

Knowledge translation of OA research: Advances after 15 years

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Agenda

- To examine the status of OA management
- To identify knowledge translation (KT) opportunities in OA care
- To discuss the future of KT:
 - New methods
 - New partnerships

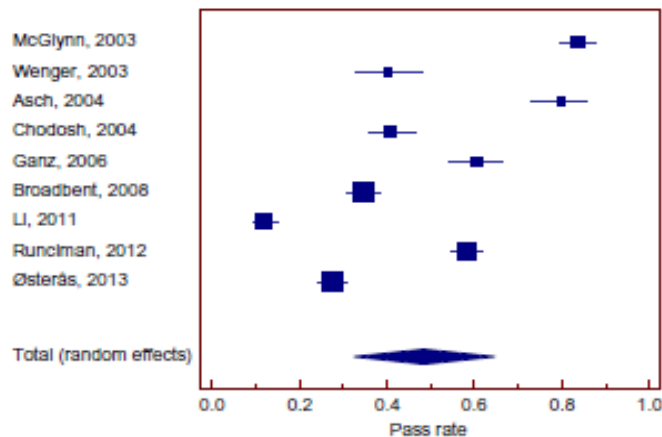
Quality of care in chronic diseases

Disease / condition	Pass rate: Managed care	Pass rate: Primary care
Stroke	82%	65%
Hypertension	77%	72%
Heart failure	71%	--
Diabetes	--	74%
Depression	31%	--
Osteoarthritis	31%	29%
Li (2011)	--	22% (non-pharmacological)
Grønhaug (2014)	--	47%
Doubova (2015)		20-26% (non-pharmacological)



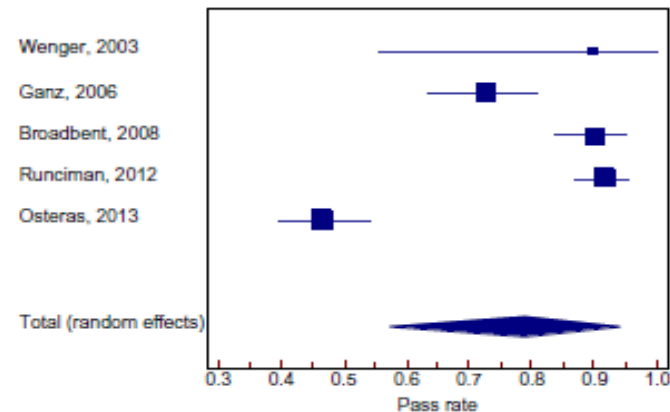
Pain & functional status assessment

Pass rate: 48.6% (32.6 – 64.6)



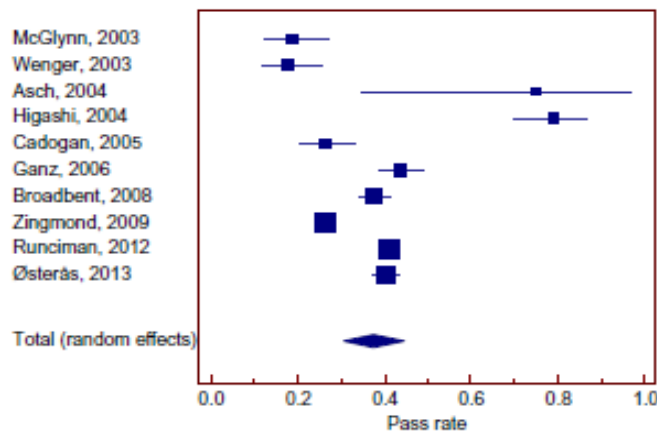
Surgical referral

Pass rate 78.9% (67.4 – 94.2)



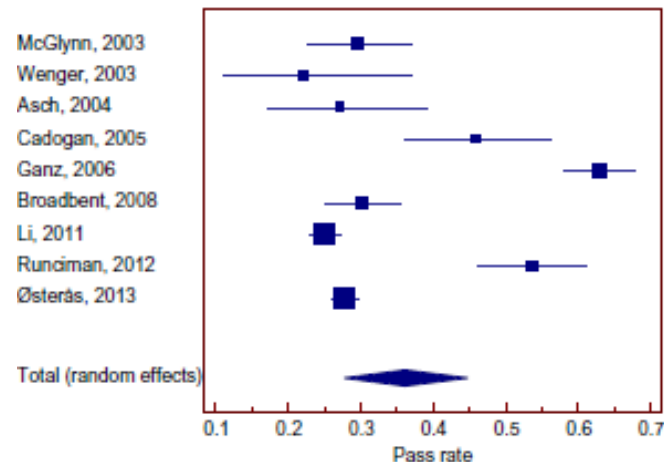
Drug treatment

Pass rate: 37.5% (30.8 – 44.5)



Non-drug treatment

Pass rate 36.1% (27.8 – 44.7)



CIHR/CMAJ: TOP ACHIEVEMENTS IN HEALTH RESEARCH

Essay for the CIHR/CMAJ award: improving access to hip and knee replacement and its quality by adopting a new model of care in Alberta

Cyril Frank MD, Deborah Marshall PhD, Peter Faris PhD, Christopher Smith BComm; for the Alberta Bone and Joint Health Institute

The 'K' on OA management

A systematic review of recommendations and guidelines for the management of osteoarthritis: The Chronic Osteoarthritis Management Initiative of the U.S. Bone and Joint Initiative

Amanda E. Nelson, MD, MSCR^{a,b,*}, Kelli D. Allen, PhD^c, Yvonne M. Golightly, PT, PhD^{a,d,e}, Adam P. Goode, DPT, PhD^f, Joanne M. Jordan, MD, MPH^{a,b,d,g}

The 'K' on OA management

Year	Country	Guideline organization
2003	Europe	<ul style="list-style-type: none"> • EULAR-knee
2005	Europe U.K.	<ul style="list-style-type: none"> • EULAR-hip • MOVE Consensus Group
2007	Europe	<ul style="list-style-type: none"> • EULAR-hand
2008	U.S. International France U.S.	<ul style="list-style-type: none"> • National Collaborating Centre for Chronic Conditions • OA Research Society International (OARSI) • French Clinical Practice Guideline Group • American College of Clinical Pharmacy
2009	U.S.	<ul style="list-style-type: none"> • American Physical Therapy Association
2011	Netherlands U.S.	<ul style="list-style-type: none"> • The Dutch OA Guideline Group • Michigan Quality Improvement Consortium
2012	U.S. Asia Canada	<ul style="list-style-type: none"> • American College of Rheumatology • Chronic Pain Advisory Board • The Ottawa Panel
2013	U.S.	<ul style="list-style-type: none"> • American Academy of of Orthopaedic Surgeons

KT opportunities

- Target implementation efforts at the primary care level
- Expand from imparting skills in self-management to developing resources to support patients to self-manage

Speed it up!

Bridging the gaps

1. Study clinical effectiveness and implementation simultaneously
2. Optimize patient-researcher partnership
3. Foster new partnership in e-health

1. Study effectiveness and implementation simultaneously



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Med Care. 2012 March ; 50(3): 217–226. doi:10.1097/MLR.0b013e3182408812.

Effectiveness-implementation Hybrid Designs:

Combining Elements of Clinical Effectiveness and Implementation Research to Enhance Public Health Impact

Geoffrey M. Curran, PhD^{*}, Mark Bauer, MD[†], Brian Mittman, PhD[‡], Jeffrey M. Pyne, MD^{*}, and Cheryl Stetler, PhD[‡]

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Effectiveness-implementation Hybrid Designs

Hybrid Type 1

- Test a clinical intervention while gathering information on its delivery and the potential for implementation

Hybrid Type 2

- Test a clinical intervention and an implementation intervention simultaneously

Hybrid Type 3

- Test an implementation strategy while gathering information on the clinical intervention and related outcomes

2. Optimize patient-researcher partnership

Domecq et al. *BMC Health Services Research* 2014, **14**:89
<http://www.biomedcentral.com/1472-6963/14/89>



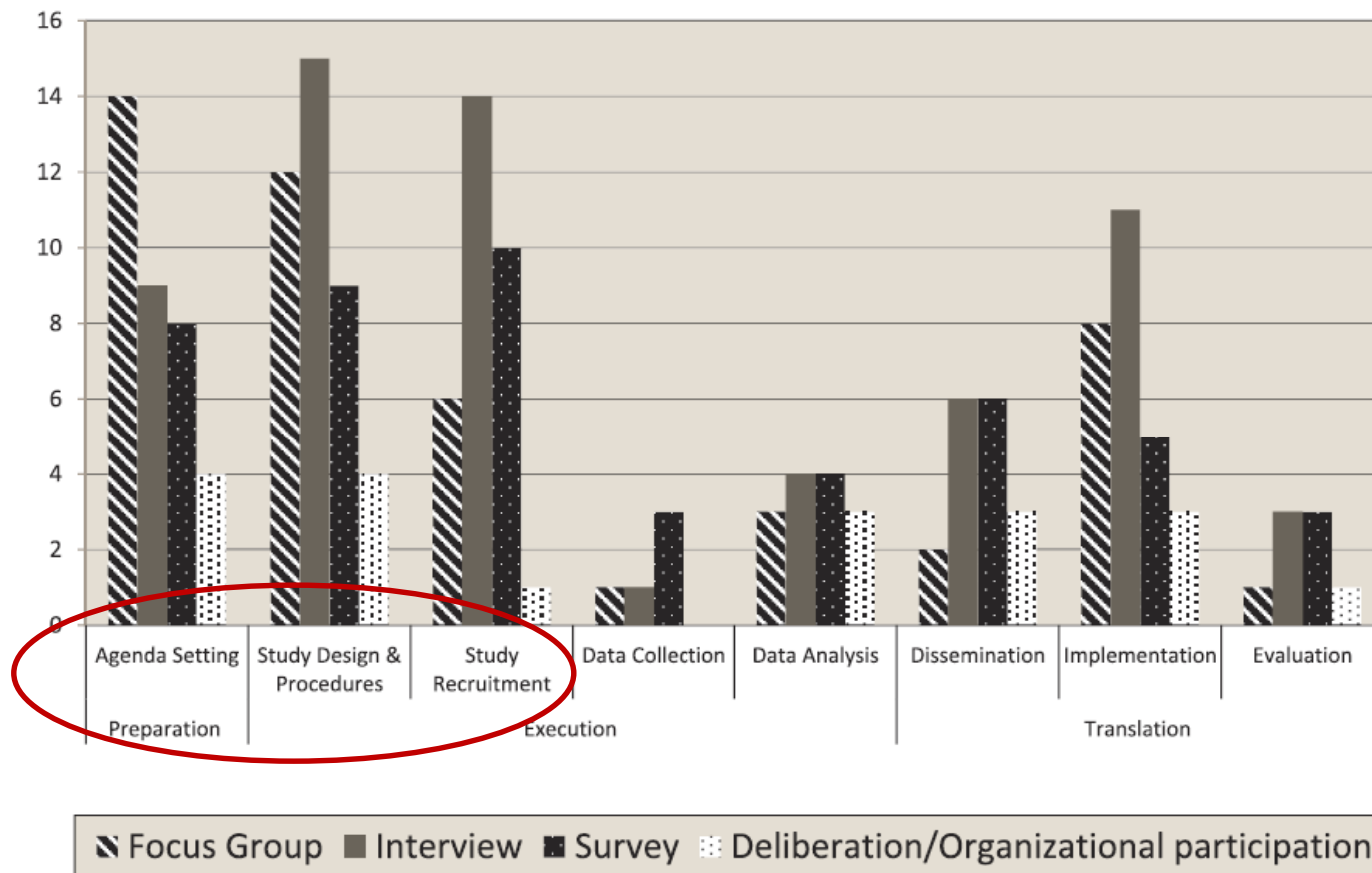
RESEARCH ARTICLE

Open Access

Patient engagement in research: a systematic review

Juan Pablo Domecq^{1,2,5}, Gabriela Prutsky^{1,2,5}, Tarig Nathan Shippee^{1,5,6}, Juan Pablo Brito^{1,4,5}, Kasey Bo David Eton^{1,5,6}, Jeff Sloan^{1,5,6}, Victor Montori^{1,2,4,5,6}, and Mohammad Hassan Murad^{1,3,5,6*}

No. studies



'It is about us!':

The patient's experience as a research partner

ARC
ARTHRITIS RESEARCH CANADA

"It IS about us!": Understanding Patient Engagement in Health Research (Study Protocol)


B. Tran^{1,2}, J. Leese^{1,3}, S. Kerr³, A. Hoens³, L. Gulka³, W. Kum³, LC. Li^{1,2}

1. Arthritis Research Canada (ARC), Richmond, Canada, 2. University of British Columbia, Graduate Program in Rehabilitation Sciences, 3. Arthritis Patient Advisory Board (APAB), ARC, Richmond, Canada

UBC

BACKGROUND

- Patient engagement in research occurs when patients meaningfully and actively collaborate in the research process.
- Examples include: setting research priorities, developing research questions, designing the study protocol; interpreting and disseminating results.




- Currently, limited resources are available to facilitate meaningful patient engagement in research from the perspective of patients.


OBJECTIVE

METHODS


This study was co-developed by researchers and representatives of the Arthritis Patient Advisory Board (APAB), Arthritis Research Canada (ARC). APAB is comprised of volunteer advocates with arthritis who bring personal experience and arthritis knowledge to health research at ARC.



- All 32 current and past members of APAB have been invited to participate.
- To date, 22 of the 32 current and past members of APAB emailed us to offer participation in this study.
- Interviews will be conducted in-person or by telephone, either at the Arthritis Research Canada (ARC), at participant's home or at a location of participants preference.



- Using a semi-structured interview guide, participants will be asked about their experience as a partner in health research, and their interaction with researchers.
- All the interviews will be taped and transcribed verbatim.

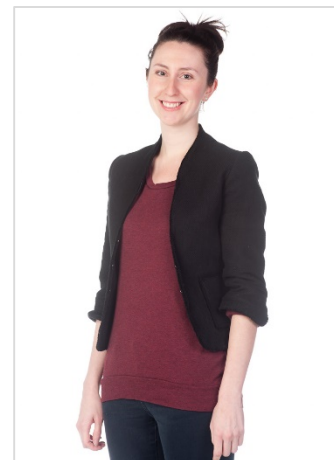


Potential Impact

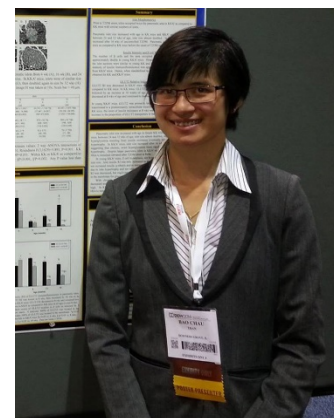
This study builds on the cumulative work and experiences of APAB since 2002. The findings from this study will provide insights on patients' experience of being a partner in health research.

The Next Step

Findings will be used to develop a user-friendly 'how-to manual', designed to guide research teams and organizations to foster and

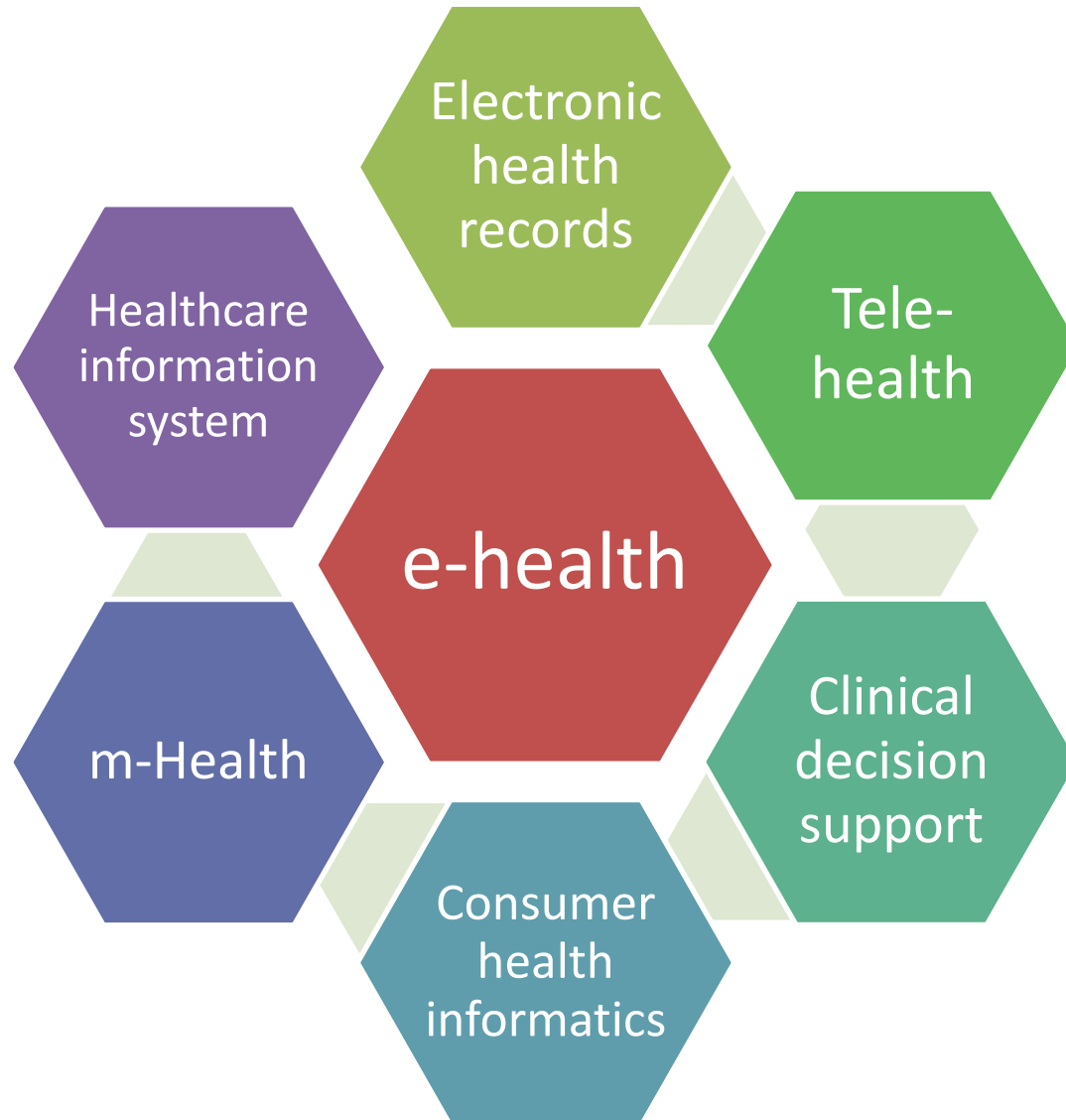


Jenny Leese

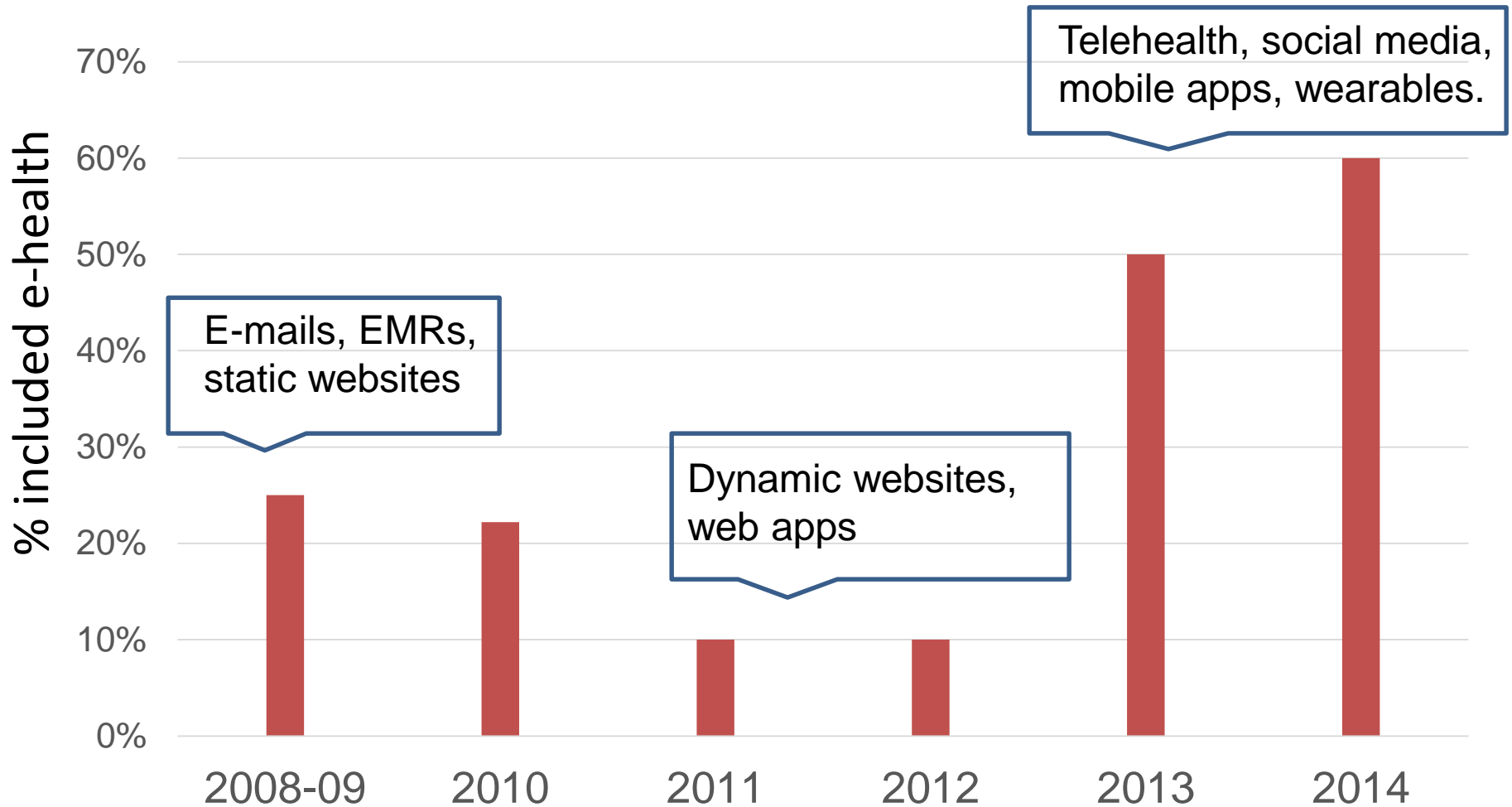


Bao Chau Tran

3. Using e-health technology in KT



Funded CIHR Knowledge-to-Action Grants



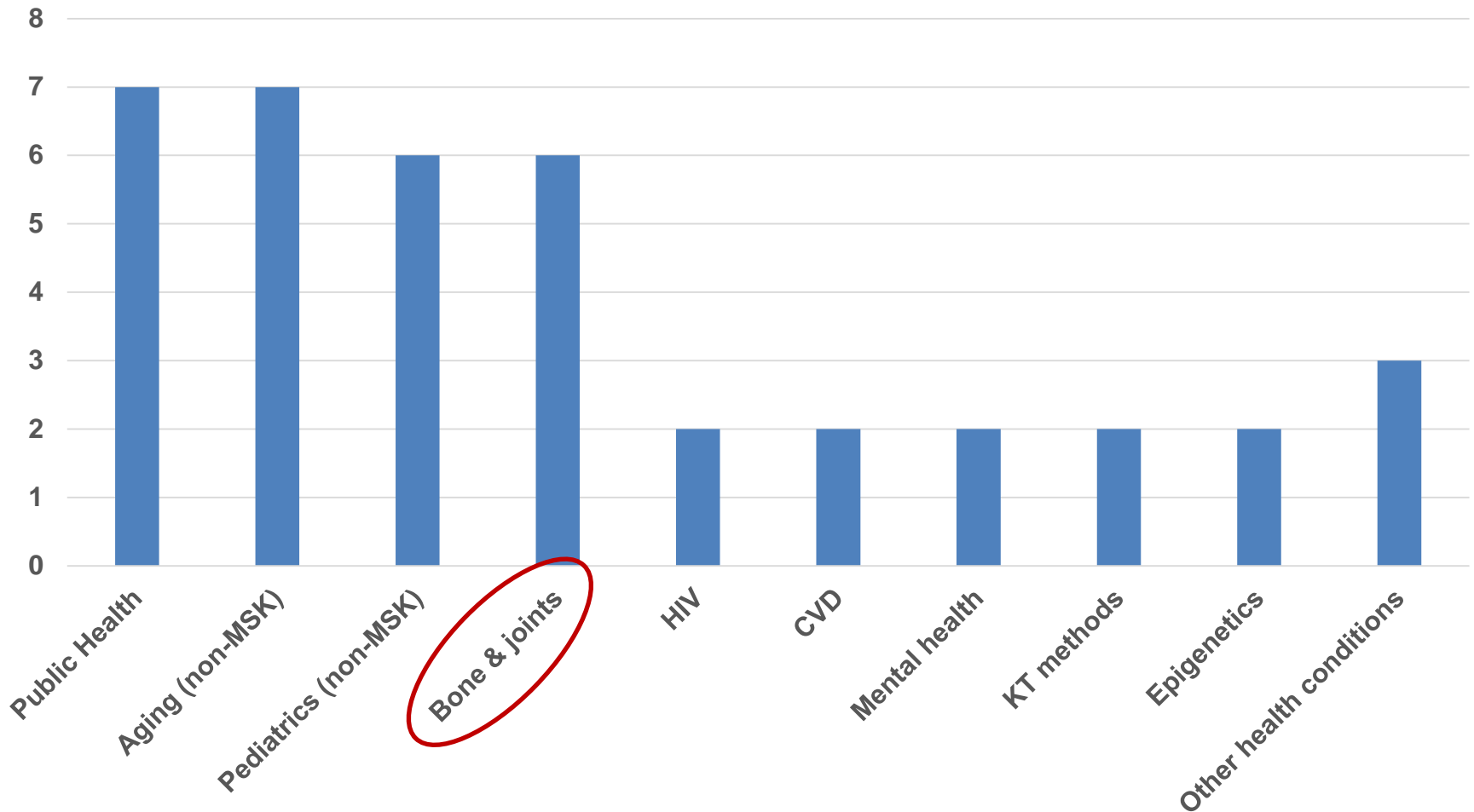
Partnering with technology sector: Pros and cons

	Cost	Production speed	Product quality	Product sustainability
Students	\$	+	+(+)	+
Computer scientists / engineers	\$	+(+)	++(+)	++
Local software companies	\$\$\$	+++(+)	+++(+)	++
e-Health companies	\$\$\$(\$)	++++	++++	++++

Building capacity in KT

- Knowledge Translation Prize (since 2004)
- Betty Havens Prize for Knowledge Translation in Aging (since 2010)
- Bégin KT New Investigator Salary Award (2010-14)
- Dickson KT Fellowship Award (2009-14)
- Lomas KT Doctoral Research Award (2010-14)
- **39 awards given**

KT award distribution (n = 39)



Summary

- For people with OA, quality of care in surgical referral is good. More implementation effort is required in the use of first-line treatment.
- The blended effectiveness & implementation research design could help to shorten the lag time from evidence to practice.
- Future research should examine methods to engage patients as research partners, as well as the use of e-health to facilitate the use of evidence in practice.

Acknowledgement

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Cheryl Koehn, Alison Hoens, Otto Kamensek, Sheila Kerr, Lianne Gulka, Annette McKinnon, Ruta Cumming, Pam Monte, and many more ...

Research collaborators

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Aileen Davis	Jolanda Cibere
Nick Bansback	Lynne Feehan
Elaine Yacyshyn	Allyson Jones
Jacek Kopec	Paul Adam
Alison Hoens	
Catherine Backman	



Trainees

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Cam Clayton	Alex Klemm
Clayton Hamilton	

> 25 Master's students @ **Centre for Digital Media, Vancouver**

Staff members

Jasmina Memetovic	Navi Grewal
Graham Macdonald	Eric Sayre
Juyoung Yoo	

