

# Reaching very remote underscreened populations – challenges and opportunities

André Langlois, équipe d'évaluation  
DAESSS

Karina Olivier, Services cliniques de dépistage  
DRBST

Institut national de santé publique du Québec



August 2012

# Content

---

- PQDCS ;
- Description of mobile units;
- Mission;
- Results;
- Technology;
- The logistic.



information



formation



recherche



coopération  
internationale



assistance-  
conseil

Institut national  
de santé publique

Québec

# PQDCS: Quebec's breast screening program

---

- Offered to women 50-69 since may 1998
- Eligible population given by medicare twice a year
- Invitation letter and consent form
- Two mobil units for mammography operated by les Services cliniques de dépistage (SCD) of l'Institut national de santé publique du Québec (INSPQ) :
  - Mobile unit CLARA;
  - Portable unit SOPHIE.



information



formation



recherche



coopération  
internationale



assistance-  
conseil

Institut national  
de santé publique

Québec 

# Description of mobile units

---

## Mobile unit CLARA :

- For regions that can be reached by road;
- Bus by Prevost car;
- Name: CLinic Accredited RAdiology.



information



formation



recherche



coopération  
internationale



assistance-  
conseil

Institut national  
de santé publique

Québec 





# Description of mobile units

---

## Portable SOPHIE :

- For regions that **cannot** be reached by road;
- Portable and mobile, on ;
- Compact : folds onto itself, stored in a container;
- Means of transportation : van, plane, boat and train;
- SOPHIE Classic.



information



formation



recherche



coopération  
internationale



assistance-  
conseil

Institut national  
de santé publique

Québec





# Description of mobile units

---

- CLARA and SOPHIE now have digital technology since 2011



information



formation



recherche



coopération  
internationale



assistance-  
conseil

Institut national  
de santé publique

Québec 

# Mission

---

- To offer mammography screening service to remote regions
- To offer mammography service in regions with difficulty (capacity, shortage, lost of accreditation, material break down)



information



formation



recherche



coopération  
internationale



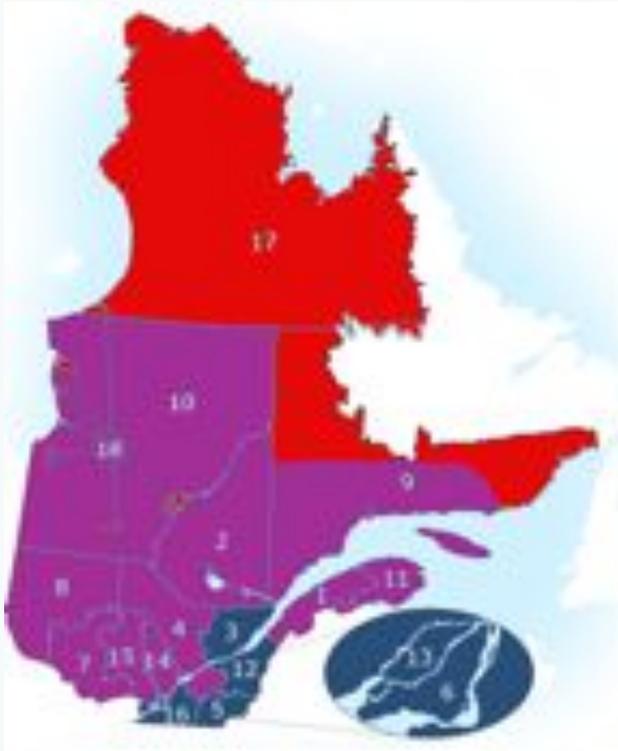
assistance-  
conseil

Institut national  
de santé publique

Québec 

# Mission

---



- Mobile units only
- Mobile units and fixed centers
- Fixed centers only



information



formation



recherche



coopération  
internationale



assistance-  
conseil

Institut national  
de santé publique

Québec 

# Results

Number of mammograms per year

Year	Mobile units in remote areas			Total	
	Fixed centers	CLARA	SOPHIE		Sub total mobile
1998	44 101	0	0	0	44 101
1999	145 132	0	0	0	145 132
2000	153 002	0	0	0	153 002
2001	172 128	0	0	0	172 128
2002	192 292	179	356	535	192 827
2003	204 741	265	149	414	205 155
2004	217 402	315	620	935	218 337
2005	232 555	673	123	796	233 351
2006	249 428	393	592	985	250 413
2007	268 127	703	230	933	269 060
2008	278 168	545	502	1 047	279 215
2009	295 110	758	435	1 193	296 303
2010	310 580	361	121	482	311 062
2011	317 785	846	636	1 482	319 267
<b>Total</b>	<b>3 080 551</b>	<b>5 038</b>	<b>3 764</b>	<b>8 802</b>	<b>3 089 353</b>



information



formation



recherche



coopération  
internationale



assistance-  
conseil

Institut national  
de santé publique

Québec



# Results

Number of women 50-69, participation rate and contribution of Mobile units to the participation rate for breast screening

Region	2009			2010			2011		
	Pop n	PR* %	contribution of MU (%)**	Pop n	PR* %	contribution of MU (%)**	Pop n	PR* %	contribution of MU (%)**
ABITIBI-TÉMISCAMINGUE <sup>1</sup>	413	51,1	88,2	434	49,1	88,3	449	44,5	88,5
CÔTE-NORD <sup>1</sup>	915	72,9	95,8	944	35,8	91,1	962	74,6	92,6
NORD-DU-QUÉBEC <sup>1</sup>	658	78,7	83,2	679	49,0	64,0	703	58,2	66,7
NUNAVIK <sup>2</sup>	567	66,1	97,3	594	64,8	95,8	613	38,0	90,1
TERRES-CRIES-DE-LA-BAIE-JAMES <sup>2</sup>	908	66,6	90,7	945	67,3	91,8	987	64,5	92,9
Sub total mobile units	3 461	68,7	91,3	3 596	53,0	87,2	3 714	59,1	87,3
QUÉBEC	1 011 542	56,1		1 039 106	57,4		1 064 112	57,9	

\* PR :Participation rate

\*\* Contribution of Mobile Units (MU): proportion of the participation rate due to MU = PR in MU/global PR

<sup>1</sup>: Only the remote part of the region covered by mobile units

<sup>2</sup>: The region is only covered by mobile units



information



formation



recherche



coopération  
internationale



assistance-  
conseil

Institut national  
de santé publique

Québec



# Technology

---

- PACS technology, in network with other centers (like an additional mammography room for the department);
- Since march 2012, prior mammograms are transfered, new films are transfered to the center and kept also in the mobile unit;
- Centralized reading;
- Data entry;
- Results.



information



formation



recherche



coopération  
internationale



assistance-  
conseil

Institut national  
de santé publique

Québec

# Technology in remote areas

---

- No PACS technology;
- Laser mammograms are printed;
- Centralized archiving in villages;
- Centralized reading with the films sent on a special USB key (super protected) by plane;
- Data entry;
- Results.



information



formation



recherche



coopération  
internationale



assistance-  
conseil

Institut national  
de santé publique

Québec



Salluit

Ivujivik

Akulivik

Puvimutuq

Baie-d'Hudson

Inukjuak

Umiujaq

Crees and Inuits

Kuujuarapik

Whapmagoostui

By Plane

Scheferville

Kawawachikamach

Matimékosh

Lac-Juillet

By Train

Caniapiscau

Radisson

Chisasibi

Wemindji

Némaska

Eastmain

Nemiscau

Wasikanish

Baie-James

Matagami

Chibougamau

Normétal

Rouyn-Noranda

Temiscaming

Saguenay

Baie-Comeau

Gaspé

Sept-Îles

Lac-Jérôme

Rivière-Mouchalagane

Blanc-Sablon

Pakuashipi

La Romaine

By Boat

Québec

100 km

# Pictures

---

Karina Olivier, INSPQ



*information*



*formation*



*recherche*



*coopération  
internationale*



*assistance-  
conseil*

*Institut national  
de santé publique*

**Québec** 

# Questions?

---

QUESTIONS?

QUESTIONS?

QUESTIONS?



*information*



*formation*



*recherche*



*coopération  
internationale*



*assistance-  
conseil*

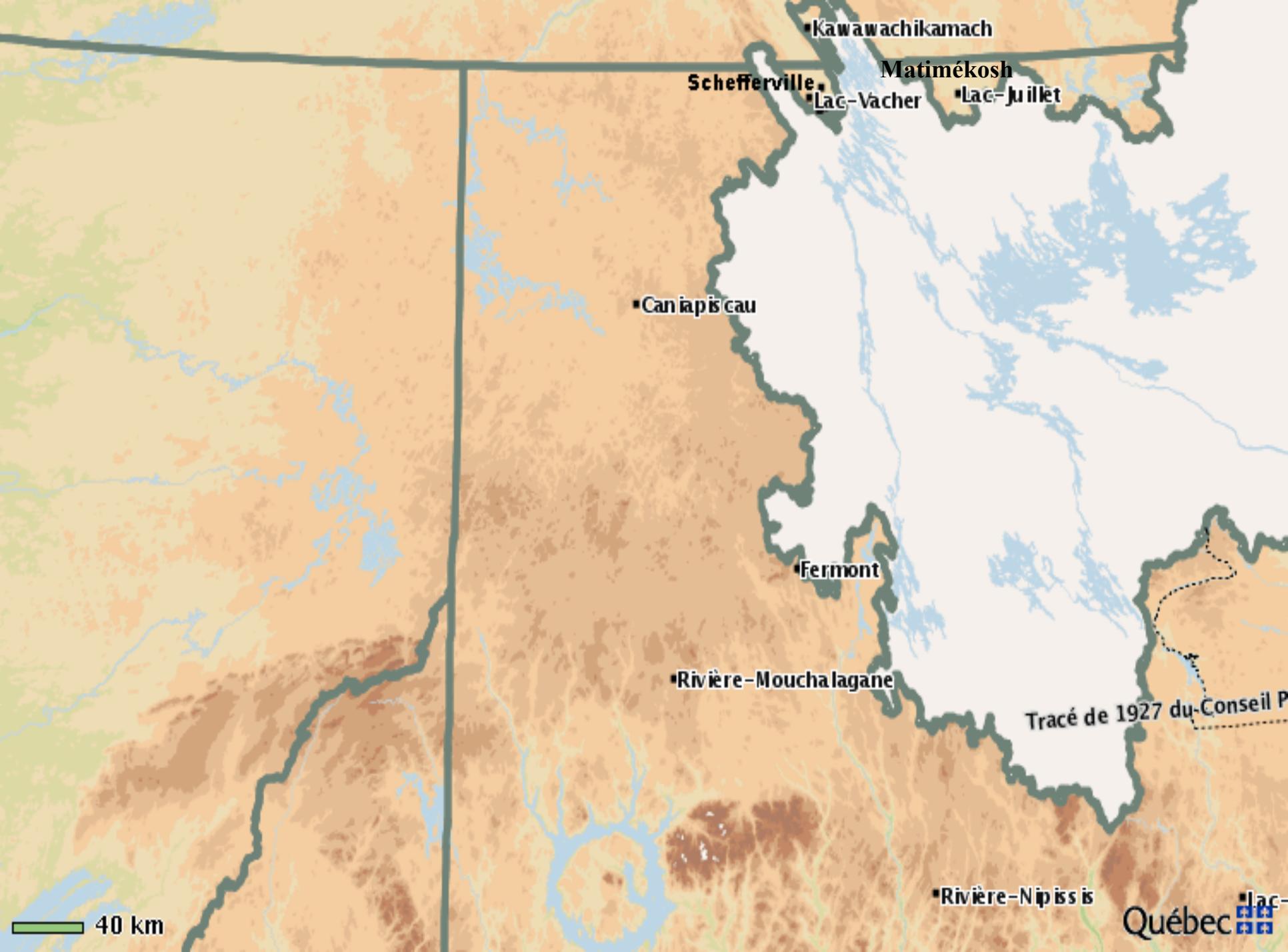
*Institut national  
de santé publique*

**Québec** 





50 km



•Kawawachikamach

Schefferville

Matimékosh

•Lac-Vacher

•Lac-Juillet

•Caniapiscau

•Fermont

•Rivière-Mouchalagane

Tracé de 1927 du-Conseil P

•Rivière-Nipissis

40 km



Tracé de 1927 du Conseil Privé (non définitif)

•Lac-Jérôme

•Rivière-au-Tonnerre

•Havre-Saint-Pierre

•Natashquan

•Kegaska

•La Romaine

•Côte-Nord-du-Golfe-du-Saint-Laurent

Tête-à-la-baleine, Aylmer Sound  
Chevery, Harrington Harbour

•Gros-Mécatina

La Tabatière, Mutton Bay

•Saint-Augustin

•Middle Bay

Bonne-Espérance

•Blanc-Sablon

30 km

•L'Île-d'Anticosti

# Results

Number of women 50-69, participation rate and contribution of Mobile units to the participation rate for breast screening

Region	2006			2007			2008		
	Pop n	PR* %	contribution of MU (%)**	Pop n	PR* %	contribution of MU (%)**	Pop n	PR* %	contribution of MU (%)**
ABITIBI-TÉMISCAMINGUE <sup>1</sup>	385	32,2	91,1	388	55,2	92,5	396	50,8	89,6
CÔTE-NORD <sup>1</sup>	870	70,8	90,6	872	72,1	92,8	882	74,5	95,3
NORD-DU-QUÉBEC <sup>1</sup>	611	75,8	89,4	629	77,7	86,5	643	75,1	86,3
NUNAVIK <sup>2</sup>	505	52,1	95,4	515	62,5	97,5	533	34,3	96,7
TERRES-CRIES-DE-LA-BAIE-JAMES <sup>2</sup>	803	69,6	79,1	842	60,7	75,3	875	68,6	86,8
Sub total mobile units	3 174	63,8	87,8	3 246	66,7	87,9	3 329	63,8	90,4
QUÉBEC	934 979	51,1		960 061	53,1		983 411	54,8	

\* PR :Participation rate

\*\* Contribution of Mobile Units (MU): proportion of the participation rate due to MU = PR in MU/global PR

<sup>1</sup>: Only the remote part of the region covered by mobile units

<sup>2</sup>: The region is only covered by mobile units



information



formation



recherche



coopération  
internationale



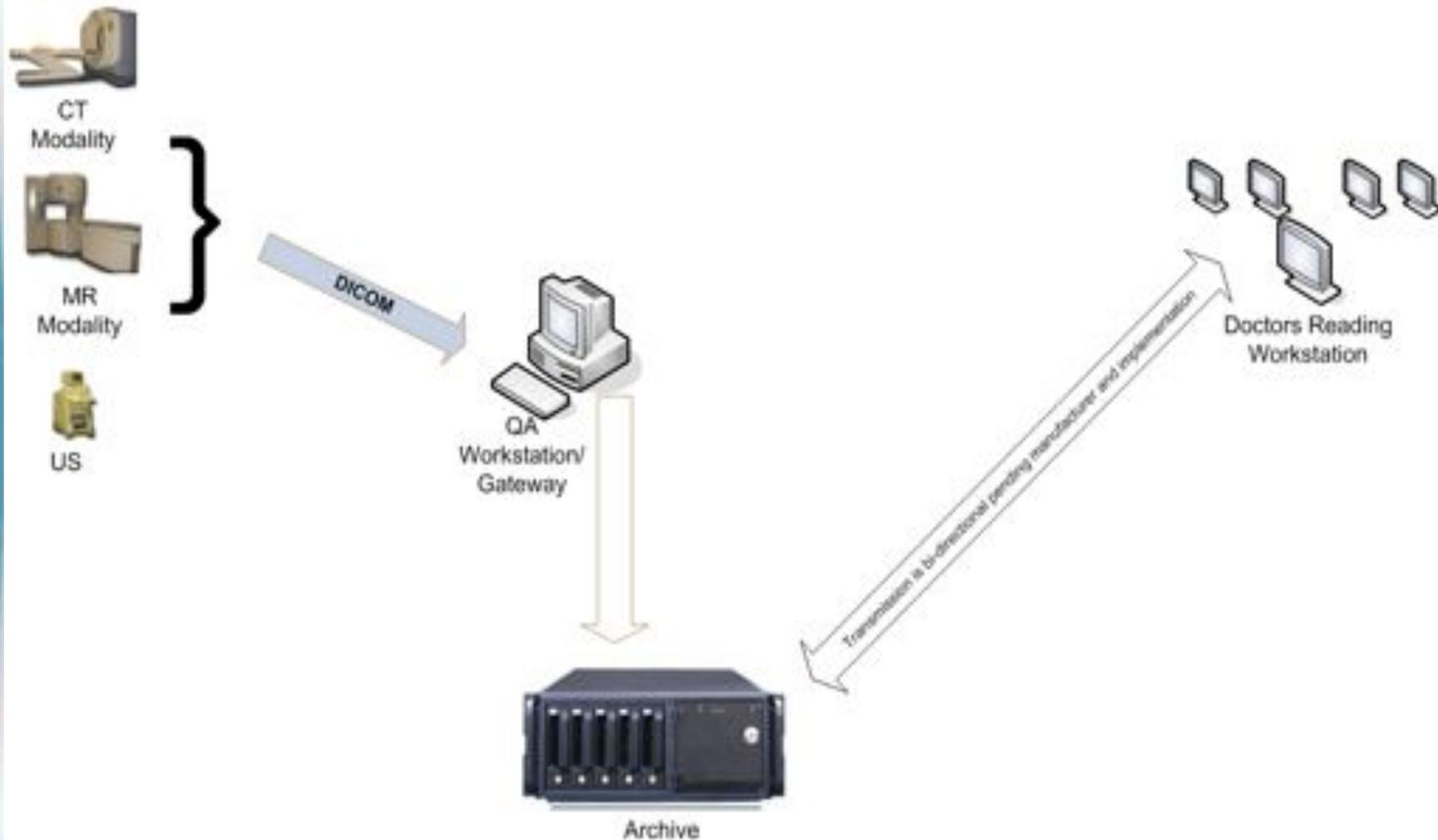
assistance-  
conseil

Institut national  
de santé publique

Québec



# PACS



information



formation



recherche



coopération  
internationale



assistance-  
conseil

Institut national  
de santé publique

Québec



