

Implementation of an “*infirmière pivot en oncologie* (IPO)” for Head and Neck cancer in Quebec City area (region 03)



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*Navigation and self-management
Innovative Approaches to Managing
Chronic Conditions*



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PLAN

CONTEXT

Implementation and Program Evaluation

- Phases and objectives
- Conceptual Model
- Design : Process (qualitative) and Outcomes
- Results

CONCLUSION

DISCUSSION



CONTEXT

- To improve cancer control, different initiatives: Canadian Strategy for Cancer Control (CSCC)
- Several provinces have reviewed their approach. In Quebec : *Programme québécois de lutte contre le cancer* (PQLC)

Problem

- Patients and families complain about difficulties understanding the diagnosis and cancer care system (PQLC, 1997)
 - Poorly coordinated care, long waiting lists, poor connections, and inadequate information (lack of navigation)
- 2 main categories of needs (MSSSQ 1995, 2004):
 - Cancer experience itself (symptoms management, information, emotional support, ...)
 - Access and continuity of care (continuity of approaches, information and therapeutic relationships)



The CSCC and Patient navigator

- Several workgroups of the Canadian Strategy for Cancer Control confirmed the problem.
- They also proposed a potential solution: the patient navigator.
 - The *Supportive Care/Cancer Rehabilitation Working Group Report (2000)* recommends establishing navigator roles in communities to co-ordinate patient needs (CSCC Supportive Care Working Group, 2002, p.21).
 - The idea is to have someone to help patients enter and navigate through the maze of professionals, services, and programs.



The PQLC and *l'infirmière pivot en oncologie (IPO)*

- The PQLC promotes an integrated model of services :
 - Patient-centred; interdisciplinary team; and comprehensive care.
 - The implementation of the *Infirmière-pivot en oncologie (IPO)* is an integral part of the PQLC. Similar role than patient navigator, but different: (symptoms management is included for the IPO)
 - 41 IPO in March 2004; M 192 new cases by year; 5000/36000 pts (De Serres et al., 2004)
 - Number of IPO is increasing. Implementation in process all over the Province of Quebec (MSSSQ,CÉPIO, 2005)



Preliminary work : definition of IPO role

- Litterature review & qualitative study (Fillion, Morin, & Saint-Laurent, 2000)
 - Numerous terms: Case manager, Clinical Coordinator, Cancer Support Nurses, Advanced Nurse Practice, Breast Nurse, Cancer key worker, Cancer Coordinator.
 - Close to new models of « **case management** »
 - Moves beyond the scope of a systems coordinator (system-oriented)
 - To patient advocacy : assessment of needs, planning, linkage to resources, psycho-education, crisis intervention (patient-centred)



Operational definition (CQLC, 2000)

- The role may change in importance depending:
 - treatment stage (e.g. more important around diagnosis)
 - health providers and health services available
- Easily accessible
- Present from diagnosis to palliative care
- Work with an interdisciplinary team (complementary)
- When treatment begins, the IPO may facilitate information from one clinical team to another (e.g. from surgery to radiation therapy)
- Make links between actors and health care settings
- Oncology nurses
 - (BScN prepared; **clinical expertise/experience in oncology**; CNA oncology nursing certification; interests; personal qualities)



IPO Functions

- Assessment, reassessment (physical and psychosocial; in Quebec new legislation for nurses)
- Information (on cancer, treatments, symptoms management, resources,...)
- Support (emotional) and presence
- Coordination of care (facilitator; among HP, organisations, and community resources)



HEALTH PROGRAM EVALUATION

- *Elaboration d'une stratégie d'implantation d'intervenants pivots en oncologie au CHUQ: étude d'implantation sectorielle (01/2002-12/2004)*
- Supported by RRSSS-03 & CCLCCQ
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Program Evaluation

Phases

OBJECTIVES

- A
 - 1. Create a vision of the new role
(committees; consultation: winter 2002)
 - 2. Describe functions and initial clinical tools
 - 3. Develop selection criteria & training program
 - 4. Prepare the change, implement the IP (09-02)
- B
 - 5. Describe the implementation process
- C
 - 6. Describe the impact of the new role



CONCEPTUAL MODELS

- **Organizational change** (Robert, 2000)
 - 1) Vision
 - 2) Necessary changes from current to desirable situation
 - 3) Strategical analysis (legitimacy, relevance, credibility, changes, costs/benefits)
 - 4) Facilitating factors and obstacles
 - 5) Impacts
 - 6) Overall strategy
- **Health program evaluation** (Donabedian 1980,85)
 - PERCEPTION OF ACTORS
 - STRUCTURE; RESOURCES; PROCESS, EFFECTS; IMPACTS
- **Logical framework for implementation of change**
: Theory of action (Patton, 1997)



Process of the implementation (qualitative approach)

- Longitudinal descriptive design
- Data collected before (T0), 6 –mth (T1) & 1-year after the implementation (T2)
- Interview based on Patton 's logical framework

	T0 S/02	T1 W/03	T2 W/04
Cancer staff CHUQ	47	42	35
Patients	--	19	16
Family	--	15	15
External staff (family md & CLSC)	--	--	21

Process study: final results (T0 , T1 & T2)

	Health Providers	Patients & Family
1. Inputs	Understand role & functions	--
2. Activities	Coordination (from StCare to PTNeeds), support, information, assessment	Support & information
3. Participation	Progressive integration	Respect of needs
4. Reaction	Good for both: patients & team	Very positive
5. Attitudes ch.	Understanding of the patients	Understanding (C,P,S)
6 Behaviors ch.	More communication (internal & external) and better interdisciplinary work	Active coping (emotion and problem solving)
7. Effects	Better adjustment for patients and family; increased satisfaction at work for HP	Supported, informed, realistic expectancies about C & treatments

Process study: conclusions

Association between presence of the IPO and:

- 1) patient and caregiver's adjustment to disease
 - (understanding of cancer and its treatments; active coping strategies; importance of timely and tailored information: feel supported).
- 2) improved continuity of care:
 - a) information; b) treatments and approaches; c) therapeutic relationship (safety net).
- 3) improved interdisciplinary work based on patient-centred needs
 - (help to deal with conflicts and different values; clarification of roles and tasks still a challenge..., dynamic process)



Impact of the new role (quantitative approach)

- **Correlational design (comparison of 2 cohorts)**
- **Outcomes :**
 - Quality of life
 - Adaptation
 - Satisfaction
 - Costs/benefits

	Historical Cohort	IPO Cohort
H. Providers	52	In process
Patients	83 (63%)	74 (63%)
Health system	In process	In process

Group homogeneity

Variable	Test	Value
Gender	χ^2	4.78 NS
Age	t	.08 NS
Education	t	.81 NS
Work status	χ^2	2.13 NS
Type of food	χ^2	6.05 NS
Cancer stage	χ^2	4.53 NS
Treatment	χ^2	Surgery/chimio/rad.t./ NS
Charlson Index	t	2.12 p = .04 (*higher in post)

Impact on Quality of life: *preliminary results (EORTC-30)*


	Historical cohort	IPO cohort
Physical functioning	76	75
Role functioning	67	67
Cognitive dimension	75	80
Emotional dimension	66	73*
Social dimension	68	72

Note: * $p < .05$



Impact on Adaptation process: *preliminary results (IRLE-C & POMS)*

Total stressors (IRLE-c)	50	46*
<i>Future concerns</i>	9.2	8.5*
<i>Functional Disability</i>	12.9	12.9
<i>Social problems</i>	8.3	7.4*
<i>Medical & Treatments</i>	5.5	5.2
<i>Body-Image Concerns</i>	9.4	8.0**
Distress (POMS -TMD)	48	43



Note: * $p < .05$; ** $p < .01$

Impact on satisfaction: preliminary results (SAT-32)

	H	IPO
Global oncology care satisfaction	86	91*
Satisfaction with medical team	80	87**
Satisfaction with interdisciplinary team	80	86*
Satisfaction with health services and organisation	77	83*
Satisfaction with IP	---	91%



Note: * p <.05; ** p <.01

IMPACT Study: Conclusions

- Patient outcomes: improvement in 3 categories of indicators
 - a) quality of life; b) adjustment to disease (self-management); c) satisfaction with care.
- Health services outcomes:
 - in process (JCS model- demands/control- job satisfaction and others (role ambiguity)).
- Health Providers outcomes:
 - in process.



CONCLUSION

- Qualitative data support the success of the implementation and describe the benefits of this new role for patients, families, health care providers, and continuity of care.
- Quantitative results suggest positive impact for the patients on 3 indicators.



DISCUSSION

- Preliminary phase: *important to prepare the field for change*
 - Partnership, committees, information, and VISION (PQLC)
- Consultation phase: *useful to tailor the IPO functions (job description) and select the site of implementation*
 - Meetings with homogeneous groups, and VISION
- Process and impact studies: *triangulation of approaches and populations*
 - Choice and flexibility; personal qualities of the IPO;
 - The evaluation process is appreciated; hard to integrate GPs
- Organizational issues
 - Improvement to PQLC understanding, interdisciplinary team & virtual corridors of services (integrated network of care). Importance of having managers committed, and health authority on board.
 - Results coherent with Roberge (2004) who had : shared philosophy
- Next step in research ...



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