

Posttransplant and Quality of Life Research

Donna Hathaway, RN, PhD, FAAN
Professor and Dean
The University of Tennessee
Health Science Center

Translating Research Into Practice

Step 1—Establish scientific basis for the intervention

Step 2—Design and test the intervention

Address a need

Demonstrate efficacy

Show cost-effectiveness

Step 3—Disseminate Findings

Step 4—Incorporate in Practice

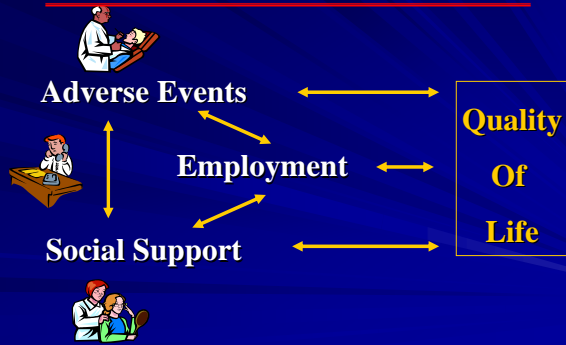
Chang, C.F., Winsett, R.P., Gaber, A.O., & Hathaway, D.K., (2004). Cost effectiveness of post-transplantation quality of life intervention among kidney recipients. Clinical Transplantation, 18, 407-14.

Step 1: Predictors of Post Transplant Quality of Life

Total Sickness Impact Profile

predictor variables	partial R ²	model R ²
Hospital Admits, 6 mo	.14	.14
Employed	.16	.30
Social Support	.12	.42

Clinical Implications



Step 2: Design QoL Interventions

Decrease Adverse Events	Increase Employment	Increase Social Support
Patient Empowerment	Transplant Center-based Voc. Rehab Program	Multidisciplinary Social Assessment
Multi-media Teaching	Employment Specialist	Social Network Mapping
Dedicated Education Specialists		Peer Support
	Control, n=27	
	Intervention, n=94, 68	

Adverse Events – Results

Hospitalization for infections decreased nearly 50%

	Control n (%)	Intervention n (%)
Alterations in therapy	0	7 (6.5)
Oral Antibiotic therapy	18 (46.1)	67 (62.5)
IV Antibiotic therapy	1 (2.5)	0
Hospitalization <24hrs	0	6 (5.6)
Hospitalization >24hrs	20 (51.2)	26 (24.2)

Employment - Results

Employment of Patients who were *Disabled* Pre-Transplant



Social Support – Results



Support Type	pre	12 mos
Concrete	58.4	72.7 *
Emotional	65.4	69.4
Informational	72.7	61.5
Total SNM Score	562.4	681.7 *

* p < 0.05

Cost Effectiveness – results

Costs/Patient	Control (n=27)	Intervention (n=72/46)
Direct	-	2,987
Indirect	2,202	993
Medical	40,144	29,539
Total	\$42,346	\$33,519

Step 3: Broadly Disseminate Findings

Presentations—

- clinical transplant nursing—over 12
- clinical transplant professionals—over 15
- academic nursing—over 5
- invited—over 20 (*nurse-centric and multi-professional, local staff to inter-national organizations to US Congress*)

Publications—

- Over 15 publications in transplant specific clinical and scientific interdisciplinary journals

Step 4: Incorporate Into Practice

Status Today

Quality of life outcomes a growing focus of concern
15-year program of research no longer funded
Transplant program merged and moved
Significant turn-over and expansion of staff
Status of translation into practice.....

Concluding Observation

Translating research into practice takes more than:

- Addressing a need
- Interventional efficacy
- Cost effectiveness
- Dissemination of findings

What is it ?



Customer-Centric Innovations

lessons learned from business

“Customer R&D focuses on developing better ways of communicating value propositions and delivering complete, satisfying experiences to real customers.”

“Simply put, customer R&D propels the innovation efforts away from headquarters and the traditional R&D lab out to those closest to the customer.”

Selden & MacMillan, *Manage Customer-Centric Innovation Systematically*, HBR April 2006, 84(4):108-116.

The Supply Chain and Research Translation



Customer R & D Strategy



- | | | | | |
|--|---|--|---|--|
| Identify new capabilities that attend to other needs of segments, subsegments or halos | Extend capabilities to attend to additional needs of core segment | Identify and develop deep understanding of needs of core customers | Identify halo segments similar to core that can be similarly served | Identify new segments unrelated to core where capabilities can be deployed |
|--|---|--|---|--|

How to Kill an Innovation

Spend without reward—keep pouring funds into traditional R&D although markets don't buy it. Leaders make excuses like, "We're in a tough industry".

Make R&D an entitlement—funding decisions are made on the basis of last year's budget. R&D staff view funds as an entitlement rather than as an investment focused on customers expectations.

Assume people in the field know nothing—R&D is a centralized function run by people with technical backgrounds. "God forbid," a CEO might think, "we put people with real hands-on experience in charge of product development—they would never understand the complexities of"

Selden & MacMillan, HBR April 2006, 84(4):108-116.

How to Kill an Innovation

Put marketing, finance and R&D on different planets—these functions rarely communicate (except to consider budget cuts). This ensures no one pays attention to the customers needs from the company as a whole.

Detach marketing from the customers—marketing just feeds propaganda to customers. When airline passengers lack a meal or pillow, marketing can only report customer dissatisfaction.

Don't rock the boat—organizing business around customers is too complicated. *But given the average growth of business, shaking up silo leaders wouldn't be such a bad thing for customers, employees, and shareholders.*

Selden & MacMillan, HBR April 2006, 84(4):108-116.



Rock the Boat!
