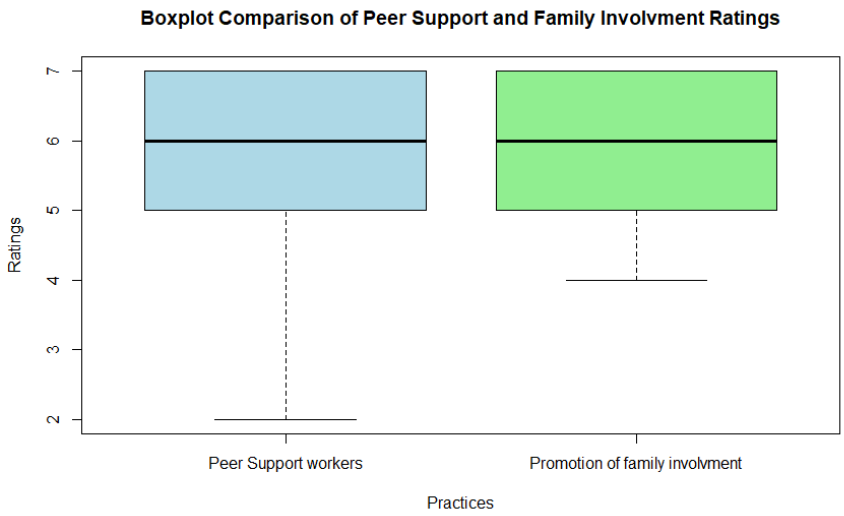

Figure 2 *Illustration of the differences in ratings between the two topics that did not meet the cutoff for consensus: peer support workers and promotion of family involvement.*

Conversely, the promotion of participation in one's care emerged as the most highly rated topic, encapsulating key Aire Ouverte values such as compassion, openness, the promotion of overall health, and autonomy. This finding aligns with previous studies that highlight the widespread efficacy of autonomy-centered care (Ells and Chamber-Evans, 2011). Furthermore, this emphasis on autonomy resonates with Aire Ouverte's initial mandate, reflecting a broad and inclusive vision for the support and services offered.

For the qualitative data among youth, several unexpected elements emerged as part of the first feedback on Aire Ouverte's practices. First, there was a notable focus on general health, extending beyond mental health. Second, the expressed need for support in areas beyond health—such as career and academic guidance and orientation—was widely stated and not initially expected. Third, despite the potential for agreement bias, the levels of consensus reflected in open-ended questions suggest overall strong satisfaction, highlighting the perceived efficiency of this new system. Aire Ouverte's flexibility in addressing mental health as a global state that can be influenced by factors such as physical health or career ambiguity further reinforces its effectiveness (Kleszczewska et al., 2022). By targeting the root causes of worry, Aire Ouverte's services are positioned to both prevent and respond to emerging issues among youth. This approach not only helps mitigate risks that could develop into serious mental health challenges but also offers adaptable services that address both psychiatric-psychological concerns and specific burdens, such as career orientation or sexual health care.

The strengths of the study reside in its diversity of participants in backgrounds and regions, wide array of qualitative and quantitative data, as well as the blind investigation of stakeholders in data analysis. Limitations to be considered would be the agreement bias found in the Likert questions. Even though differences in answers were considered in analysis, a more diverse range of answers could potentially have provided deeper insights on controversial subjects. Phases 2 and 3 will allow to investigate these further. Still, the findings from this first round provide an early indicator of Aire Ouverte's impact within the system. Phase 1 data demonstrates that Aire Ouverte's flexibility allows it to alleviate pressure on various health systems while addressing needs that might otherwise go unmet, particularly in underserved regions. Moreover, this data will guide subsequent rounds in identifying best practices on-site to concretely align with Aire Ouverte's values, principles, needs, and desired impacts. The strong agreement observed across most dimensions of Aire Ouverte's services can be attributed to its general openness to diverse forms of care and assistance, as highlighted in the qualitative responses. This adaptability suggests that Aire Ouverte is addressing critical gaps in youth services at the local level. Furthermore, when limitations in its activities are encountered, Aire Ouverte leverages its local partnerships to ensure continuity of care and support for youth. Further analysis in Phases 2 and 3 of this study will provide deeper

insights into Aire Ouverte's specific practices, limitations, and priorities, offering a more comprehensive understanding of its contributions to youth care.

Findings from this project have informed the development of the subsequent round in this Delphi study. As described above, the second round will comprise a re-rating of items which did not meet the consensus threshold on the quantitative questions. Further, qualitative analysis of the open-ended questions has resulted in a categorization of key elements such as: values, guiding principles, youth needs, overall Aire Ouverte objectives, and key activities. For each of these, participants will be asked to rate the overall importance or to narrow their selection. Further refining of these questions will occur in the third round.

CONCLUSION

This study provides insights into the practices, principles, and impacts of Aire Ouverte, Quebec's first integrated youth services model. By combining quantitative and qualitative analyses, the research highlights the alignment of Aire Ouverte's services with the needs and priorities of youth and stakeholders. The strong agreement on key components such as youth-friendly spaces, holistic and flexible care, and the promotion of autonomy underlines the program's responsiveness to addressing youth health challenges.

Particularly, the findings reveal stakeholders' views of Aire Ouverte's capacity to fill gaps in the existing healthcare system by offering services that extend beyond mental health to include physical health, career guidance, and support for life transitions. However, certain areas require further exploration. For instance, the mixed perspectives on family involvement and peer support reflect variability in stakeholder priorities and implementation practices, suggesting the importance of adopting a localized approach. The strong consensus on empowering youth through full participation in their care further emphasizes the need to prioritize autonomy in future service design.

These findings carry significant implications for the development of integrated youth services. Aire Ouverte serves as an innovative model, highlighting the potential of services that demonstrate broad competence on site to, through many means, patients' autonomy, self-determination, and

sense of belonging. Policymakers in Quebec and beyond can draw upon Aire Ouverte's principles to refine clinical frameworks that address these priorities. By continuing to evolve in response to these findings, Aire Ouverte can set a new standard for integrated youth services, both within Quebec and beyond.

REFERENCES

Asarnow, J. R., Rozenman, M., Wiblin, J., & Zeltzer, L. (2015). Integrated Medical-Behavioral Care Compared with Usual Primary Care for Child and Adolescent Behavioral Health: A Meta-analysis. *JAMA pediatrics*, *169*(10), 929–937. https://doi.org/10.1001/jamapediatrics.2015.1141

Bentayeb, N., Weiss, B., Ziani, M., & Goyette, M. (2022). Aire ouverte Laval: Défis et premières leçons d'une histoire de cocréation en santé mentale jeunesse. Canadian Public Administration, 65(1), 99–121. https://doi.org/10.1111/capa.12451

Braithwaite, J., Churruca, K., Long, J.C. et al. When complexity science meets implementation science: a theoretical and empirical analysis of systems change. BMC Med, 16, 63 (2018). https://doi.org/10.1186/s12916-018-1057-z

Cooper, R. E., Saunders, K. R. K., Greenburgh, A., Shah, P., Appleton, R., Machin, K., Jeynes, T., Barnett, P., Allan, S. M., Griffiths, J., Stuart, R., Mitchell, L., Chipp, B., Jeffreys, S., Lloyd-Evans, B., Simpson, A., & Johnson, S. (2024). The effectiveness, implementation, and experiences of peer support approaches for mental health: A systematic umbrella review. BMC Medicine, 22(1), 72. https://doi.org/10.1186/s12916-

Couturier, Y., Wankah, P., Guillette, M., & Belzile, L. (2021). Does Integrated Care Carry the Gene of Bureaucracy? Lessons from the Case of Québec. International Journal of Integrated Care, 21(S2). https://doi.org/10.5334/ijic.5658

Ells, C., Hunt, M. R., & Chambers-Evans, J. (2011). Relational autonomy as an essential component of patient-centered care. International Journal of Feminist Approaches to Bioethics, 4(2), 79–101. https://doi.org/10.2979/intjfemappbio.4.2.79

E, M., Mm, A., S, R., J, M., Sf, N., K, T. B., Jd, Z., & M, S. (2023). Youth engagement in mental health research: A systematic review. Health Expectations: An International Journal of Public Participation in Health Care and Health Policy, 26(1). https://doi.org/10.1111/hex.13650Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world?. The Behavioral and Brain Sciences, 33(2-3), 61–135. https://doi.org/10.1017/S0140525X0999152X

Howarth, E., Vainre, M., Humphrey, A., Lombardo, C., Hanafiah, A. N., Anderson, J. K., & Jones, P. B. (2019). Delphi study to identify key features of community-based child and adolescent mental health services in the East of England. BMJ Open, 9(6), e022936. https://doi.org/10.1136/bmjopen-2018-022936

Høgh Egmose, C., Heinsvig Poulsen, C., Hjorthøj, C., Skriver Mundy, S., Hellström, L., Nørgaard Nielsen, M., Korsbek, L., Serup Rasmussen, K., & Falgaard Eplov, L. (2023). The Effectiveness of Peer Support in Personal and Clinical Recovery: Systematic Review and Meta-Analysis. Psychiatric Services (Washington, D.C.), 74(8), 847–858. https://doi.org/10.1176/appi.ps.202100138

Iyer, S. N., Boksa, P., Joober, R. (2019). Editorial: How youth mental healthcare is being transformed in diverse settings across Canada: Reflections on the experience of the ACCESS Open Minds network. Early Intervention in Psychiatry, 13(Suppl. 1), 8–11. https://doi.org/10.1111/eip.12811

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Archives of General Psychiatry, 62(6), 593–602. https://doi.org/10.1001/archpsyc.62.6.593

Kleszczewska, D., Dzielska, A., Michalska, A., Branquinho, C., Gaspar, T., dos Matos, M. G., & Mazur, J. (2022). What Factors do Young People Define as Determinants of their Well-being? Findings from the Improve the Youth Project. Journal of Mother and Child, 25(3), 170–177. https://doi.org/10.34763/jmotherandchild.2021.2503SI.d-21-00031

Kreitchmann, R. S., Abad, F. J., Ponsoda, V., Nieto, M. D., & Morillo, D. (2019). Controlling for Response Biases in Self-Report Scales: Forced-Choice vs. Psychometric Modeling of Likert Items. Frontiers in Psychology, 10, 474933. https://doi.org/10.3389/fpsyg.2019.02309

Luvira, V., Nonjui, P., Butsathon, N., Deenok, P., & Aunruean, W. (2023). Family Background Issues as Predictors of Mental Health Problems for University Students. Healthcare, 11(3), 316. https://doi.org/10.3390/healthcare11030316

Macé, C., & Weiss, B. (2021). Cadre de référence Air Ouverte. Ministère de la Santé et des Services Sociaux, Québec.

Nasa, P., Jain, R., & Juneja, D. (2021). Delphi methodology in healthcare research: How to decide its appropriateness. World Journal of Methodology, 11(4), 116. https://doi.org/10.5662/wjm.v11.i4.116

National Institute of Public Health of Quebec. (2022). Disparities in mental health and its determinants among Quebec high school students by language of instruction.

https://www.inspq.qc.ca/sites/default/files/publications/2883-mental-health-determinants-quebec-high-school-students.pdf

Qi, M., Santos, H., Pinheiro, P., McGuinness, D. L., Bennett, K. P. (2023). Demographic and socioeconomic determinants of access to care: A subgroup disparity analysis using new equity-focused measurements. PLOS ONE, 18(11): e0290692. https://doi.org/10.1371/journal.pone.0290692

Québec, I. de la statistique du. (2024, April 29). Demographic portrait of diversity in Québec: Differences between women and men. Institut de La Statistique Du Québec. https://statistique.quebec.ca/en/communique/portrait-demographique-diversite-quebec-differences-femmes-hommes

Settipani, C. A., Hawke, L. D., Cleverley, K., Chaim, G., Cheung, A., Mehra, K., Rice, M., Szatmari, P., & Henderson, J. (2019). Key attributes of integrated community-based youth service hubs for mental health: A scoping review. International Journal of Mental Health Systems, 13(1), 52. https://doi.org/10.1186/s13033-019-0306-7

Statistics Canada. (2018). Mental health care needs, 2018. https://www150.statcan.gc.ca/n1/pub/82-625-x/2019001/article/00011-eng.htm

Statistics Canada. (2023). Mental health Disorders in Canada, 2022. https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m2023053-eng.htm

Statistics Canada. (2023). Mental health disorders and access to mental health care 2023. https://www150.statcan.gc.ca/n1/pub/75-006-x/2023001/article/00011-eng.htm

Varatharasan, N., Chiodo, D., Hanna, M., & Henderson, J. (2022). Barriers and facilitators in implementing integrated youth services: Lessons Learned from Youth Wellness Hubs Ontario. International Journal of Integrated Care, 22(S3). https://doi.org/10.5334/ijic.ICIC22176

Von Der Gracht, H. A. (2012). Consensus measurement in Delphi studies: review and implications for future quality assurance. *Technological forecasting and social change*, *79*(8), 1525-1536

APPENDIX 1. Youth answers on open questions about Aire Ouvertes practices, with elements of answers separated in values, principles, needs and impacts. Answers in French.

OPEN QUESTION	VALUES	PRINCIPLES	NEEDS	IMPACTS
1.1 In an ideal world, what aspects of young people's lives should ao seek to improve**?**	Adapté aux jeunes Bienveillance	perspective holistique Santé globale	Besoins en santé physique et sexuelle Besoins en santé mentale	Impacts sur le fonctionnement et l'autonomie des jeunes Impacts sur la santé mentale et le bien-être des jeunes
1.2 W*hat could be done to improve these* *aspects* ***of young people's lives?***	Adapté aux jeunes Bienveillance Compétence Épanouissement	Promotion, prévention et déstigmatisation Accessibilité Centré sur la personne, Perspective holistique et santé globale	Besoins en santé mentale Besoins en santé physique et sexuelle *** Besoins en intégration socioprofessionnelle **	Impact sur l'accessibilité et l'utilisation des services *** Impacts sur le fonctionnement et l'autonomie des jeunes
2.1 In an idea; world, to which individuals *(population)* ***should ao services be offered?***	Adapté aux jeunes Bienveillance coopération et entraide Réactivité des services	Accessibilité spécifique aux jeunes Perspective holistique et santé globale	Besoins d'orientation et d'accompagnement Besoins en santé physique et sexuelle	Impacts sur le fonctionnement et l'autonomie des jeunes Impacts sur la satisfaction des jeunes et de leurs proches
2.2 Are there individuals or *populations* ***of individuals***	Adapté aux jeunes Bienveillance coopération et entraide Réactivité des services	Accessibilité spécifique aux jeunes Perspective holistique et santé globale	Besoins d'orientation et d'accompagnement Besoins des proches besoins en santé mentale	Impacts sur le fonctionnement et l'autonomie des jeunes Impact sur l'accessibilité et l'utilisation des services

which ao services should specifically target?		Inclusion et sensibilité culturelle	Besoins en santé physique et sexuelle	
3.1 In an ideal world, what types *of services or interventions would be offered* ***to individuals presenting at Aire Ouverte?***	Adapté aux jeunes Authenticité Créativité Réactivité des services	Accessibilité Centré sur la personne Spécifique aux jeunes Perspective holistique et santé globale	Besoins en santé mentale Besoins en santé physique et sexuelle Besoins d'orientation et d'accompagnement	Impacts sur la santé mentale et le bienêtre des jeunes Impacts sur la santé physique et sexuelle des jeunes Impacts sur le fonctionnement et l'autonomie des jeunes
3.2 In an ideal world, *for how long should individuals be offered services* ***at ao? How should this be determined?***	Adapté aux jeunes Réactivité des services	Accessibilité Centré sur la personne Spécifique aux jeunes	Besoins en santé mentale Besoins d'orientation et d'accompagnement	Impacts sur la santé mentale et le bienêtre des jeunes Impacts sur le fonctionnement et l'autonomie des jeunes
4.1 What should be done to ensure that youth and families have	Adapté aux jeunes Bienveillance Compétence Réactivité des services	Accessibilité Partenariat et intégration des services Amélioration continue	Besoins d'orientation et d'accompagnement Besoins des proches	Impacts sur l'efficience des services Impacts sur la santé et le bienêtre des populations

positive *experiences when seeking help* ***and receiving services at ao? How should we determine if we are doing this well?***				
5.1 W*hat do we need to understand about a young person* ***when they first come to ao?***	Adapté aux jeunes Authenticité Réactivité des services	Accessibilité Centré sur la personne Amélioration continue Inclusion et sensibilité culturelle	Besoins d'orientation et d'accompagnement Besoins des proches Besoins en santé mentale	Impacts sur la santé et le bienêtre des populations Impact sur l'accessibilité et l'utilisation des services
6.1 In an ideal world, how would we know if things are better for a young person who came to ao? What should be some *signals, indicators,* ***or ways of knowing this?***	Adapté aux jeunes Réactivité des Services adaptés aux jeunes Authenticité	Accessibilité Centré sur la personne Spécifique aux jeunes Amélioration continue	Besoins en santé mentale Besoins d'orientation et d'accompagnement	Impacts sur la santé mentale et le bienêtre des jeunes Impacts sur le fonctionnement et l'autonomie des jeunes

7.1 In an ideal world, what *values or principles* ***should ao services aspire to and follow?***	Adapté aux jeunes Authenticité Bienveillance Compétence Épanouissement	Promotion, prévention et déstigmatisation*** Accessibilité *** Centré sur la personne, perspective holistique et santé globale*** Inclusion et sensibilité culturelle	Besoins en intégration socioprofessionnelle *** Besoins en développement de soi Besoins d'orientation et d'accompagnement	Impact sur l'accessibilité et l'utilisation des services *** Impacts sur la santé mentale et le bienêtre des Impacts sur le fonctionnement et l'autonomie des jeunes ***
7.2 In an ideal world, what are the different impacts that ao should have? *(values)*	Adapté aux jeunes Authenticité Bienveillance Compétence Épanouissement	Promotion, prévention et déstigmatisation Accessibilité Centré sur la personne, Perspective holistique et santé globale	Besoins en santé mentale Besoins en santé physique et sexuelle Besoins en développement de soi Besoins d'orientation et d'accompagnement	Impact sur l'accessibilité et l'utilisation des services Impacts sur la santé mentale et le bienêtre des jeunes Impacts sur la santé physique et sexuelle des jeunes Impacts sur le fonctionnement et l'autonomie des jeunes