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**The mapping of organizations delivering
mental health services in Nunavik,
Ungava Bay Area**

Master's dissertation in Mental Health Policy and Services

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Acknowledgments

The process of writing that thesis has provided me an opportunity to think about the people who have provided me encouragement, advice, support.

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Summary

In Nunavik, a complete mapping including hospital, local health centre and the community organizations delivering basic or more advanced mental health care and mental health care support services delivered and available in each village of the Ungava Coast has never been done. This research is the first comprehensive mapping of the different kinds of services delivered by different institutional and non-institutional organizations in this area.

Objectives: this project research more specific objectives are the following:

1. Mapping organizations delivering mental health care and mental health care support to people over 18 years old on the Nunavik Ungava coast
2. Mapping the services available from those organizations
3. Mapping the availability of those services in each village
4. Mapping the institutional alliance between those organizations and the regional hospital setting.

Methods: All the mental health organizations in the geographical area were contacted and the data gathered classified using the DESDE-LTC instrument.

Results: the results achieved include:

1. An appraisal description of services delivered in adult mental health
2. A mapping picture of the continuum of services between community organizations, primary care level, secondary care level and tertiary care level
3. Proposed improvements in the continuum of services.

Conclusions: By identifying and describing the community organizations services, our findings give instruments to build collaborative bridges between the institutionalized mental health care, the community resources, and the population needs.

Key words: Inuit, mental health, community organization, mapping

Resumo

Em Nunavik, nunca foi realizado um mapeamento completo dos serviços que incluem um hospital, centro de saúde local e organizações da comunidade que fornecem cuidados de saúde mental básicos ou mais avançados e serviços de apoio aos cuidados de saúde mental fornecidos e disponíveis em cada localidade da Costa Ungava. Esta pesquisa é o primeiro mapeamento abrangente dos diferentes tipos de serviços fornecidos por diferentes organizações institucionais e não institucionais nesta área.

Objetivos: os objetivos específicos da pesquisa deste projeto são os seguintes:

1. Mapeamento de organizações que forneçam cuidados de saúde mental e apoio aos cuidados de saúde mental a pessoas com mais de 18 anos na costa Nunavik Ungava
2. Mapeamento dos serviços disponíveis destas organizações
3. Mapeamento da disponibilidade destes serviços em cada localidade
4. Mapeamento da aliança institucional entre estas organizações e a configuração hospitalar regional

Métodos: Todas as organizações de saúde mental na área geográfica foram contactadas e os dados reunidos foram classificados através do instrumento DESDE-LTC.

Resultados: os resultados atingidos incluem:

1. Uma descrição classificativa dos serviços fornecidos para a saúde mental dos adultos
2. Uma imagem de mapeamento da continuidade dos serviços entre as organizações da comunidade, o nível de cuidados primários, o nível de cuidados secundários e o nível de cuidados terciários
3. Melhorias propostas na continuidade dos serviços.

Conclusões: Ao identificar e descrever os serviços das organizações da comunidade, as nossas conclusões fornecem instrumentos para construir pontes de colaboração

entre os cuidados de saúde mental institucionais, os recursos da comunidade e as necessidades da população.

Palavras-chave: organizações da comunidade, Nunavik, saúde mental, mapeamento

Resumen

En Nunavik nunca se ha elaborado un mapa completo que incluya el hospital, el centro de salud local, las organizaciones comunitarias que prestan atención de salud mental básica o más avanzada y los servicios de apoyo a la atención de salud mental prestados y disponibles en cada aldea de la costa de Ungava. Este estudio es el primer mapa exhaustivo de los diferentes tipos de servicios prestados por distintas organizaciones institucionales y no institucionales en esta zona.

Objetivos: los objetivos más específicos de este proyecto de investigación son los siguientes:

1. Mapear las organizaciones que prestan atención de salud mental y apoyo a la atención de salud mental a personas mayores de 18 años en la costa de Ungava de Nunavik
2. Mapear los servicios que prestan dichas organizaciones
3. Mapear la disponibilidad de dichos servicios en cada aldea
4. Mapear las alianzas institucionales entre dichas organizaciones y el ámbito hospitalario regional.

Métodos: se ha contactado con todas las organizaciones de salud mental de la zona geográfica y los datos recopilados se han clasificado con el instrumento DESDE-LTC.

Resultados: los resultados obtenidos incluyen:

1. La descripción y evaluación de los servicios prestados en salud mental de adultos
2. Una imagen de representación de los servicios de continuidad entre organizaciones comunitarias, nivel de atención primaria, nivel de atención secundaria y nivel de atención terciaria
3. Mejoras propuestas para el conjunto de servicios.

Conclusiones: las conclusiones extraídas de la identificación y la descripción de los servicios de las organizaciones comunitarias nos proporcionan instrumentos para

tender puentes de colaboración entre la atención de salud mental institucionalizada, los recursos comunitarios y las necesidades de la población.

Palabras clave: organizaciones comunitarias, Nunavik, salud mental, mapear

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Acronyms list

BSIC	Basic units of production of care
CISSS	Centre intégré de santé et de services sociaux
CIUSSS	Centre intégré universitaire de santé et de services sociaux
CLSC	Centre local de services communautaires
CMI	Common mental illness
CWB	Community well being index
DESDE-LTC	Description and evaluation of services and
ECCM	Expanded Chronic Care Model
FCNQ	Fédération des Coopératives du Nouveau-Québec
GP	General practitioner or doctor
HCU	Hébergement communautaire Ungava
INAC	Indian and Northern Affairs Canada
IPQ	Ilusiliriniqmi pigutjiutini qimirruniq
JBNQA	James Bay and Northern Quebec Agreement
KHSSC	Kativik Health and Social Services Council
KMHB	Kativik Municipal Housing Bureau
KRG	Kativik Regional Government
KRPF	Kativik regional police force
KSB	Kativik School Board
MTC	Main types of care
NRBHSS	Nunavik Regional Board of Health and Social Services
RCMP	Royal Canadian Mounted Police

RI	Ressources intermédiaires - Intermediary resource
RIUS	Réseau Universitaire Intégré de Santé
RTF	Ressources de type familial - Family type resource
SCM	Stepped Care Model
SHQ	Société Habitation du Québec
SMI	Severe mental illness

The mapping of organisations delivering mental health services in Nunavik, Ungava Bay Area

Introduction

Nunavik, a region in the Northern part of Canada, is inhabited mainly by an indigenous population, the Inuit. Many studies carried out in Nunavik have shown that the mental health care structure is overwhelmed by the unmet needs of the Inuit population (Nunavik Regional Board of Health and Social Services, 2007; Santé Québec, 1992). Many reasons explain that situation. Some studies (Lessard, 2015; Kirmayer et al., 2000) have stressed that for the Inuit people the mental health system is often perceived as too medicalized and too far from their way of treating mental illness (Lessard et al., 2008, RRSSSN, 2003; Cooney et al., 2000).

The Inuit population are looking for more involvement of the community, family, relatives and peers in the healing process (Pauktuutit, 2006; Kirmayer et al., 1993, 1997; Dussault et al., 1996). Boksa, Jooper and Kirmayer (2015) have summarized those difficulties encountered by the population when relating to the mental health care system:

“There is a dearth of trained mental health workers of Aboriginal origin and a high turnover of non-Aboriginal health workers leading to a lack of continuity of services, a lack of connection to specialized services for persons with severe mental illness or

excessively long wait lists. Stigma and discrimination remain as major barriers to accessing mental health services. In mainly non-Aboriginal mental health settings, the values and traditions of Aboriginal persons may be poorly understood and their concepts of wellness and ways of knowing undervalued. Thus, services may be inadequate or inappropriate owing to a lack of culturally competent and knowledgeable mental health care providers.”

The Inuit population are not using the existing institutional mental health services or are using them only as a last resort (Nunavik Regional Board of Health and Social Services, 2007). In fact, mental health services are not adapted to the population’s needs.

A few years ago, in order to solve that discrepancy, decision makers at the Nunavik Regional Board of Health and Social Services (NRBHSS) and at the two regional hospitals were questioning the way they were delivering the mental health services to the Inuit population (Nunavik Regional Board of Health and Social Services, 2003; Tremblay et al., 1995; Evaluation directorate health Canada and Public Health Agency of Canada, 2013; Streit, 2004; Beaudoin et al., 2005).

In 2009, the Health Board, Inuulitsivik and Ungava Tulattavik health centres have launched the clinical project, Ilusiliriniqmi pigutjiutini qimirruniq (IPQ), to find new ways to deliver and adapt services that meet the Inuit population needs and priorities. Three broad objectives have been given to the project:

1. Strengthen or develop services identified as regional priorities by the partners;
2. Strengthen partnerships between local and regional organisations because social and health problems are complex and need to be addressed collectively;

3. Change the way the health and social services are planned in the region so that Inuit input and leadership are at the center of the designing and decision making process.

The existing community organisations are perceived as a new way to reach the population because they understand their concern, break the loneliness of people having psychological distress (Mann et al, 2017) and give them the appropriate mental health care. To develop the psychological resiliency as defined by Panter-Brick which means 'a process to harness resources in order to sustain well being' (Southwick, Panter-Brick et al., 2014), the concept beneath that approach is the social capital. That concept is defined as:

'The characteristics of the social organization such as networks, norms and social trust that facilitate coordination and cooperation for mutual benefit' (Putnam,1995).

The main components of the social capital are:

1. the bonding, which means strong supportive ties which occurs within a group;
2. the bridging, which means opportunities for people and groups in a community to get together to share information, experiences;
3. the linking, which means facilitating people to get together, exchanging ideas, discussing issues.

Those components are underlined to improve the health and the mental health among the Inuit population in their communities.

To implement the three broad objectives contained in the IPQ program through the community-based approach (Thornicroft, Tansella, 2004), decision makers need to have a comprehensive understanding about all the mental health services and mental health well being supported and delivered in each village. They need to figure out about the relationship between those services and the support provided, if any, with the health local centre and the regional hospital centre.

We decided to carry out the current study to put together the available information.

In Nunavik, a complete mapping that includes hospital, local health centre and the formal and informal community organisations (WHO, 2003) that are delivering basic or more advanced mental health care and mental health care support services in each Ungava coast village has never been done.

Through a systematic listing and description of the mental health resources available, we hope our research project can help the decision makers to have a better grasp of the existing community resources.

Those services can be mobilized to meet the unmet needs of the Inuit population either at the local level or at the regional level. In the scientific literature review we explain how the social capital operates on the mental well being.

This research is the first comprehensive mapping the different kinds of services delivered by different institutional and non-institutional organisations.

In the first section, we describe the innovative aspects of our study. The second section is a short scientific literature review discussing the underlying concept related with the organization mapping and mental health. In the third to fifth sections we describe the setting, the study design, the method and the study constraints we have faced while doing our research and their impact on our methodology and expected results. In the sixth section, we present the catchment area, socio demographic characteristics, health and mental health population status, and the unmet population needs regarding the mental health distress. In the seventh and following sections we present the formal service organization and the mapping of the different organisations related with the mental health promotion and prevention in each village located along the Ungava Bay Coast. In the ninth section, we present and discuss our findings and how those findings can be used to improve the mental health services provided to the population.

Chapter 1

State of the art and innovative aspects of the study

Canada is the second largest country in the world. It is bordered by the Pacific Ocean (west coast), the Atlantic Ocean (east coast), the Arctic Ocean (far north) and the United States of America (south border) (Fig. 1).



Figure 1. Map of Canada and Canadian provinces

In 2011, the Canadian population was 34 million. Most of the population (75%) is concentrated along the United States border. People live mostly (81%) in urban areas, compared to 19% in rural and remote areas (Statistics Canada, 2011 Census of

Population. Population, urban and rural, by province and territory (Canada)).

The majority of the Aboriginal people (First Nations, Inuit and Metis) are living either in rural areas, remote communities, Indian reserves or in urban areas mostly in impoverished areas. The Aboriginal represent 4.3% of the Canadian population. The Inuit represent about 5% of all Aboriginals in Canada. Most of them (43,455 Inuit) are living in four Northern areas, Inuvialuit (3,310 Inuit), Nunavut (27,070 Inuit), Nunavik (10,750), Nunatsiavut (2,325 Inuit) (Fig. 2). There are also around 7,095 Inuit living in Canada's cities.

There are huge differences between the Aboriginal group and the Canadian population, when comparing population estimates, age distribution, and median age (Statistics Canada 2011; 2015). The Aboriginal group the Inuit living in Nunavik (province of Quebec) and the Nunavut have socio demographic specificities that differentiate them from First Nations and Metis (Table 1).

Nunavik and Nunavut Inuit median age are the youngest one among the Aboriginal groups and the Canadian population. The Nunavik area is the one with the highest age group between 0 to 24 years old. It has the lowest age group of 65 years old and over among the Aboriginal groups. Among the Aboriginal the Nunavik inhabitants are using predominantly the inuktituk. 99% of the Nunavik Inuit population use that language in their daily life. It is part of their community life and identity.. Compare with the others Aboriginal groups the inuktituk in Nunavik is alive and present everywhere.

Table 1. Population estimates¹, age distribution , median age, ability to converse in Aboriginal language as of July 1, 2015, Canada, and Inuit areas. Data are in percentage

Age groups and median age	Nunatsiavut	Nunavik	Nunavut	Inuvialuit region	First Nations	Metis	Canada
0 to 24 years	43,9	58,4	47,7	48,4	48,8	40,8	28,77
25 to 64 years	50,3	39,0	39,5	46,4	45,7	52,6	48,87
65 years and over	5,8	2,7	3,3	6,0	5,5	6,6	16,1
Median age	29	21	21	26	26	31	40
Ability to converse in Aboriginal language(1)	25	99	89	20	22.4	2.5	

Source: Statistics Canada, 2011, Statistics Canada 2013, Statistics Canada 2015

Note 1: First Nations people refer to registered or treaty Indian, living on reserve, living off reserve.



Figure 2. The Inuit regions

1.1 Canadian Hospital System

Canada is a federation. Powers are split between the federal government and the provinces and the territories. In Canada, the health system and the health care system responsibilities between the federal government and the 10 provinces and the 3 territories have evolved along the Constitution, the Supreme court decisions and the federal spending power.

The federal government has responsibility over:

1. ensuring access to health care to First Nations living on reserves, Inuit, Canadian Armed Forces, RCMP;
2. regulating safety and efficacy drugs and medical devices through setting and administering national standards;
3. health promotion;
4. health research through funding;
5. financial support of provincial health care systems.

The provinces and the territories have the primary responsibility under the constitution to fund and administer the health care. They provide hospital coverage and physician service to their population. The Canadian health care system is mostly public financed, with 70% of health expenditures financed through the general tax revenues coming from the federal, provincial and territories governments. Even as a decentralized health system, the federal government through its health funding has established standards that must be implemented by the provinces and the territories in order for them to receive their funding.

Those standards are the following:

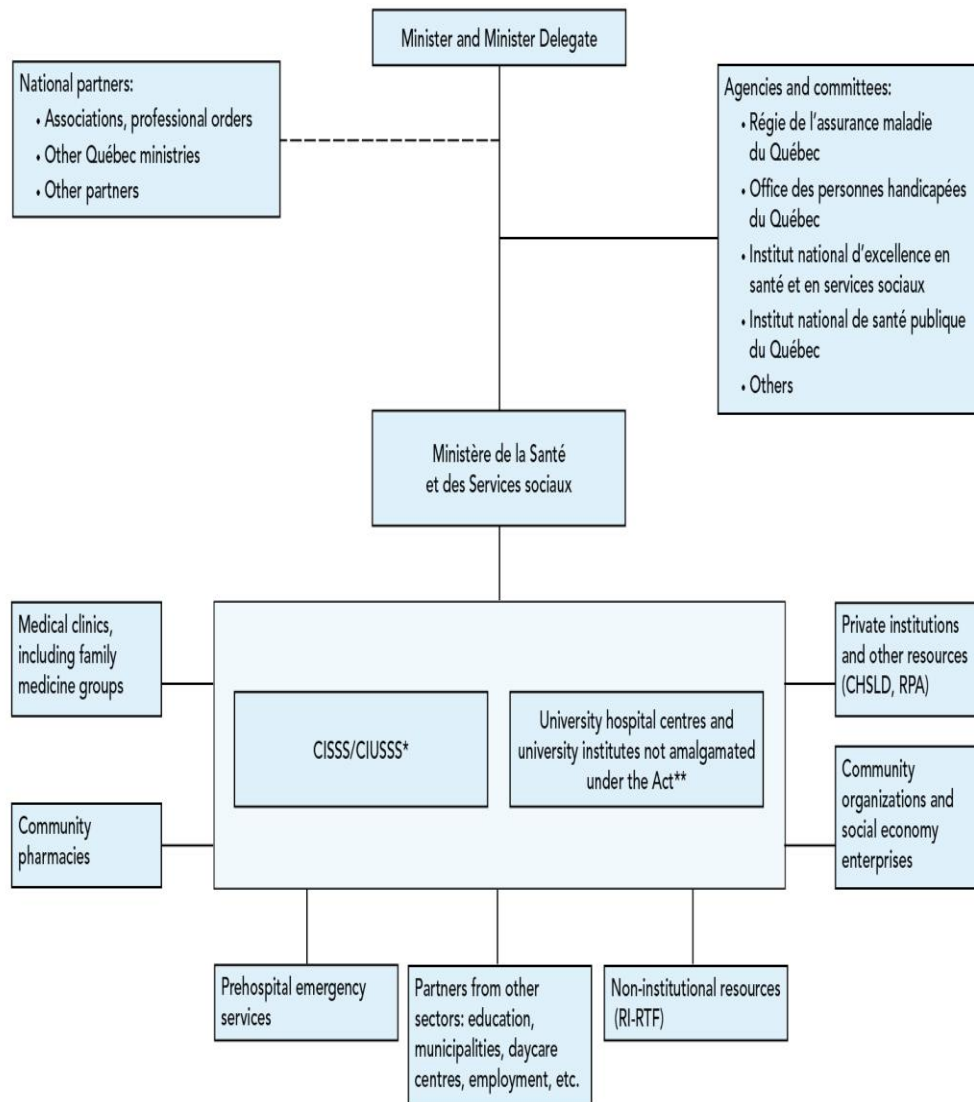
1. **Public administration:** At the provincial and territorial level the health system must be operated on a non-profit basis by the public administration;
2. **Comprehensiveness:** The health services must be provided by either hospitals and physicians. The province and the territory decide which medical services are necessary to meet the health care insurance purposes. If the service is considered medically necessary then the full service cost is covered by the public health care insurance plan.
3. **Universality:** All provincial and territory plans must cover their residents.
4. **Portability:** Provincial and territorial residents are covered when travelling inside Canada. They have a partial coverage when going outside the country. Certain conditions apply when a resident is moving to another province or territory.
5. **Accessibility:** The provincial and territorial insurance plan must provide to all residents a reasonable access to medical service. Each province and territory have their own governance, organisation and delivery of health services and mental health services. Like the other provinces and territories of Canada the province of Quebec, where the Nunavik region is situated, has a decentralized health system.

1.2 Quebec Health System

In 2015, a new governance and organisation system has been implemented in the province of Quebec. That system is built around the ministry, and the integrated health and social services centres or integrated university health and social services centres. Included in the new reorganisation, the ministry implemented an approach based on a territorial integration of the different health and social services institutions. The purpose is to design a services' network based on the proximity and the continuity of the services. Among the services' network there are many partners: medical clinics, social economy enterprises, community pharmacies, non institutional resources, partners coming from schools, municipalities, daycares, employment center and so on. The community groups are part of that services' network. For the purpose of our research project it is interesting to take a look at the definition of the community organisations. In the government perspective, to be recognized as partners in the Health and Social Services System community organisations must be subsidized. Their main roles are:

1. advocacy of the user's rights;
2. prevention and support services;
3. health and living conditions promotion;
4. implementation of innovative approaches to specific groups of users
(Gouvernement du Québec, 2016)

Structure of the Health and Social Services System



Source: Santé et Services sociaux Québec, July 2017.

The ministry has centralized some responsibilities done before by the regional health authorities and transferred some to the new entity, the integrated health and social services centres.

The main ministry's responsibilities are to:

1. regulate and coordinate the health and social system;
2. define health and social policies, standardized organisational resource management in the system;
3. monitor population health, promote health and well being;
4. oversee presence of coordination mechanisms between services of the sanitary region;
5. allocate resources among the regional agencies;
6. be responsible to oversee the health and social services systems performance.

The main responsibilities of the Integrated centres are to:

1. implement a network management built around the population needs (population based responsibility);
2. plan and coordinate services in accordance with the ministry policies, populations needs and territory specificities;
3. in the territory managed by the integrated centre, coordination of services provided by the different partners participating in the health and social services systems (comprehensive treatment and services close to the living environment);

4. reach service agreements with other integrated centres and/or at the regional level to meet the population health and social services needs (service hierarchy to facilitate the continuum of services between the front line, the secondary and tertiary services);
5. provide funding to community organisations and private service partners.
(Santé et Services sociaux Québec, 2017)

1.3 Nunavik Health System

In Nunavik, until the James Bay and Northern Quebec Agreement (JBNQA), the Health Canada's Medical Services Branch was operating nursing services. The Inuit were managed by the Canadian government. With the JBNQA, signed in 1975, the health and social services were transferred to a new entity, the Kativik Health and Social Services Council (KHSSC). That organisation was governed by the Act respecting Health Services and Social Services and all other laws of general application in the province (James Bay and Northern Quebec Agreement, 1976, p.260). The KHSSC is under the administration of the Kativik Regional Government (KRG). Nunavik has been divided in two sectors, Hudson Bay and Ungava Bay. In the agreement, each sector should have:

1. local community service centers;
2. hospital centers;
3. social service centers;
4. reception centers.

In 1990, the Quebec government implemented a wide health and social services decentralization. It transferred to 17 regional boards the administration of the health

and social services. Under the James Bay and Northern Quebec Agreement, the Nunavik was not affected by that reorganisation. After consultation with the government of Quebec, Makivik and Kativik Regional Government have decided to participate in the new structure (Health Transition Fund, 2000). Doing so, the Nunavik Regional Board of Health and Social Services has gained independence from KRG.

As previously mentioned, the Health ministry implemented in 2015 a new governance and organisation system. The NRBHSS main responsibilities are basically the same, however they must still implement the Health ministry policies. On top of that, since its inception the NRBHSS has adopted a mission that respects the values and the particularities of the Inuit people. When they implement the Ministry's policy, the NRBHSS put an emphasis on the Inuit values.

1.4 Quebec Mental Health Organisation

The Health Ministry has, in its mental health policy, *La Force des Liens* (Ministère de la Santé et des Services sociaux du Québec, 2011) and the latest one, *Working together and differently* (Ministère de la Santé et des Services sociaux, 2015; Menear, 2016), implemented a mental health care model based on the Expanded Chronic Care Model (ECCM). That model is used in many provinces in Canada and it is built around several aspects (Barr et al.,2003):

1. The community. Partnership is developed between mental health professionals and community organisations that can support and help people having mental health problems;

2. Health system. Implementing a program with specific goals and tools aimed at providing care to people with mental health problems;
3. Self management support. The patient plays the central role in the management of his/her illness;
4. Decision support. The daily clinical practice integrates existing evidence based research;
5. Delivery system design. Emphasis is on teamwork. Professionals are working in an interdisciplinary environment;
6. Clinical information system. Information system that gathers data on population at risk.

In Quebec that system is complemented with the Stepped Care Model (SCM). The SCM organizes, in an explicit formalization and monitoring, patient services provision offered by carers and healthcare professionals. It identifies which level of services offers the most effective interventions. The first step in the Stepped Care Model is referring to the least intrusive treatment such as self help, limited input from health professional (British Psychological Society, 2010, Gouvernement du Québec, 2011). That system has been coupled, in the Quebec mental health plan, with the implementation of the Consultation liaison model. In that model, a one stop service (single point of entry in the health system) for mental health services has been created (Fleury et al, 2016).

1.5 Nunavik Mental Health Organisation

1.5.1 Integrated institutional macro and meso levels organisations and communities' organisations in the regional mental health service continuum

At the **macro level** specialized psychiatric care is offered by McGill University's Réseau Universitaire Intégré de Santé (RIUS). Through the RIUS one psychiatrist is coming once a month at UTHC to meet the clients, sometimes she goes to the villages. In 2015-2016 the psychiatrist has met 255 patients. Those patients can be either newly referred patients by the hospital doctors or patients being followed-up. Data are not available from the previous years.

If people suffer from a severe mental disorder they are sent down south to Montreal and hospitalized at Douglas Mental Health University Institute.

At the **meso level**, the Ungava Tulattavik Health Centre (UTHC) assumes the mission of general and specialized care hospital for the population living along the Ungava Bay coast. UTHC has 15 beds, and one bed is reserved for people having severe mental illness (SMI).

No dedicated adult mental health teams were organized at UHTC, at the time the report was being prepared. There is, since one year ago, a mental health nurse position, but that position is very difficult to fill. The turnover is very high and the case load is too demanding for just one nurse.

UTHC has a case manager and an adult psychologist available for people having

common and severe mental illness. The physician at the emergency room is responsible to evaluate people showing up with mental or psychological distress. No doctor is specialized in mental illness.

The other regional hospital located on the Hudson Bay Coast, Inuulitsivik Health Centre, has two (2) institutional resources serving the regional mental health users:

- a. Reintegration center located in Inukjuak;
- b. Aaniavituqarq (Crisis Center) located in Puvirnituk.

Those resources are complementing both hospitals mental health services (Inuulitsivik and UTHC) by relieving pressure on the medical staff and facilitating the client's discharge.

The Reintegration center provides services to an adult regional population with severe mental health problems and/or intellectual disabilities. The delivered services focus on developing people skills to reintegrate their family and their community. The services are culturally oriented, and include respite for families who are overburdened by the person with SMI they take care of. That facility has 9 beds and one room is used as an isolation room.

Aaniavituqarq delivers services to individuals not requiring intensive psychiatric treatment. However, those individuals cannot move freely in the community. They have either:

- a. severe behaviour problems;
- b. non-compliance with their medications;
- c. dangerousness for themselves or others.

Aaniavituqarq has 6 beds plus an isolation room.

As already mentioned those two institutions are integrated in the institutionalized provincial health system. There are two regional community organisations offering residential services for people having SMI:

- a. Hébergement communautaire Ungava;
- b. Hébergement communautaire Uvatinutt.

Hébergement communautaire Ungava (HCU) is located in Kuujjuaq. It provides housing to people having mental health problems. The mission is to help the residents to gain their autonomy, and to promote their social reintegration in their communities.

Through the residents' involvement in community activities HCU is promoting:

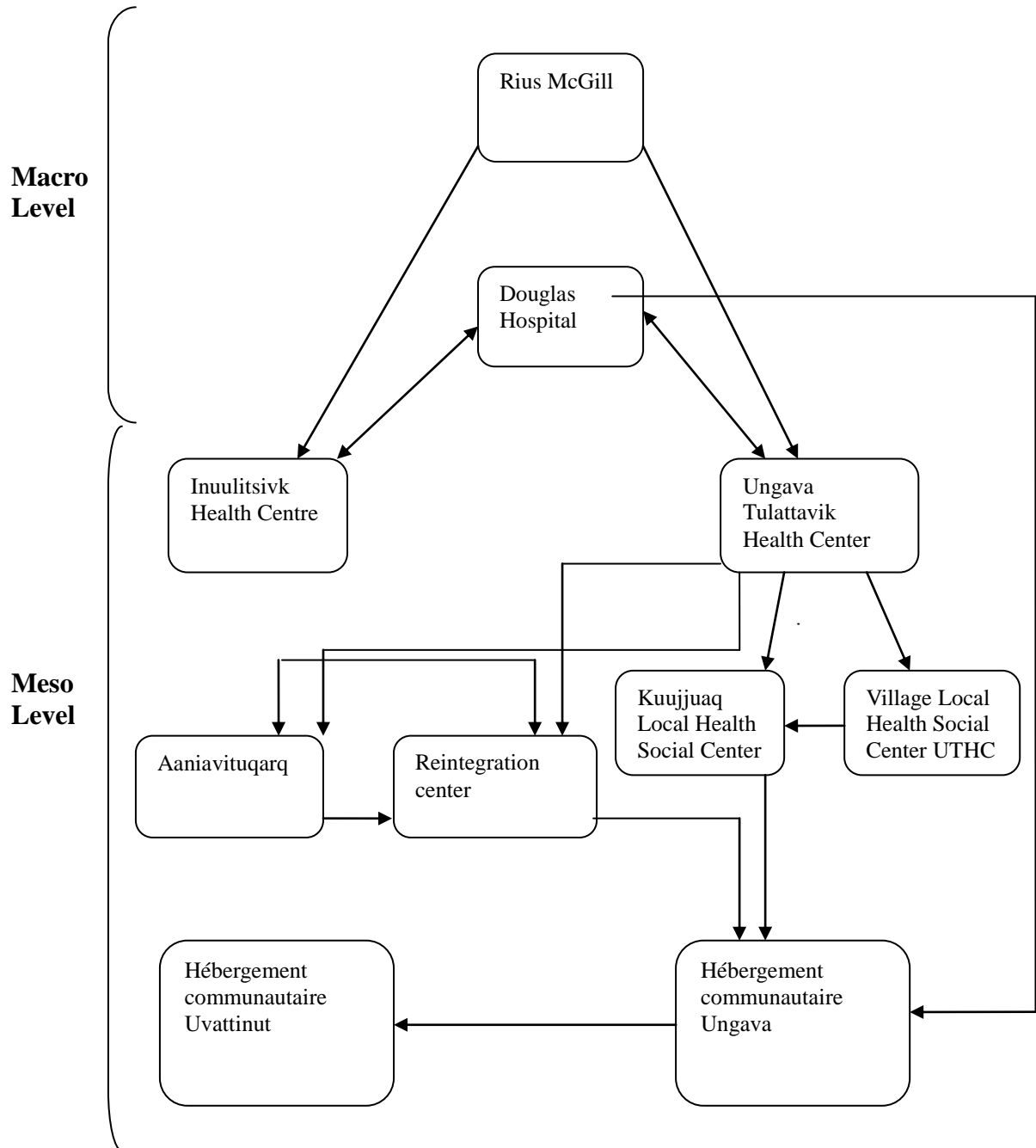
1. population awareness about mental illness;
2. fighting stigmatization among the population;
3. promoting the integration of the people having mental problems in the community;
4. advocacy role in the community and at the regional level.

Hébergement communautaire Uvattinut is located in Puvirnituk. This organization is a social housing project with a mission: to provide permanent housing for Inuit with

mental health problems and to give residents the opportunity to develop a variety of skills through participation in their housing program.

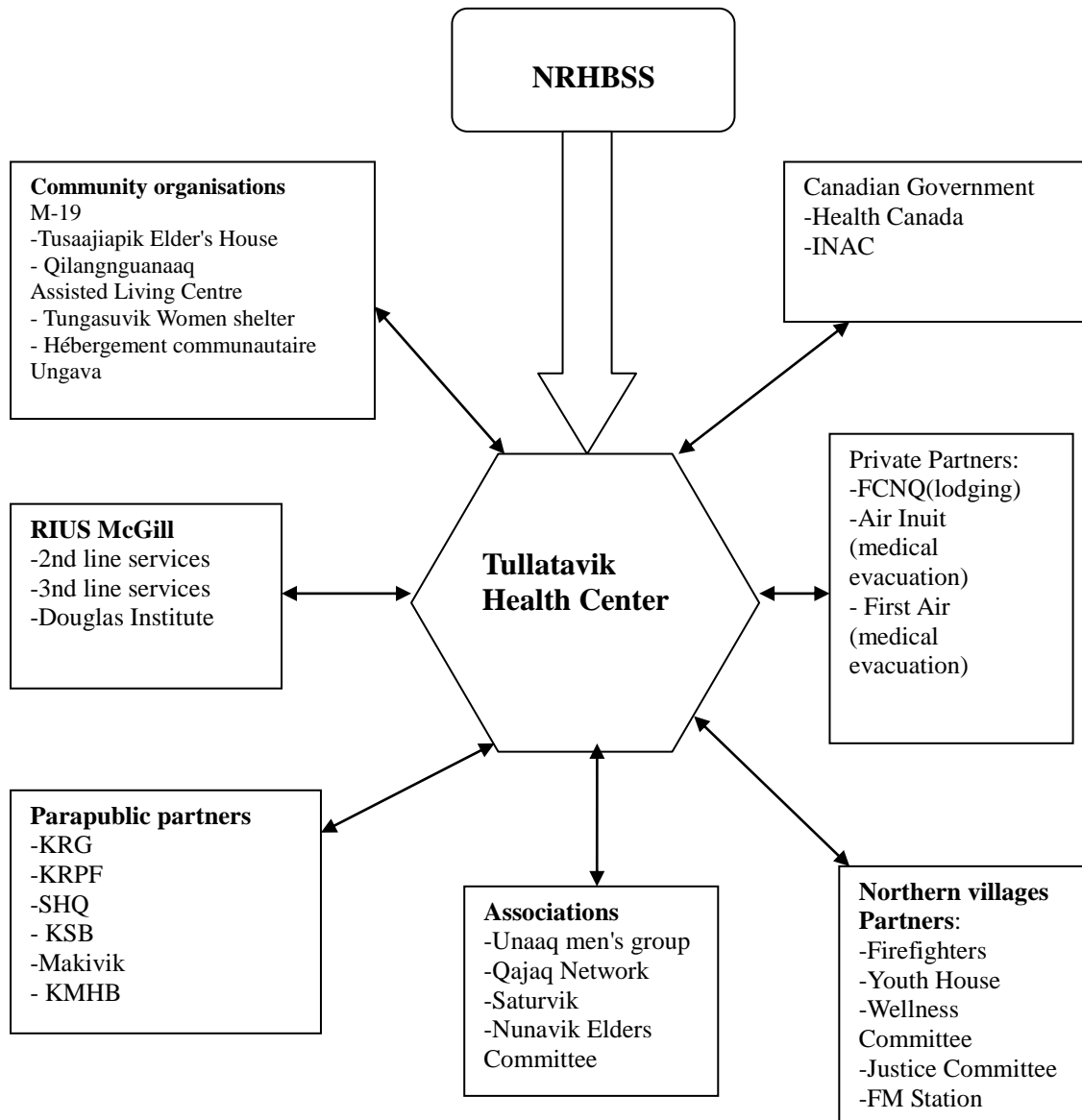
The institutional and nongovernmental mental health service continuum at the macro and meso level is organized around specific stakeholders. The service continuum mapping at the macro and meso level looks straightforward. In fact, that system capacity is overloaded. There are not enough rooms or apartments in those institutional and non-governmental organisations to fill up the SMI needs.

Macro and Meso Residential Mapping of the mental health service continuum



According to the UTHC stakeholders, (see UTHC stakeholders' architecture) UTHC architecture is dealing, offering, maintaining and using services to many stakeholders spread in all the villages along the Ungava Bay coast. But when we aligned that architecture with the actual operational reality, the communities' organisations as stakeholders were not included in the local medicalized approach (each Ungava coast village). More specifically, at the local level, UTHC has no record of any organisations or associations they could be dealing with to complement CLSC mental health intervention. At best, there are some informal relations existing between some regional organisations and the mental health professionals. But at the local level there are no operational links between UTHC professionals and the local community organisations and associations.

Ungava Local Health Network Architecture



Chapter 2

Scientific literature review

In the Inuit culture the community and the social networks have always been the way to solve physical, emotional, social and psychological problems. (...) With the arrival of the Welfare State, southern institutions have slowly been taking over some of the traditional ways of sharing, helping each other, and resolving social conflicts (...).

But those institutions have not taken over the Inuit way of life. There are many organisations, associations, and committees that play an important role maintaining alive the community social capital.

The mapping of the mental health services on the Ungava Bay Coast and its relationship with the mental wellness is related with the social capital concept. That concept explains the purpose of our research.

In this scientific literature review we, succinctly, are putting emphasis on the definition of social capital, its meaning and how that concept operates as community protective factors for mental wellbeing. We, then, in the scientific literature review emphasize how that concept is operationalized through the collective efficacy and the inummarik concept, a concept used in the Inuit society.

According to Lin, one of the main theorists of social capital with Putman and Coleman, the social capital consists in the 'resources embedded in a social structure which are accessed and/or mobilized in purposive actions.' (Lin,1999).

According to that definition the social capital is a relational stratifier but does not exclude conflicts that can arise between the community members.

For Coleman (Kemenade, 2002) the social capital is a by-product of social networks and social support systems.

Putman (1995) decomposes the social capital in three interrelated main components:

- a. social networks;
- b. norms of reciprocity;
- c. trustworthiness

He defines two subtypes of social capital:

- a. bonding;
- b. bridging

Bonding capital enhances the reciprocity and the solidarity inside the group. The bridging capital refers to the individual's social network an individual has. It is composed of people sharing socio demographic and socio economic characteristics. Those two mechanisms, bonding and bridging, operate at different levels when addressing the mental health issues. They are used to explain how the informal organization network act as contributors of psychosocial processes promoting

affective support and mutual respect among people. They operate as 'motivators of behavioural change, solidarity, and/or social support.

Hawkins et al. (2009) referring to Lin emphasize that even if the bonding represents the strongest connection between individuals, like family ties, the bridging capital, even if the connections are weaker, produce a more valuable by products. Through the information exchange process the individual has access to different kinds of information forwarded by the people encountered in the group (associations, committees, and so on). That process supplies the social support and the social influence that is used to promote and prevent psychological distress.

To illustrate that point, Shidhaye et al. (2017), in a research about delivering information and services for depressive individuals in rural India have concluded that ``(...) the community engagement approach increases support for clients with depression compared with the traditional depression improvement programmes for treatment and symptoms alone.`` (Shidhaye et al., 2017).

Nakayama et al. (2014) have found out that 'people who met with strangers (not family members or friends) more often were more likely to have better mental health.' That kind of social network can suggest 'that such bridging ties might be useful for accessing new and different forms of information, leading to improvement in individuals' problem-solving ability' (Nakayama et al., 2014).

Referring to a research done in 1999, McKenzie et al. report that 'close-knit communities (...) are not necessarily 'healthy', particularly for outsiders. A dominance

of high-bonding horizontal social capital at the expense of vertical integration may be pathological in consequence.' (McKenzie et al., 2002).

Da Silva et al. (2005), in a systematic review of quantitative studies that have investigated the association between social capital and mental illness, have concluded that 'a strong evidence was found for an inverse association between cognitive social capital and common mental disorders' (Da Silva et al., 2005).

Truong and Ma (2006), in a systematic review of 27 studies over 29 have found out a statistically significant association between at least one measure of neighborhoods factors and mental health. The neighborhood is defined as a 'physical space, shared social norms and expectations, social networks, and institutional structures (...)' (Freedman, 2013).

Gray and al. (2016) have found that at the community level suicidal ideation was lower where food was processed and shared. The researchers explain that finding by stressing that in those communities sharing and reciprocity are greater. That may 'reflect the presence of extensive community networks through which sharing occurs, the availability of positive role models (...)'. (Gray et al., 2016). That specific protective factor and the contact with the elders are considered by the Inuit communities as two culturally relevant Inuit health indicators (Pauktuutit Inuit Women of Canada et al., 2012).

Another study about the youth (16 years to 35 years old) in Nunavik (Gray, 2014) has concluded, using multivariate models, that community positive interaction is the

strongest community level protective factor.

That finding corroborates another study (Paul, 2007) showing that having a very good relationship with the community is associated with a lower level of distress amongst males and females aged between 25- 44. In his research, Paul (2007) found out another community protective factor, church attendance. That factor, associated with lowering the level of distress, is more present in males aged 45 and over.

Those studies explain the result of the social capital and its main characteristics as such bonding and bridging at the community level. But social capital alone does not describe the modus operandi process. According to Ansari (2013) the collective efficacy is the process that operationalizes the social capital present at the community level. 'The essence of collective efficacy is that residents will have willingness to intervene for the common good if they share mutual trust and solidarity' (Ansari, 2013, p.82). That willingness for the common goods can be expressed through different forms of informal social control process. It can be based on neighborhood sharing a socioeconomic status, and neighborhood deciding to take control of their social environment.

In the Inuit society, the informal social control process takes many forms. Among them organisations and committees play an important role. In the Nunavik Inuit Health Survey (2004), it is reported that overall, 25% of the Nunavik population have participated in activities to do work for the community, 30% in games, sports or recreational activities, and around 30% in healing or wellness activities. Compared with the Quebec population there is a significant gap. In the Portrait Statistique de la

Santé Mentale des Québécois, only 7% of the population have used community organisations services to get some help or mental health support (2015, p.125).

According to Viscogliosi et al. (2017), the social participation of elders is important in the community life. The elders as individuals and as active participants in organisations and committees can be useful in the promotion and the prevention in communities (Viscogliosi et al. 2017).

The role of Inuit elders, inummarik in inuktituk, in the community and in the community organisations is not related to the age. When considered and perceived as an inummarik the person will be expected to sit on different committees. 'Inummaritt (...) serve on committees not merely for the money but because of a genuine concern for the welfare of the community (Collings, 2014, p.45). They are perceived as having reached a certain level of wisdom that they are willing to share with the community. An inummarik is someone 'who understands his or her place within the community and the environment and behaves in a manner that maintains a proper balance between them (Collings, 2014, p.380). That concept of inummarik comes from the Inuit ideas and values related to the 'experienced hunters and knowledgeable persons' (Laugrand et al. 2009, p.124). Today, as an example, members of the Rangers, one of the organisation we have identified, are perceived by the communities as inummaritt because they are experienced hunters and knowledgeable persons (Laugrand et al. 2009, p.124)

Considering the social position and the role of the inummarik in the community and in the community organisations, that person can play a crucial role in the promotion and

the prevention of mental health.

Chapter 3

Methodology

3.1 Settings

Our research project was carried out in the Nunavik area, the northern part of the province of Quebec in Canada. There are two regional hospitals in this area. We have selected the area where the Ungava Tulattavik Health Centre (UTHC) is located. This hospital is located in Kuujuaq.

Kuujuaq is considered as the regional centre for the Nunavik. All the main regional public organisations are located there (Kativik Regional Government, Kativik Municipal Housing Bureau, Kativik School Board, Nunavik Regional Board of Health and Social Services). It serves a regional population of 5,820 inhabitants spread across seven villages along the Ungava Bay. These villages are only reachable by plane.

3.2 Study design and objectives

The study design consists in a mapping of services.

Our main objective is to provide a comprehensive and systematic listing and description of:

1. institutionalized service provision in mental health care;

2. non-profit organisations delivering services in mental health;
3. associations offering structural and functional support to the well being of individuals and to their community.

To describe the mental health services' system we use a common codes system, a glossary of terms and standardised instruments to describe the different mental health services available at the meso and micro level. We are using the Strahdee and Thornicroft community mental health services definition.

The study was carried out on the Ungava Bay coast area between March 2017 and July 2017. The service provision includes all those services providing health and social care delivered or offered to the population aged at least 18 years old.

The information about the organisations delivering mental health services is spread along many institutional and non-institutional sources. We have contacted Nunavik institutional regional and local organisations: Kativik Regional Government; Makivik; the Northern Village in each community; NRBHSS Public Health Agents and Planning and Programming Agents; The Youth Houses Association in each Community; the Local Recreation departments; The wellness program coordinator in each community; the Regional recreation Departments (under KRG); Kativik Municipal Housing Bureau; Kativik School Board Youth & Adult programs; Rangers & Jr. Rangers; Local Police and Quebec Provincial Police; Local Churches and Missions.

3.3 Methods/Procedures

By identifying and describing the community organisations services, our findings will provide instruments to build collaborative bridges between the institutionalized mental health care, the community resources, and the population needs.

Doing so, we can envision that the decision makers from institutionalized mental health care will use that information to question:

1. how the services are operating now;
2. how the hospital and the mental health services can be more present in each community;
3. how the hospital can operationalize a community based approach.

The objectives and expected achievements of the present research project were the following:

5. Mapping organisations delivering mental health care and mental health care support to people at least 18 years old on the Nunavik Ungava coast
6. Mapping the services available from those organisations
7. Mapping the availability of those services in each village
8. Mapping the institutional alliance between those organisations and the regional hospital setting.

The outcomes we want to achieve are to:

1. Provide a list of services delivered and accessible in adult mental health
2. Provide an appraisal description of services delivered in adult mental health
3. Provide a mapping picture of the continuum of services between community organisations, primary care level, secondary care level, and tertiary care level
4. Propose improvements in the continuum of services
5. Provide a mapping picture of the formal organization and association participating in increasing the population mental wellness.

3.4 Instruments

We are using the DESDE-LTC to map and to gather specific information on the mental health care services available in the study area.

The information that can be gathered is organized along the general context of each service that have been identified, its ecological setting, service distribution and service utilization. More specifically four types of information are used:

- service basic information;
- location and geographical information about the service;
- information and contacts;
- service data.

It gives us a complete and detailed description of the structure of health care and social services delivered to people having mental problems in the study area. It also

includes the specialized services located outside the catchment area that provide services to the residents in the area.

In the DESDE-LTC the mental health services are identified by the Basic units of production of care (BSIC). That is the minimal unit of production of care for delivering mental health care to a group of users in a specific location. Those units are defined by their organizational stability, target patients, staff, administrative autonomy. The Main Types of Care (MTC) is the specific service identification code of the BSIC. They are classified into 89 specific Main Types of Care (MTC) or specific service codes. MTC is the main descriptor of the care function. Those MTC are under six main areas of services:

1. Information for care which means facilities whose main aim is to provide users from the defined target group with information and/or an assessment of their needs;
2. Accessibility to care which means facilities whose main aim is to facilitate accessibility to care for users with long term care needs;
3. Self help and voluntary care which means facilities which provide for users support, self help or contact with unpaid staff, that offer accessibility, information, outpatient, day and residential care;
4. Outpatient care which means facilities which involve contact between staff and users for some purpose related to management of their condition and its associated clinical and social difficulties, that are not provided as a part of residential or day care delivery and structured activity services;
5. Day care which means facilities which are normally available to several

users at a time, providing a structured activity, or social contact and/or support, and expect service users to stay at the facilities beyond the periods during which they have face to face contact with staff;

6. Residential care which means facilities which provide beds overnight for users for a purpose related to the clinical and social management of their health condition.

The system (DESDE-LTC) and its instruments have been used in over 13 countries. It uses a tree system for the classification of services in a catchment area according to the main care structure, activity and level of availability. The DESDE-LTC instrument provides detailed descriptions of the coding and characteristics of services from all relevant sectors (health, social, education, employment, housing and justice), including their utilisation and staffing (Salvador-Carulla et al., 2015).

This matrix arranges the indicators of the mental health system according to the Donabedian model of the production of health care (inputs, throughputs and outputs) at three levels: macro (country, region); meso (health district, small health area); and micro (individual care). However, in the DESDE-LTC, instead of individual care, “services” are considered at the micro-level (Salvador-Carulla et al., 2015).

In our research project, we have focused on some specifics related with the service provision in the catchment area. The DESDE-LTC allows us to use parts which best suit our needs (Salvador-Carulla et al., 2011). We are concentrating our research on describing the catalogue of services available in the catchment area and the types of care available (Salvador-Carulla et al., 2015).

The DESDE-LTC Service Inventory is used to get a detailed description of the local services listing available at the micro level. In that inventory, we have focused on the elements that are available to us.

- a. Name of the service;
- b. Codes;
- c. Local definition of the service;
- d. Sector;
- e. Catchment area of service users.

The DESDE-LTC Care type mapping is used to get a comprehensive categorization of the organisations providing formal and informal services.

We have focused our attention on three mapping branches:

- a. Self Help and Volunteer Care Coding Branch;
- b. Residential Care Coding Branch;
- c. Outpatient Care Coding Branch.

The Self Help and Volunteer Care Coding Branch refer to facilities providing support, self help or contact. The professionals present in those facilities can be unpaid or paid staff. (Salvador-Carulla, 2013)

The Residential Care Coding Branch refers to facilities that provide beds overnight for people who need it to manage their clinical and social health condition.

The Outpatient Care Coding Branch refers to facilities where the staff has to manage

the clinical and social difficulties encountered by the user.

The level of analysis is divided in three levels, macro, meso and micro level.

The macro level refers to the province of Quebec. That level includes mental health services provided from outside the catchment area. In our research those services are restricted to the secondary and tertiary mental health services forwarded to the Inuit population. Those services are negotiated by the NRBHSS and follow the Quebec Health ministry directives.

The meso level is the catchment area. The mental health services at that level are located either at the regional hospital, and/or the health and social local centre in Kuujuaq. The non-profit organization delivering regional mental health services to the users aged between 18 years to 65 years old are included in the meso level.

The micro level is located at the local level. It refers to mental health services delivered by the local health centre, public organization, non-profit organisations offering mental health services including promotion and prevention.

The Strathdee and Thornicroft definition of community mental health services is used to define the organisations included in the DESDE-LTC. The definition of community mental health services is 'the network of services which offer continuing treatment, accommodation, occupation and social support and which together help people with mental health problems to regain their normal social roles' (Strathdee, Thornicroft, 1997).

Chapter 4

Results

4.1 Catchment Area

In 2011, the Nunavik population was 12,090. Its demographic weight compared to Quebec is 0.15%. The Nunavik covers a land area of 507,000 square km.

The catchment area of Ungava Tullatavik Health Centre covers an area of seven (7) villages not connected by road with the hospital. The only way to get access to the regional hospital is by plane.

The villages are: Kangiqsalujjuaq (population 874), Kangiqsujuaq (696), Kangirsuk (549), Kuujjuaq (2375), Kuujjuarapik (657), Quataq (376), Tasiujaq (303).

The unemployment rate in 2011 was 14.1% in Nunavik compared with 7.2% in Quebec.

4.1.1 Description of general characteristics of the area

The data are available only for the Nunavik area. That area includes the Hudson Bay Coast and Ungava Bay Coast. We are studying just the Ungava Bay Coast but, in

order to give a general description of the study area we are also using the Quebec province statistics.

Compared with the population of Quebec overall, the Inuit living in Nunavik face many challenges related with their physical health, mental health, social and economic conditions.

Food insecurity and housing are two important social determinants of health. In Nunavik, the cost of food in 2015-2016 was 48.3% higher than the rest of the province of Quebec (Robitaille, J., et al. 2016). The disposable income was in 2012, latest data available, lower in Nunavik than the rest of Quebec, \$22,764.00 in Nunavik and \$26,764.00 in the province of Quebec.

The housing is another important issue segregating Nunavik from the rest of Quebec. In 2011, in Nunavik, 26.1% dwellings are overcrowded compared to 1.3% to the province Quebec (Nunivatt, 2008).

Among the health gap we can noticed shorter life expectancy and higher infant mortality rates. Death by accidental injury is much higher in Nunavik (10.6%) than in the province of Quebec (3%). Death by suicide and self-inflicted injuries is 11.5% in Nunavik and 1.1% in Quebec.

There is a significant mental health gap when comparing Quebec population suicide ideation and Nunavik population. The suicide ideation during lifetime in the group between 15 years and older in the population of the province of Quebec have

decreased from 14.4% in 2002 to 12.4% in 2012 (Institut de la statistique du Québec, 2015). In 2004, 35% of the Nunavik population aged 15 years and older have had suicide ideation during their lifetime (Nunivatt, 2008).

The statistics show there is more doctors and nurses in Nunavik. But the percentage of people meeting, seeing or talking to a GP in Nunavik is lower than in Quebec. In 2012, 54% of Inuit aged 15 years and older reported having met a doctor. In Quebec, 74.2% of the population aged 12 years and older reported having met a doctor (Santé et Services sociaux, 2015).

In 2012, in Nunavik 37% of the population aged 15 years or older reported having excellent or good health (Statistics Canada, 2012). In 2009-2010, the proportion of Quebec population 12 years old reporting having excellent or good health was 60,2% (Santé et Services Sociaux Québec, 2012)

Nunavik sociodemographic characteristics

	Nunavik	Province of Quebec 2011
Disposable income per capita(2012)	22,764	26,764
Life expectancy (years)	65.9	80.8
Population (2011)	12,090	7,903,001
Population per km2	0,02	5,83
Population aged 65 years or over (%)	2,9	15,3
Population between 15 to 65 years (%)	62,7	69,1
Population between 30 to 65 years (%)	34,7	49,7
Population younger than 15 years (%)	34,3	15,6
Unemployment	14,1	7,2
Married or common law couple families	63,1	83,4
with no children at home	18,6	50,6
with children at home	81,4	49,4
1child	18,9	20,0
2 children	21,1	20,8
3 children or more	41,1	8,6
Single parent families	37,1	16,6
Female parent	72,7	76,0
1 child	42,1	61,1
2 children	31,6	29,3
3 or more children	27,6	9,6
Male parent	26,8	24,0
1 child	50,0	66,1
2 children	30,4	27,2
3 children	19,6	6,7
Dwellings (2011)		
Rented (%)	97,0	38,6
Owned (%)	3,0	61,2
Overcrowding dwellings (%)	26,1	1,3
Cause of death (2004-2008) per 10,000 persons		
All malignant tumor (cancer)	12,4	21,0
Cardiovascular disease	5,6	21,7
Respiratory disease	6,7	6,2
Accidental injury	10,6	3,0
Suicide and self inflicted injuries	11,5	1,1

Source: Nunivaat.org, 2015, Robichaud V., Duhaime G., 2015

4.1.2 Community well being index

The Strategic Research directorate Aboriginal Affaires and Northern Development Canada have published since 1981 the Community Well-Being index (CWB). It is used to measure the well-being of the indigenous communities in Canada. The CWB index combines data on income, education, housing and labor force activity, and ranges from 0 (lowest) to 100 (highest). From 1981 to 2011, the Inuit communities (14) in Nunavik have increased their wellbeing assessed with the CWB.

Nunavik Community Well Being compare with non Aboriginal communities

Year	Inuit communities Score	Non Aboriginal communities Score
1981	36	67
1991	57	71
1996	61	72
2001	59	73
2006	59	77
2011	62	79

(Aboriginal Affairs and Northern Development Canada, 2015)

4.1.3 Nunavik health state

In Nunavik there were, in 2011 (last data available), 37.1 general practitioners per 10,000 inhabitants. The rate in the province of Quebec is 10.5 per 10,000 inhabitants.

There were, in 2011, 119.6 nurses per 10,000 inhabitants, while the rate in the province of Quebec was 55.1.

Those numbers hide the difficulty to get access to medical services. Inuit may face

challenges in accessing health care system. None of the 7 villages have doctor access year-round. The village's local health centre is staffed by nurses. Once a month a physician spends one week in the village.

The life expectancy in 2009 at birth (total population) in Nunavik was 65,9 years compared with 80,8 in Quebec. Infant mortality in 2009 is 19,4 per 1,000 live births in Nunavik compare with 4,6 per 1,000 live births in Quebec. Between 2004-2008, suicide and self-inflicted injuries have been the cause of death of 11,5 persons per 10,000 persons compared with 1,1 in Quebec. That is the second most important cause of death following closely all malignant tumors (cancer), 12,4 per 10,000 persons compared with 21,0 in Quebec.

In 2006, 54% of the Nunaviummut population aged 15 or older reported to have seen or talked on the phone with a doctor (Tait, 2008). In 2012 that proportion was the same (Wallace, 2014).

The number of days of hospitalization following a diagnosis of mental disorder (using the ICM-9) in Nunavik have increased when we compare the years 1995 (543 days) and 2005 (1708 days) (Nunivatt, 2008), with 2005 the last year that data are available. The hospitalization rate per 10,000 persons was 70 in 1995, and 208 in 2005 (Nunivatt, 2008).

4.1.4 Prevalence of unmet needs

In the Qanuippitaa report psychological distress has been assessed using the Kessler

scale (Institut national de santé publique, 2008). The researchers, using a cut off score of 19 (high level of distress), have identified 13% of the population as possible cases of depression or other common mental disorder. In the same study it has been pointed out that, among the main respondent of the household, the diagnosis of depression by a doctor or a nurse was reported to be 2.4% (95% confidence intervals 1.6 – 3.3). Tranquilizers, antidepressants, and others psychiatric medication were taken by 1.5% of all household members surveyed.

In the Aboriginal Peoples Survey (APS) 2012, the Kessler distress scale (Anderson, 2015) has been used to estimate the psychological distress among the Inuit population, and 5% reported having been diagnosed with a mood disorder and 4% with an anxiety disorder (Anderson, 2015).

In that survey, the unmet health care needs have been associated with having an impact on mental distress. According to the adjusted probability, in the previous 12 months mental distress was greater among those having unmet care needs compared to those whose health needs had been responded (27% compared to 17%) (Anderson, 2015).

In both studies, Qanuippitaa and APS, the individual's perception of closeness with the family and the community has been associated with a lower average level of psychological distress.

In the 2004 study, almost 30% of adult Inuit respondents have answered that during the last 12 months they have participated in a healing and wellness activity (40% in a

church group, 27% in a healing circle, 25% in other healing activities).

Suicide ideation is another measure to evaluate mental distress. In the population, suicide ideation is associated with depression. Among the population aged 15 years and older, the lifetime rate of suicide ideation and attempts in Nunavik increased significantly between 1992 and 2004, with 23.9% of the population aged 15 years and older in 1992 and 35% in 2004 (Nunivatt, 2008).

In the 2004 survey there was a question asking about the source of help used by people having suicide ideation: 80% of those surveyed answered they would contact a friend followed by the family in 43%, then the doctor or a nurse (28%), an Inuit social worker (27.2%), and an elderly person (26.8%). Only 9.5% of those surveyed would seek help from a non-Inuit social worker.

In the 2012 study, the strength of family ties was a variable associated with mental distress. In that study, the researcher found that 'Inuit men who reported strong or very strong family ties were less likely to be in higher mental distress (17%), compared with those who reported moderate to weak family ties (23%). That is in line with the mental wellness definition that permeates the Inuit society: Mental wellness encompasses many things, including mental health, suicide prevention, mental illness, violence reduction, and prevention and treatment of addictions and substance abuse.

For the Inuit, mental wellness refers to physical, emotional, mental and spiritual wellness, as well as strong cultural identity (The First Nations & Inuit Mental Wellness Advisory Committee, 2007).

4.2 Findings

The gathering of our findings took place in seven (7) villages located along the Ungava Bay. We have identified 84 formal and informal regional (meso level) and local (micro level) organisations delivering mental health services or giving mental health support through different means. The latter is related to the social capital theory that point at community organisations as the cement of the community life, a mental health social determinants.

DESDE-LTC organisations coding on the Ungava Bay

	Aupaluk	Quaqtaq	Tasiu- juaq	Kangiq sujuaq	Kangiqusua Lujjuaq	Kangirsuk	Kuujjuaq	Total
S.1.1	3	1	3	3	2	3	4	19
S.2.1	6	5	4	8	6	6	10	45
O.1.1	1	1	1	1	1	1	1	7
O3.1							1	1
R2							1	1
R3.1.1					1		1	2
R9.1							1	1
R9.2							1	1
J	1	1	1	1	1	1	1	7
	11	8	9	13	11	11	21	84

4.3 DESDE-LTC coding description

The codes S.1.1 and S.2.1 in the DESCE-LTC refer to organisations offering self help or contact with unpaid professional (S.1) or paid professionals (S.2), offering and sharing information that can help people experiencing psychological distress. Those organisations are located and spread unevenly along the Ungava coast communities.

We identified them as informal organisations since they are not directly related to the health system and are not subsidized by the Health ministry or one of its agencies.

The code O.1.1 refers to the Outpatient care coding branch.

The O.3.1 refers to the emergency unit in the hospital. In that type of unit specific treatment and care are given to people having suicidal ideation, psychotic crisis, and major depression.

The code R2 refers to the Residential care coding branch.

The code R3.1.1 refers to a residential setting providing specific clinical care to a target population either aged, or having major cognitive problems.

The code R9.1 refers to facilities providing beds overnight for users having clinical and social issues related with mental health problems, drugs addiction and family violence.

The code R9.2 refers to a facility providing rehabilitation for people having SMI.

Hébergement communautaire Ungava - Ippigusugiursavik is a free standing regional organization providing beds and 24h/7 days staff. The staffing responsibilities include monitoring clinical and social care for the population. One of the organization's mandate is fighting stigmatization and advocating for more services for people having severe mental illness.

The J code refers to 'Justice care'. That code is used as an optional code. It is not included in the DESDE-LTC coding. But the DESDE-LTC allows it because it provides additional information on the service characteristics.

4.3.1 DESDE-LTC coding and description of the formal meso and micro levels of mental health service organisation

At the meso level we have UTHC. It is coded 0.3.1 and R 2. UTHC has an emergency unit providing care for people with mental problems requiring hospitalisation. The regional hospital is located in Kuujjuaq. The code R 2 means that UTHC has one secure unit with 24-hour physician cover. In case of acute crisis not manageable by the physicians, they have access to a psychiatrist on a 24-hour basis, a service provided through the RIUS Mc Gill (macro level). It is not coded in our mapping but we refer to it in our architecture of mental health services.

The code R3.1.1 refers to Tusaajiapik. It is a regional organization located in Kuujjuaq that mainly provides residential services to people having cognitive impairments or that are older than 65 years old.

In our mapping, the code R9.1 refers to two (2) regional organisations having those kinds of services, Isuarsivik Treatment Centre and Tungasuvvik Women's Shelter, both located in Kuujjuaq.

The J code refers to the Kativik Regional Police Force (KRPF) station located in each village. Until now the local health and social services are using the police station jail

as a room to control people having severe mental health problems (suicidal ideation, psychotic crisis, major depression, intoxicated people having mental health problems).

At the micro level in each village there is a local health and social centre (DESDE-LTC code O1.1). The local nursing is under the supervision of the CLSC (Centre local des services communautaires). Among its main functions, the local health centre offers basic mental health services, mainly medical mental health first aid. The physician is present one week, once a month in the village.

This team (two nurses and one social worker) provides a 24-hour psychosocial emergencies' service where the patient's mental health condition is evaluated and, if necessary, he/she is referred to UTHC. If a patient experiences a psychotic crisis the nurse stabilizes the patient and refers him/her to UTHC for further investigation, and evaluation.

In the meantime, each community has an isolation room or a detention cell available at the local police station. Lately, the KRPF (DESDE-LTC code J) has decided not to incarcerate in jail facilities people having mental problems. That decision has been taken because it is in contravention to the basic human rights.

In each of the seven villages there is a wellness committee (DESDE-LTC code S.2.1) and a wellness worker.

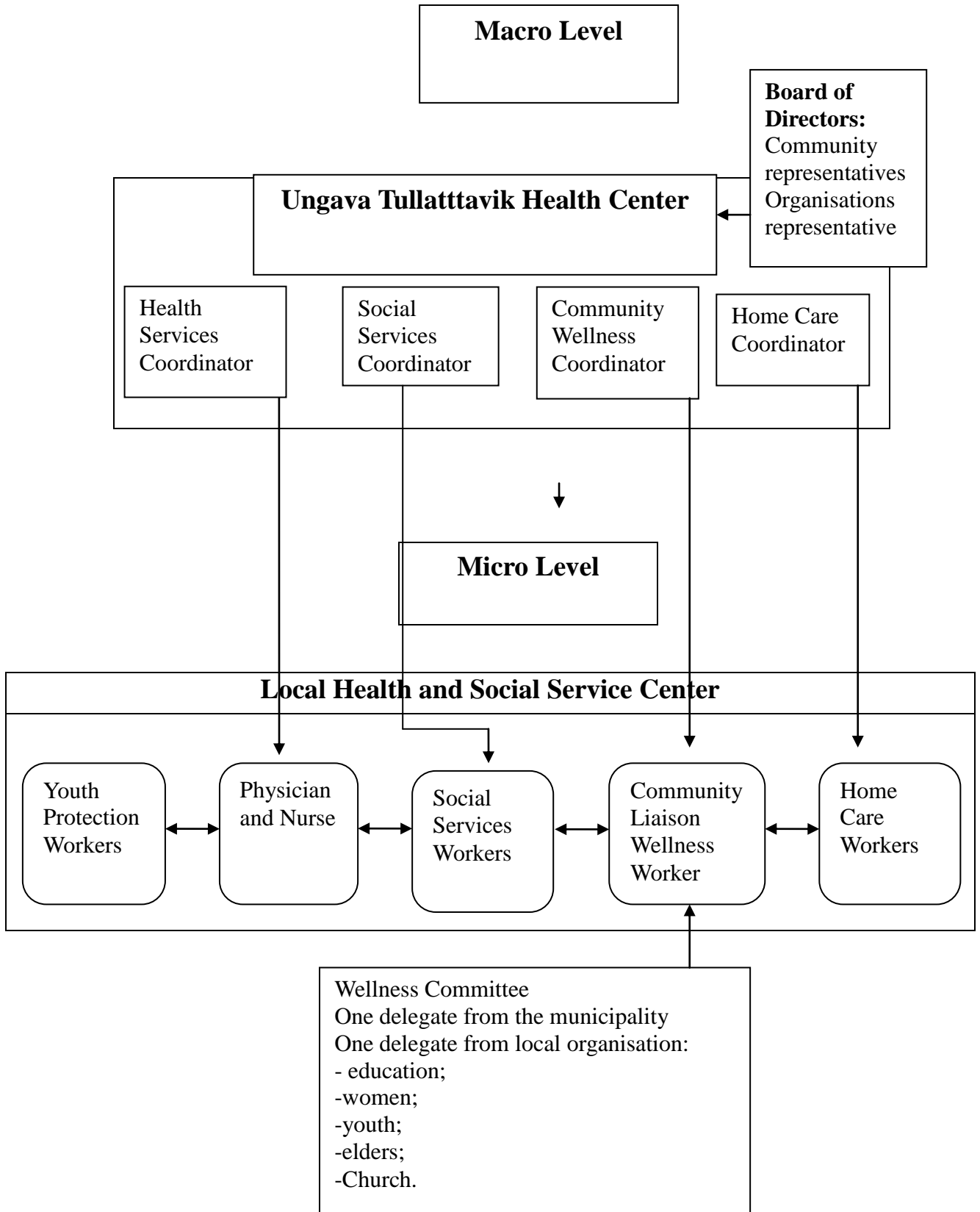
That committee is organized around community members concerned about the well being of their community. The wellness committee objectives are to:

1. serve as the link between health and wellness services and the community;
2. identify the health and wellness needs and problems of its community;
3. consult the public and the organisations to find methods to respond to the needs and solve problems;
4. provide the population with information concerning public health and wellness in general (NRHBSS, 2012).

The wellness committee staff develops close links with community representatives, individuals and organisations (NRBHSS, 2016). Basically, the wellness committee plays an advisory role on health and social problems that matters for the local population and then transfers that information to the regional level. The information gathered from the field is send to the regional level. Then that information is passed along the other departments through different formal and informal organisational mechanisms.

Meso and micro mapping of the formal service continuum in mental health

(adapted from NRBHSS, 2016)



4.4 Meso level organisations not formally integrated in the public mental health service continuum system

The regional communities' organization not included in the formal mental health service continuum serves a regional population located on both coasts, the Ungava Bay, and the Hudson Bay. Those organisations are subsidized, at least partially, by the NRBHSS. Their role is to offer services and to advocate for the users rights at the regional level.

The Saturviit Inuit Women's association of Nunavik is an advocacy group located in Inukjuak (Hudson Bay coast). It is helping women to be in control of their lives in order to achieve their highest social and economic wellbeing. As a regional organization, the Saturviit provides money to help local women's group to carry out community projects. However, this organization, is not included in our mapping.

The Isuarsivik treatment center (DESDE-LTC code R.9.1) is located in Kuujjuaq, and offers services to a regional population. It provides a culturally adapted addiction program. Through that program Isuarsivik promotes Inuit pride, self-empowerment, spirituality and healing. The objective is to help Inuit to reach an addiction free lifestyle.

In Kuujjuaq, the Tungasuvvik Women's Shelter (DESDE-LTC code R.9.1) provides physical and psychological support to women and their children experiencing conjugal violence, and abuse. While at the shelter, the women and their children receive healing services through activities promoting wellness and recovery.

The Qajaq Network (DESDE-LTC code S.2.1) helps men who are experiencing emotional difficulties. The organization promotes available programs and services to enhance the personal and collective well being.

4.5 Micro level organisations not formally integrated in the public mental health service continuum system

The main characteristics of the local informal organisations are their connection with the community life. Each of them covers a part of the social life. According to the social capital theory, the collective efficacy and the ethnographic studies, each of those organisations covers a part of the community social life. In that field they can play an important role in mental health promotion and prevention of mental disorders (Mann et al, 2017).

In this section, we are listing and detailing those organisations that promote wellbeing, prevent psychological distress, and provide mental health social support.

a) Hunter's Support

The Hunter's Support Group (DESCE-LTC code S.2.1) is structured around a program laid out in 1975 under section 29 of the James Bay and Northern Quebec Agreement. The objective is to 'favour, encourage and perpetuate the hunting, fishing and trapping activities of the beneficiaries as a way of life and to guarantee Inuit communities a supply of the produce from such activities' (Quebec government, 1982). Each community receives funding for that program. There are many activities involved in the program such as: training youth in developing land skills, maintaining a

community boat, paying people without employment wages to get country foods which will then be distributed, free of charge, to the Inuit members of the community (Gombay, 2009).

b) Sewing Committee

The Sewing Committee (DESDE-LTC code S.1.1) is part of a traditional activity. Women gather to sew together, and during those meetings they can work on personal projects, help each other, sew for other people. Sometimes sewing committees (DESDE-LTC code S.1.1) can be intertwined with the Anglican group or other organisations (Inuit Women's Association of Nunavik, 2015).

c) Anglican Group

The Anglican Group (DESDE-LTC code S.1.1) is affiliated with the Anglican Church (DESDE-LTC code S.2.1). Its main activity is to help people who have some type of needs. That help can be expressed in different ways according to the needs. Under the Anglican Group there is the Women's Helpers. Their mandate is to help families in need, prepare bodies for funerals, and help the handicapped.

d) Full Gospel Church Committee

The Full Gospel Church Committee (DESDE-LTC code S.2.1) is responsible to manage all affairs related with the Church and religious activities.

e) Catholic Church Mission

Like the other religious denominations, the Catholic Mission respond to the people's spiritual and emotional needs. They help sick people both at home and in the hospital,

and people to go through stressful events like losing a family member.

They also help people to go through different kinds of religious or casual activities (visiting sick people in the hospital, listening to people living stressful events), among others.

f) Local Justice Committee

Some villages have a local justice committee (DESDE-LTC code S.2.1). The role of those committees is to empower people having problems with the justice to take responsibility for their actions and their lives. Through the Inuit way of dealing with disputes the committee works with the offender to make him or her involved and concerned about their community. The coordinator, a paid professional, helps the people to go through their community work, do follow-up with the organization where the people are working, help to smooth the transfer from the prison to the community.

g) Cultural Committee

Each community has a local cultural committee (DESDE-LTC code S.1.1). The committee mandate is tailored around the respect and the promotion of the local traditions and the community needs. The main role of that committee is to foster Inuit culture. The activities carried out by the committee include: the construction of qarmaq, seal skin tent, traditional umiaq and qajaq, bannock making, kamik making, and puurtaq making.

h) Recreation Committee

The Recreation Committee (DESDE-LTC code S.2.1) organizes and manages recreational games and events in accordance with the community needs and requests.

i) Youth Committee

The Youth Committee (DESDE-LTC code S.2.1) is responsible to organize different activities and events related with the youth. The objective of those events is to create opportunities where the young can interact with other people, stay out of the street.

j) Qarmaapik Elsie Annanack Family House

The Qarmaapik Family House (DESDE-LTC code S.2.1) is located in Kangiqsualujuaq. That organization is a local resource. The main objectives are to offer parenting skills workshops, and related training wanted by the participants (community kitchen, providing a safe place for kids when they are not feeling safe in their homes).

k) Qilangnuanaaq assisted living

The Qilangnuanaaq center (DESDE-LTC code S.2.1) is located in Kangiqsujuaq and provides shelters and support for the elders and the handicapped people.

l) Rangers

The Rangers (DESDE-LTC code S.1.1) are located in each community (in our mapping we were able to reach only two). Their mandate is to provide a military presence in support of Canadian sovereignty. From a community perspective, the Rangers have a leadership role. They are involved in rescue missions and act as

mentors and educators for the young involved in the Junior Canadian Ranger program. The Ranger's members are highly regarded in their community. As mentioned by Laugrand et al. (2009) they are the ones that can save lives when people are lost or in danger on the land.

m) Education Committee

The Education committee (DESDE-LTC code S.2.1) is present in each community. Its main function is to resolve issues between students, teachers and parents.

n) Day Care Committee

The Day Care Committees are present in two (2) communities (we were not able to get information about the others five villages). The main role is to organize activities for the children and the parents. Those activities promote the children well-being and parents' awareness about child behaviour.

Table 4**Summary mapping of regional and local organisations delivering mental health services and support in each villages of the Ungava Bay coast**

	Aupaluk	Quaq-taq	Tasiu-juaq	Kangiq-sujuaq	Kangiqu-sualujuaq	Kangir-suk	Kuujujuaq
Education committee	X	X	X	X	X	X	X
Youth Committee		X	X	X	X		
Recreation Committee	X			X	X		X
Full Gospel Church	X	X		X	X	X	
Church committee	X		X	X	X		
Wellness Committee	X	X	X	X		X	
Justice Committee				X	X	X	
Ranger	?	X	?	?	?	?	X
Cultural Committee	X	X	X	X	X	X	X
Day Care Committee		X					X
Women Shelter							X
Men's Group						X	X
Anglican Church Committee			X			X	X
Anglican Church			X				X
Family House					X		
Catholic Church							X
Alcoholic Anonymous							X
Sewing Committee				X		X	X
CLSC	X	X	X	X	X	X	X
UTHC							X
KRPF	X	X	X	X	X	X	X
Isuarsivik Treatment Centre							X
Ippigusugiursavik							X
Tusaajiapik							X
Hunter's Support Goup	X	X	X	X	X	X	X

Chapter 5

Discussion

NRBHSS Decision makers agree that to meet the unmet needs in mental health of the Ungava Bay population they have to reach the community. The actual health and mental health system, as planned by the Quebec mental health policy, do not cover the Inuit population needs. Our mapping research has shown that the subsidized community organisations defined as the backbone in the implementation of the mental health plan policy, “Working together and Differently” are barely present in Nunavik. In that regard, they cannot be useful to fulfill the government plan in promoting and preventing mental illness.

Our research project objectives and outcomes was to help the decision makers in that quest to increase the mental health services through the use of community organisations.

Using the DESDE-LTC methodology we have identified and described formal and informal community organisations in each village on the Ungava Bay.

The mapping of the Ungava Bay Coast community organisations covers different aspects of the Inuit community life. Each organization can reach different kinds of population suffering from psychological distress.

The organisations we have uncovered cover a wide range of services not necessarily

openly mental health oriented. Those organisations represent the community social capital, and are part of the community network. They maintain the community information exchange process. That process maintains and develops the social support that is operationalized through the collective efficacy. That means that in the community there are people willing to participate in the community and to help others. In the Inuit communities those people have a specific role. They are present to care for the people, they are expected to be present and are perceived in their social role as such.

Many people participating in those organisations are recognized as inumarik (Collings, 2014). That means those organisations and their members play an important role in the community. Those organisations and their members represent the backbone of the community life. They carry the Inuit culture and values.

As an example, studies have shown that organisations such as the Hunter's Support (Gombay, 2009; Kishigami, 2000; Inuit Women's Association of Nunavik, 2015), the Sewing Committee and the Rangers can play a role in promoting mental health and preventing mental disorders. Those organisations and the one that we have identified organise different kinds of activities and games in their community. Doing so they promote social cohesion, trust and social mental health support.

5.1 Study constraints

During the course of this research project we were required, while using our methodology, to lower our results expectations. The main constraints that have challenged our research while collecting data were:

1. language barrier;
2. time constraint;
3. accessibility to the villages;
4. difficulty to reach the decision maker;
5. project amplitude;
6. some of the concepts used in the questionnaire were not adapted to the local culture and have no meaning for the respondents, as for example:
 - group, association, peer support group, institutionalized and non-institutionalized mental health services.

In our research project, we have adapted our approach to handle these constraints.

At first, when we began to use the DESDE-LTC questionnaire it was obvious that the local population, including the Inuit decision maker, did not understand the meaning of our questions. To label 'organisation', a group or an association helping people having mental problems or offering mental well being have no meaning in the Inuktitut language. To get that label the organisation must receive funding from the government. The Inuit population do not conceive that informal groups can be as beneficial to the individual as the services delivered by the hospital or the local health centre. The association is understood through concepts like sharing, and reciprocity. Through conversations with Inuit, Qallunaat and explaining the study purpose we have understood which concepts to use to gather the information we were looking for.

Conclusions - Recommendations

The mental health service architecture can be broadened and reorganized to include informal community organisations present in each community.

The DESDE-LTC research project has identified those organisations and their operational field.

The institutional local and regional mental health services can develop stronger and fruitful connections with those local community organisations.

At the operational level, we recommend the integration of the informal community organisations in each local health nursing through a specific process.

1. there should be appropriate financing for local community organisations;
2. there should be a communication plan to address to the community organisations, their sponsors and the people working in those organisations;
3. the communication plan should be written taking into account the mental health literacy of the people working in those organisations;
4. a booklet identifying and describing local community organisations services should be distributed to health and mental health professionals working in each village;
5. the booklet should be available through the FM radio, distributed in each village house, and in the local nursing;
6. each year an updated booklet should be distributed regarding the local community organisations;

7. regular meetings should be organised between health and mental health professionals and the informal community organisations. The purpose of those meetings would be to increase the awareness about mental health problems;
8. the meetings should take place outside of the local nursing building in order to integrate the health and mental health professionals in the community;
9. task shifting would be offered and available to people working in the informal community organisations;
10. task shifting training will be under the psychiatrist supervision. The psychiatrist in charge would be the one serving the community;
11. regular meetings should be organised between the psychiatrist and the informal community organisations workers;
12. a communication channel should be put in place between the informal community organisations' workers and the local health nursing. That channel would be used to transfer information about potential clients or to get more information about the users. It would be a two-way channel;
13. a formal communication channel between the UTHC Board of Director's, the community representatives and the informal community organisations should be implemented;
14. The main role of that community channel will be to communicate to the BoD the community organisations concern about mental health services, prevention, and promotion;
15. The local community communication plan should be built around Champions. They would understand the services, promote the services, and de-stigmatize mental illness;
16. a debriefing service should be available to the informal community

organisations' workers;

To operationalize that new architecture, the inummarik, considering their social position in the community, could be partners in promoting mental health and preventing mental disorders. That role could complement the health and mental health professionals since the actual mental health system, as noticed by the decision makers, is striving to meet the unmet needs of the Inuit population.

Using the mapping done in our research and complementing it with the training of the people working on those organisations, as shown in our recommendations, can be an innovative way to reach the mental health population needs and increase the population's psychological resiliency (Ionescu et al. 2010).

The health professionals, while developing that relationship, will increase the potential flow of information (Webber, 2017, 2016) coming from the community and the population. That flow will be bidirectional. It will act, at least minimally, as an assisted resiliency process (Ionescu, 2016 a, Ionescu et al., 2016 b).

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