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CHOOSING WISELY CANADA DE-IMPLEMENTING LOW VALUE CARE

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RESEARCH

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PRESENTATION OUTLINE

- The problem of low value care
- Low-value care in Oncology
- Moving Forward Centre for Implementation Research and Choosing Wisely Canada (CWC) Collaboration





THE PROBLEM OF LOW-VALUE CARE

- Three pillars of inappropriate health care: underuse, overuse, misuse
- Until recently misuse and underuse were the predominant focus
- Recently there has been increased recognition of the importance of overuse or 'low-value care' - a test or treatment for which there is no evidence of patient benefit or where there is evidence of more harm than benefit
- Low-value care is a now a urgent problem in Canada and globally
 - high rates of low-value care
 - substantial variation among regions and facilities in terms of the number of unnecessary tests and procedures performed



WHY IS LOW-VALUE CARE A PROBLEM?

- 1. It leads to poor patient outcomes due to:
 - adverse events relating to unnecessary tests and treatments
 - secondary unwarranted tests and treatments
 - over-treatment of incidental findings
- 2. It adds to the burden of treatment faced by patients and families
- 3. It leads to inefficient use of scarce healthcare resources threatening the sustainability of healthcare systems



LOW-VALUE CANCER CARE

- Reducing low value care requires de-implementation
- There are relatively few studies of de-implementation, particularly in health care and specifically in cancer care
- Most articles on low-value care in oncology examine outcomes that follow screening, diagnostic tests or discrete treatments
 - These investigations have identified potential overuse and established an evidence based case for reversing standard practice....but not how to go about achieving this reversal
- Therefore, the field of oncology made a very nice starting place for our investigations into understanding reasons for low-value care and developing interventions for de-implementation



THREE STUDIES

Low-Value Behaviour	Evidence-Based Recommendation	Time Frame	Funding
Medical imaging to detect metastases in early stage breast cancer	Don't perform PET, CT, and radionuclide bone scans in the staging of early breast cancer at low risk for metastasis (Choosing Wisely US)	2014-2017	Canadian Cancer Society
Contralateral Prophylactic Mastectomy in unilateral breast cancer	The use of a prophylactic mastectomy contralateral to a breast treated with breast-conserving therapy is very strongly discouraged (National Comprehensive Cancer Network Invasive Breast Cancer Guideline)	2015-2017	Cancer Care Ontario Canadian Cancer Society
Multiple fraction radiation for uncomplicated bone metastasis	Don't recommend more than a single fraction of palliative radiation for an uncomplicated painful bone metastasis. (Choosing Wisely Canada-Oncology)	2015-2017	Canadian Cancer Society

STUDY METHODS

- Similar iKT approach across all three Canada-wide studies
- Purpose: To use state of the art approaches from implementation science to identify the determinants of each of the overused low-value care practices and to develop an intervention to reduce the low-value care based on the determinants assessment

Methods

- Theory-based determinants assessment
 - Data collection and analysis informed by the Theoretical Domains Framework (TDF)
 - TDF composed of 14 'theoretical domains' from 128 constructs across 33 health and social psychology theories
 - Offers wide coverage of potential determinants of behaviors
 - Allows identification of key beliefs that can then be targeted by (de-) implementation interventions

- Knowledge
 - Aware of guidelines and evidence?
- Skills
 - Sufficient training in techniques required?
- Social/professional role and identity
 - Is the action part of what the actor sees as typical of their profession?
- Beliefs about capabilities
 - Confident in capacity to do the behaviour. What makes it easier/difficult?
- Optimism
 - Is the actor generally optimistic that doing the behaviour will make a difference?
- Beliefs about consequences
 - What are the benefits and negative aspects of doing the behaviour?
- Reinforcement
 - Does the behaviour lead to any personal or external rewards when it is performed?

- Intentions
 - How motivated is the actor to do this?
- Goals
 - How much of a priority is this action compared to other competing demands
- Memory, attention, decision processes
 - Does the actor ever forget? Are there reminders in place?
- Environmental context and resources
 - Are there sufficient resources for the behaviour,? If not, what is missing?
- Social influences
 - Who influences the decision to perform the behaviour?
- Emotion
 - Is performing the behaviour stressful?
- Behavioural regulation
 - What does the actor personally do to ensure that they perform the behaviour?

STUDY METHODS

- Theory-based determinants assessment continued
 - Semi-structured interviews (based on TDF) with healthcare providers most involved in the low-value care practice and with breast cancer survivors (who had and had not received the low-value care)
 - Qualitative deductive coding into TDF domains, followed by generation of specific beliefs, and classification of beliefs as individual, community, organizational, and/or system-level determinants

Intervention design and assessment

- Intervention mapping process (with stakeholders)
 - Prioritization of key beliefs (team meeting with additional stakeholders, surveys of stakeholders)
 - Mapped behaviour change techniques to prioritized belief statements using the empirically and consensus driven Behavior Change Matrix
- Acceptability/feasibility assessment of intervention with stakeholders targeted by the intervention

Study Results:

Medical imaging to detect metastases in early stage breast cancer







BEHAVIOURAL DETERMINANTS – PATIENTS (N=7)

- EMOTIONS: Anxiety and fear had an impact on whether the patient wanted to proceed with imaging or what imaging type
 - I thought that if I chose to go the nonaggressive route for surgery then I wanted to have all of the possible diagnostics done so that I knew that I was making the right decision to go the more conservative surgery
- SOCIAL INFLUENCES/ REINFORCEMENT: The opinions of friends/family impacted whether or not they wanted to have imaging
 - Patient 2 recounts how her co-worker who had also been diagnosed with a similar condition but that because of the additional tests they had found that she had another kind of cancer so thank goodness she had those tests done and that is what dictated her to request the additional tests
- DECISION PROCESSES: Patients were influenced by their physicians' recommendations on imaging
 - Patient 3 discussed that the surgeon and the staff that was attending to her were very supportive of her decision to get a full body MRI. She said, "they were basically like if they had the funding and there was no budget cuts we would send everybody for a full body because the more information you have the better it is for everybody."

Belief Theme	Rank	Level
Physician knowledge of evidence regarding efficacy/yield of tests	1	Individual
Physician knowledge of guideline recommendations to not order staging tests to detect metastatic disease for early stage Br. Cancer	2	Individual
Physicians' level of confidence to manage early stage Br. cancer patients without ordering tests	3	Individual
Ordering staging tests according to patient characteristics/ specific patient population	4	Individual
Physician conviction of negative aspects of staging tests	5	Community Organizational System
Training and experience	6	Individual
Staging tests being ordered before or after you have seen the patient	7	System
Patient/ family knowledge regarding whether staging tests are needed and/ or can be harmful	8	Community
Use of staging tests to tailor treatment plans	9	Individual
Time to staging test completion		Organizational

INTERVENTION DEVELOPMENT AND ASSESSMENT

TDF Domain	De-Implementation Intervention Strategy	
Knowledge	Education and Trust of Guidelines: details of yield of tests, evidence behind guideline development, nuances of care eg. pt characteristic influencing acceptance of guidelines	
Beliefs about consequences	Education re details of negative and perceived positive consequences of tests. Positive reinforcement by colleagues that they don't need tests to be ordered for them/they themselves don't order tests	
Environmental context/Capability	Electronic pop ups during ordering with guideline reminders	
Social Influences Beliefs about capabilities	Role modeling, pre-formed scripts for various encounters with patients; to include how to communicate to each other professionally amongst clinicians; patient education in the material we provide for them+ preop education classes	

Feasibility Assessment

- Presented to, discussed, practiced, at Champaign LIHN (2 hour community of practice meeting) – attended by 75 stakeholders
- Positively received for moving forward with a more formative evaluation (trial)

Study Results:

Contralateral Prophylactic Mastectomy in unilateral breast cancer





HEALTHCARE PROFESSIONAL INTERVIEWS (N=59)



BEHAVIOURAL DETERMINANTS – PATIENTS (N=15)

Patient anxiety and fear

• Anxiety and fear related to cancer re-occurrence and aesthetic results

CPM is a difficult decision

- The decision to have (or not) CPM was difficult
- Did not feel they were properly informed about CPM
- Needed more guidance in making their decision on CPM

INTERVENTION DESIGN AND ASSESSMENT

De-Implementation Strategies

- 1. Canadian consensus statement
- 2. Funding change
- 3. Decision support 2 forms of a decision aid
 - Consult (used during the consult visit with the patient)
 - Patient (used on own)

Feasibility of Decision Aid:

- Assessed with physicians, nurses, and cancer survivors
 - Right amount of information (88%)
 - Clear (65%-92%, depending of the section of the aid)
 - Balanced (87%)
 - Prepares you to make a decision on CPM (100%)
 - Useful for clinical practice (100%)
 - Willing to use the decision aid/tell someone about it (73%)



Moving Forward: The Centre for Implementation Research and Choosing Wisely Canada Collaboration





CHOOSING WISELY CANADA (CWC) CAMPAIGN

- Established in 2014 to encourage clinicians and patients to engage in conversations about unnecessary tests/treatments, and make optimal choices to ensure high-quality appropriate health care
- It is physician-led in partnership with the Canadian Medical Association and is endorsed by all provincial/territorial medical associations in Canada
- CWC has made considerable strides with respect to low-value care:
 - 60 Canadian medical specialty societies developed more than 280 recommendations
 - Launched three national campaigns (More is not necessarily better; Opioid Wisely; Antibiotic Wisely)
 - Established the Students and Trainees Advocating for Resource Stewardship (STARS) initiative
- Next step: implementation of CWC recommendations



CWC DE-IMPLEMENTATION FRAMEWORK (DEVELOPED WITH CIR FACULTY)

Phase 0

Identification of potential low value practices

Phase 1 Identification of local priorities

Phase 2

Identify barriers and potential interventions to reduce the lowvalue practice

Phase 3

Implementation and evaluation of the de-implementation program

Phase 4

Spread of the effective de-implementation program



THE CWC IMPLEMENTATION RESEARCH NETWORK (CWC-IRN)

- CWC and the provincial CWC hubs have come together to establish the CWC Implementation Research Network
- The network is supported by the Implementation Science Hub, comprised of a interdisciplinary group of 13 scientists based here at the Centre for Implementation Research at the Ottawa Hospital Research Institute (CIR-OHRI)
- The overall goal of the network is to develop the scientific basis to support implementation of CWC recommendations in Canadian healthcare settings by undertaking rigorous implementation research and encouraging shared learning and synergies across provinces
- Early planned activities involve:
 - 1) Innovative cluster randomized trials of de-implementation strategies
 - 2) Building the conceptual basis and methods of implementation science
 - 3) Building capacity in innovative CRTs of de-implementation strategies



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