



Equity, Diversity, Inclusion and Decolonization in Knowledge Mobilization

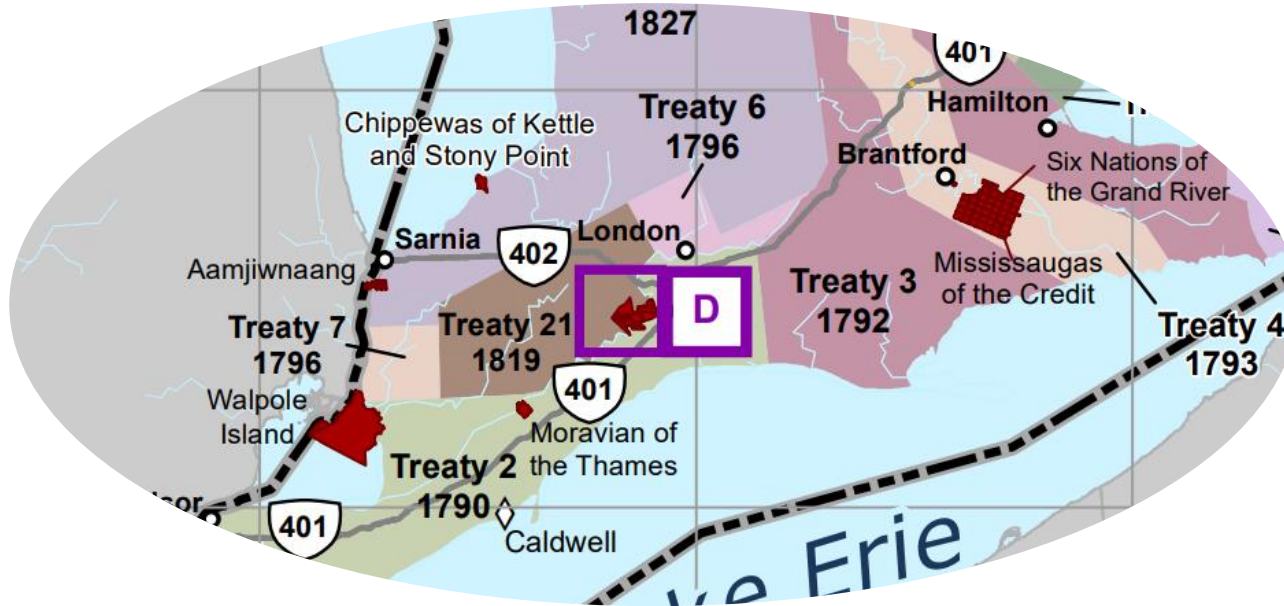
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Western University
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FHS
MSK-IF 



Truth and Reconciliation Commission's 94 Calls to Action



Truth and
Reconciliation
Commission of Canada

#19 To establish **measurable goals to close health gaps** between Indigenous and non-Indigenous peoples

#23 Increase **Indigenous healthcare representation** and create culturally safe learning environments

#24 **Mandatory education** on Indigenous health, history, Treaties, and rights for all students

#65 Establish **national research programs to advance reconciliation** & support Indigenous knowledge



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Positionality



- **Identity:** White, settler, cis, gay, queer, Franco, ADHD
- **Lived experience:**
 - Chronic lumbopelvic pain
 - Both parents with inflammatory arthritis
- **Research & clinical background**
 - Arthritis, pain, pelvic health, LGBTQIA+ health
 - Patient and community engagement
 - Physiotherapist

How does my positionality impact

- the questions I ask?
- what knowledge I value?
- how I communicate findings?



Why EDID Matters in Knowledge Mobilization



Imagine you've just finished an incredible study...



Consider...

- Who will read it? Who won't?
- Who will understand it?
- Who trusts the information? Who won't?
- Who was it designed for?
- Who benefits? Who is left out?
- How do you know?

Has knowledge actually been mobilized?



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Learning Objectives

By the end of this session, you will be able to:

- Describe how **equity, diversity, inclusion**, and **decolonization** principles influence the **quality, relevance** and **impact** of knowledge mobilization
- Identify where **inequities** can arise across the **knowledge-to-action pathway**
- **Apply EDID principles** to the **design, implementation** and **evaluation** of knowledge mobilization
- Reflect on how **positionality** influences knowledge production and mobilization



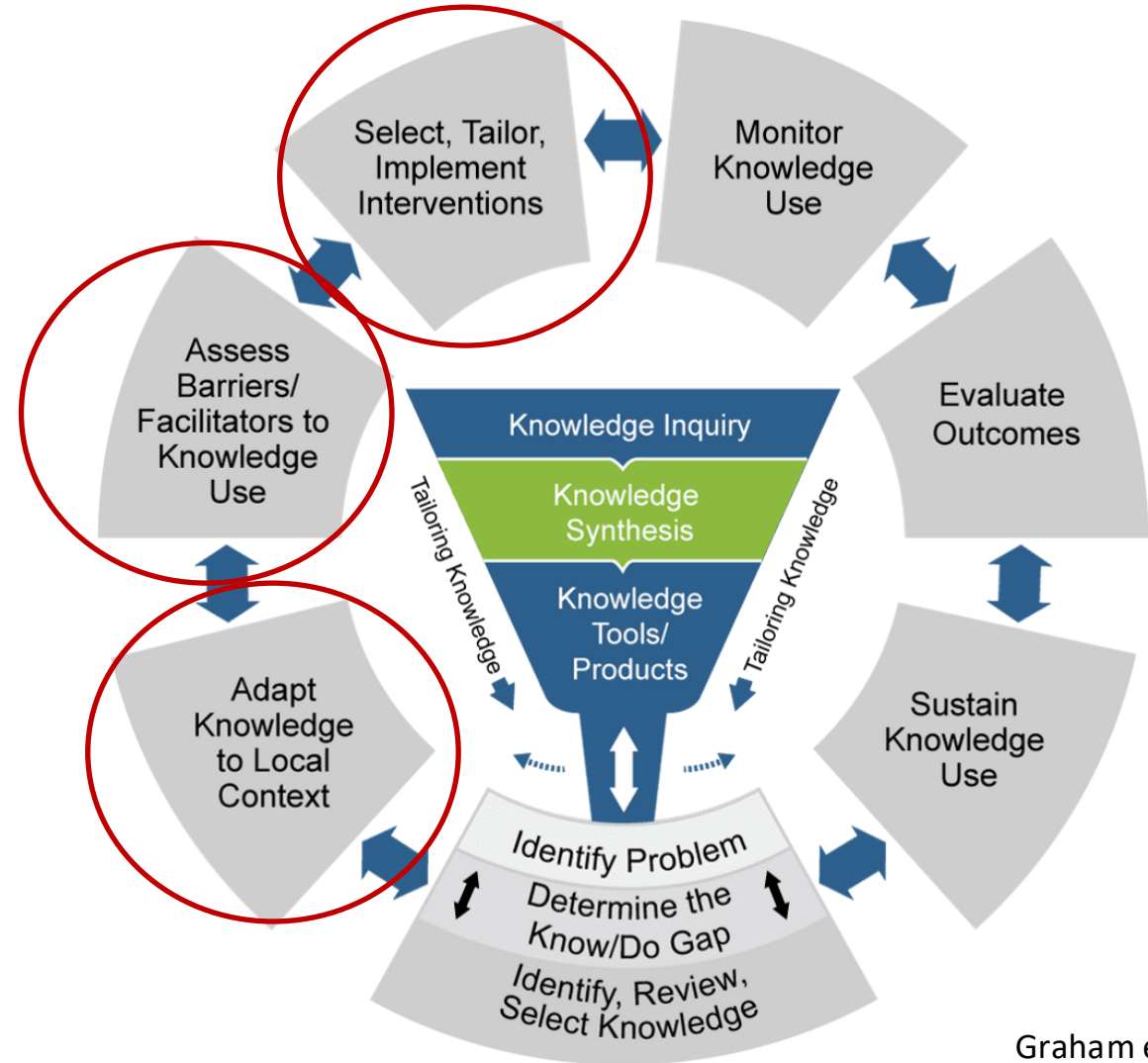
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Knowledge-to-Action (KTA) Cycle

- **Bridges** the gap between **research** and **practice**
- **Guides** how evidence is **adapted**, **implemented**, and **sustained**
- **Recognizes** that **one approach** does not fit every context or community



Graham et al., 2006

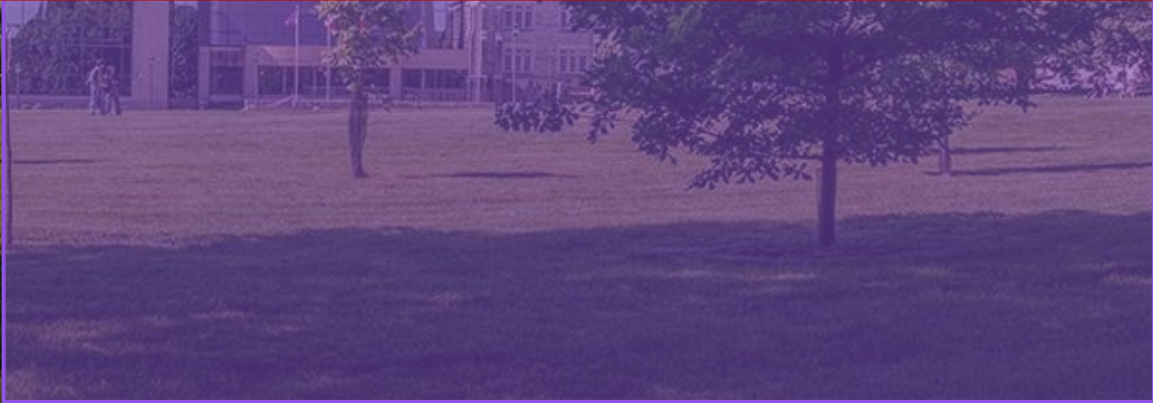
5 Questions Every Knowledge Mobilizer Should Ask



- 1. Who are we trying to reach?**
- 2. What assumptions are we making?**
- 3. What barriers exist?**
- 4. How should our strategy change?**
- 5. How will we know it worked?**



Producing Knowledge Worth Mobilizing





Why Representation Strengthens Science

- Health research often includes a **homogeneous sample – lack of diversity**
 - **Knowledge gaps** in epidemiology, disease experiences, treatment response
- Findings appear **universal**, but are **less directly applicable** to many seen in practice
- **Inclusive data** improves **validity, generalizability** and **clinical relevance**

When people's realities are missing from our data, our science loses accuracy



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Thomas et al., 2024; Wiens et al., 2024; Yip et al., 2021



Example: Belimumab for Lupus

- Early trials included **few Black participants** → **results uncertainty**
- Regulators advised **caution in prescribing to Black patients** due to limited evidence
- A **dedicated trial (EMBRACE)** was launched to assess safety and effectiveness
- EMBRACE results confirmed **similar benefits for Black patients**
 - Removal of the cautionary statement
- Shows how **underrepresentation** creates **data gaps** that affect **care and equity**

ORIGINAL ARTICLE

Two-Year, Randomized, Controlled Trial of Belimumab in Lupus Nephritis

Richard Furie, M.D., Brad H. Rovin, M.D., Frédéric Houssiau, M.D., Ph.D., Ana Malvar, M.D., Y.K. Onno Teng, M.D., Ph.D., Gabriel Contreras, M.D., M.P.H., Zahir Amoura, M.D., Xueqing Yu, M.D., Chi-Chiu Mok, M.D., Mittermayer B. Santiago, M.D., Amit Saxena, M.D., Yulia Green, M.D., Beulah Ji, M.D., Christi Kleoudis, M.P.H., Susan W. Burris, M.S., Carly Barnett, M.P.H., and David A. Roth, M.D.

Efficacy and Safety of Belimumab in Black Race Patients With Systemic Lupus Erythematosus (SLE) (EMBRACE)

[ClinicalTrials.gov ID](https://clinicaltrials.gov/ct2/show/study/NCT01632241)  NCT01632241

Arthritis & Rheumatology

Vol. 74, No. 1, January 2022, pp 112–123
DOI 10.1002/art.41900

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AMERICAN COLLEGE
of RHEUMATOLOGY
Empowering Rheumatology Professionals

Phase III/IV, Randomized, Fifty-Two-Week Study of the Efficacy and Safety of Belimumab in Patients of Black African Ancestry With Systemic Lupus Erythematosus

Ginzler et al., 2022

Furie et al., 2020



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From Representation to Impact



**Representation in research
closes the loop between
evidence and care**



Who Benefits From Knowledge?

- Individuals with which identities or life circumstances become **invisible** when eligibility criteria function as filters?
- Which assumptions about **participation, language, risk, or ability to consent** show up here?
- How does this impact **generalizability**?

Who is missing from the evidence we hope to mobilize?



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When Populations Are Missing

Missing populations → missing guidance

- How does this show impact effective and accurate KMb?
 - Many **MSK and orthopedic trials** still **exclude cognitive impairment, multimorbidity or polypharmacy** despite being common in practice
 - Limited rehabilitation research with **neurodivergent adults**
 - Sparse data on **pain communication** across **cultures, languages** and **health beliefs**
 - Minimal examination of how **racism, discrimination** and **stigma** influence **care seeking** and **participation**

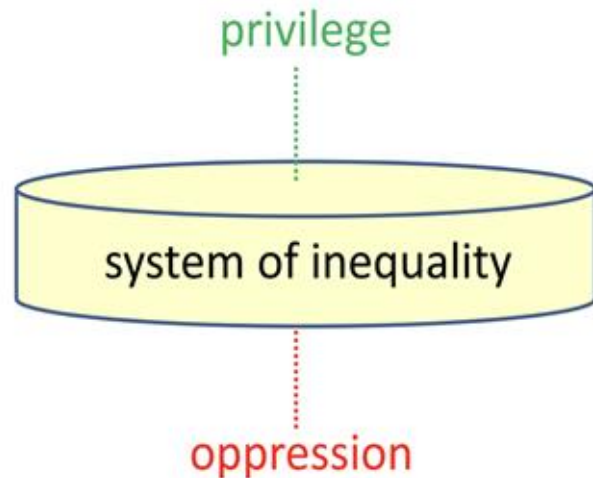
Systems Shape Who Benefits From Knowledge



The coin model of privilege and critical allyship: implications for health

Stephanie A. Nixon^{1,2} 

Power & Privilege



Top of the coin

- You have advantage others do not
- You did not earn it
- You have it because of who you happen to be

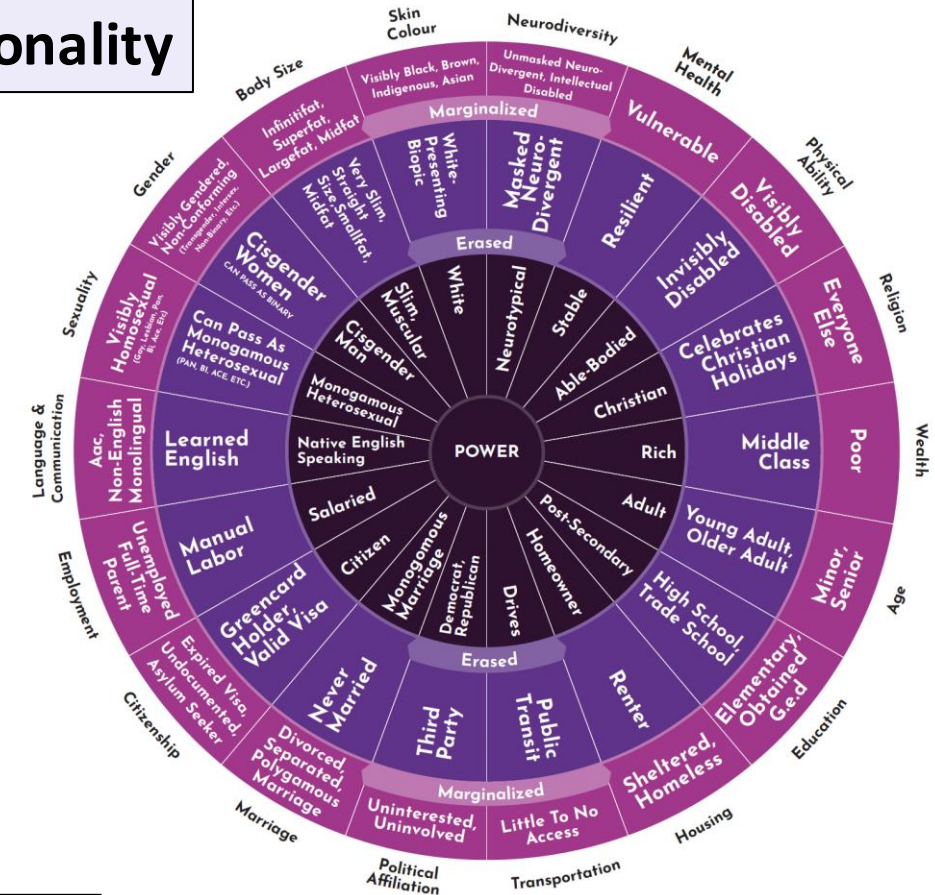
The coin

- The social structure that produces and maintains inequality e.g., sexism, racism, ableism

Bottom of the coin

- You have disadvantage others do not
- You did not earn it
- You have it because of who you happen to be

Intersectionality



Bias

Nixon, 2019
Hankivsky, 2014



When Populations Are Missing



Every upstream decision shapes the knowledge that is ultimately being mobilized



Producing Knowledge We Can Trust



Trustworthy Knowledge Requires Trustworthy Partnerships



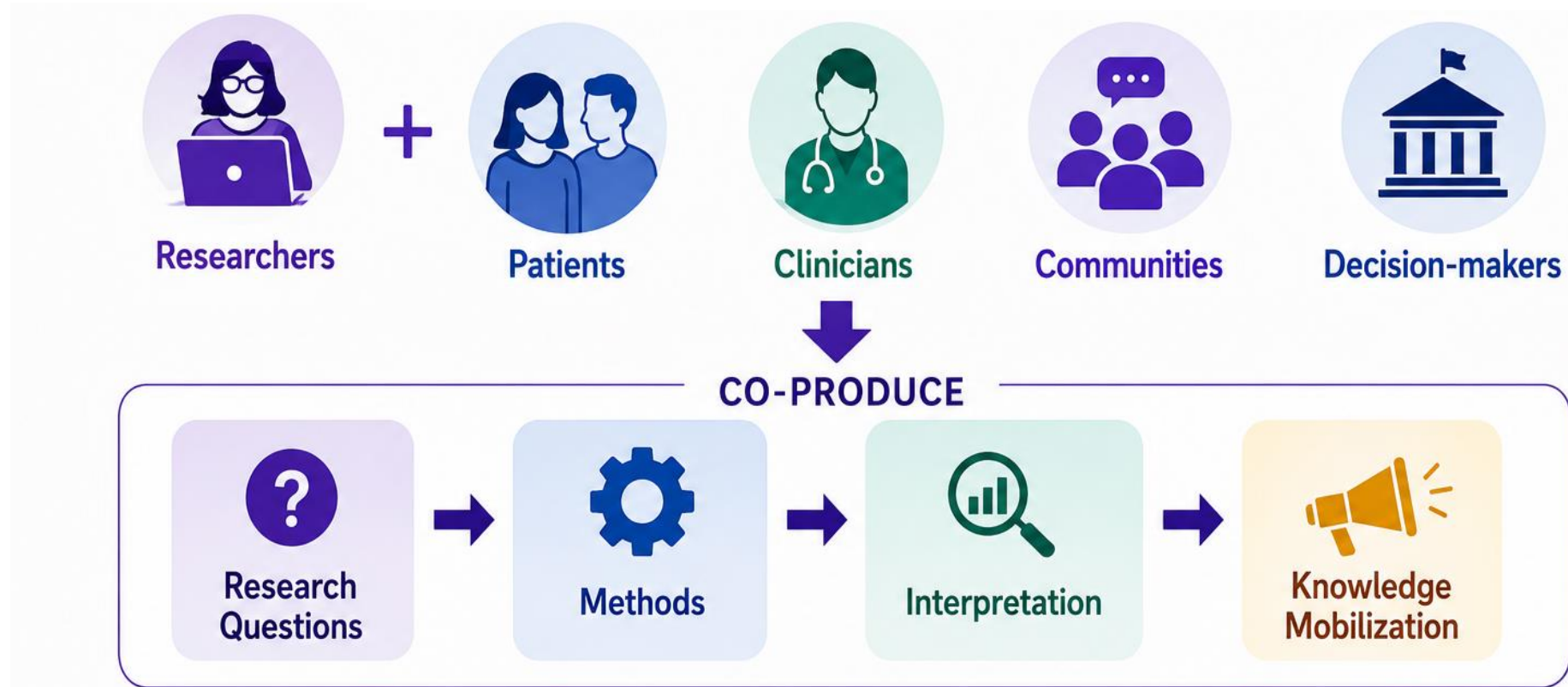
If we conceptualize or measure the **wrong construct**, we produce **knowledge that is less trustworthy** and **less useful**





Integrated Knowledge Translation (iKT)

Researchers and knowledge users work together throughout the research



**Partnership builds
more trustworthy
and useful
knowledge**

Knowledge Mobilization Depends on Relationships



Trust

Build and maintain trust over time



Reciprocity

Exchange value and benefit equitably



Shared Decision-Making

Involve partners in priorities and decisions



Long-term Relationships

Invest in relationships that last beyond a single project



Strong relationships lead to trusted knowledge and meaningful impact.



Evaluate Trust & Representation

Questions to ask when designing or appraising research:

- Who was **invited** and who **participated**?
- Did the study **engage with communities** or simply **extract data**?
- Were **language, imagery and materials** accessible and culturally relevant?
- Was participation **compensated** and **recognized** appropriately
- Were **community priorities** reflected in study aims or outcomes?
- Did the research build **ongoing relationships** or rely on one-time interactions?

Consider, would recruitment have been **accessible, safe, affirming, logistically feasible,** and **trust-building** for the populations we want represented in the evidence?



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Ashley, 2020; Cwinn et al., 2021;
McCormack, 2014; Owen-Smith, 2016



Audience Mapping



Who have we forgotten?



Hidden Assumptions

We often assume people...



**Speak
English**



**Have
internet**



**Trust
researchers**



**Have
transportation**



**Can
read**



**Can attend
daytime
events**





Accessibility is good KMb

When we make knowledge **accessible**, more people **understand it, use it, and act on it**

5 tangible ways to make your KMb more accessible

1



Use plain language

Avoid jargon and write in everyday words.

Example:
“People with knee pain benefited.”

2



Use clear visuals

Choose simple charts and graphics that highlight the main message.

Example:
Bar chart instead of a table of numbers.

3



Offer multiple formats

Share your message in different ways so people can access it how they prefer.

Example:
PDF, slide deck, infographic, video, or audio.

4



Tailor to your audience

Adapt your key messages to what matters most to your audience.

Example:
Clinicians, patients, and policymakers need different details.

5



Make it easy to act

Clearly state what the take-away is and what to do next.

Example:
“Try this exercise 3 times per week.”

Accessibility includes literacy, language, disability, technology, culture & format



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PROGRESS-Plus Framework

PROGRESS-Plus can help identify factors we should be thinking about that influence who is represented in **KMb products**, and who has **access to information through KMb**

PROGRESS-Plus	Potential constructs captured
Place of residence	Rural, remote, or local access differences
Race and ethnicity	Self identified categories and relevance to condition
Occupation	Work demands, employment status, return to work factors
Gender and sex	How measured, which variables used, and why
Religion	Cultural or care participation considerations when relevant
Education	Literacy, self management, and rehab engagement
Socioeconomic status	Income, insurance, or financial barriers
Social capital	Social support, caregiving roles, community networks
Plus	Disability, language, comorbidity, age, newcomer status



Oliver et al., 2008; 2012
O’Neil et al., 2014



PROGRESS-Plus in Action

For example...

You will likely need to tailor your KMb to specific audiences



Older Adults

Printed booklet
with large text



Newcomers

Translated
resources



Deaf Community

Captioned
videos



Low Literacy

Visual
infographics



But also, do not make assumptions reinforced by stereotypes



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Oliver et al., 2008; 2012
O'Neil et al., 2014

But Don't Confuse Tailoring with Stereotyping



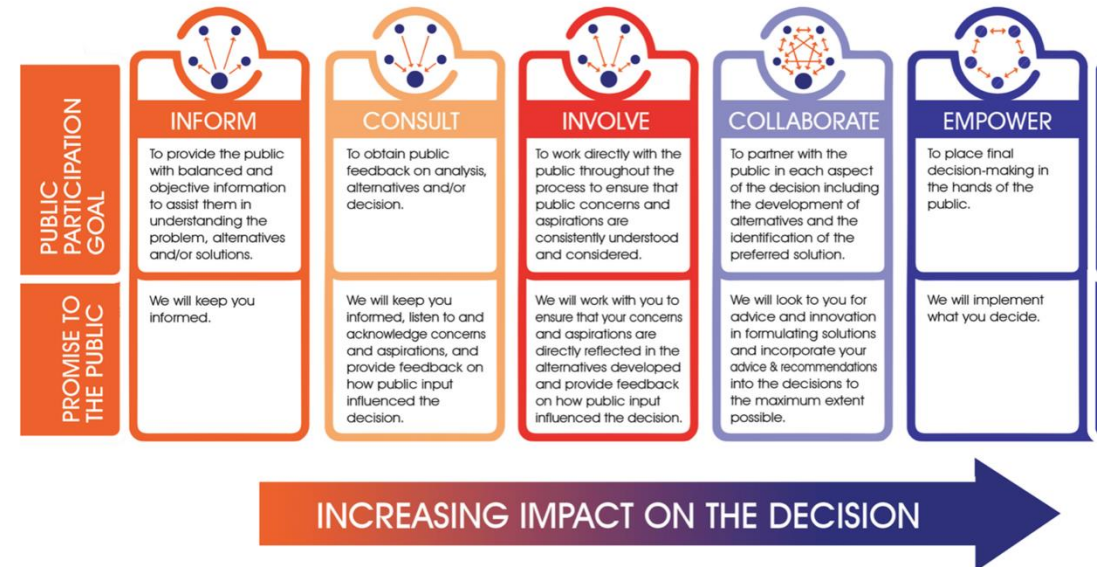
Tailor communication **with** communities, **not based on assumptions** about communities.
For example:

- “Older adults don’t use technology”
- “Everyone with low literacy wants pictures”
- “All newcomers require translation”

Instead:

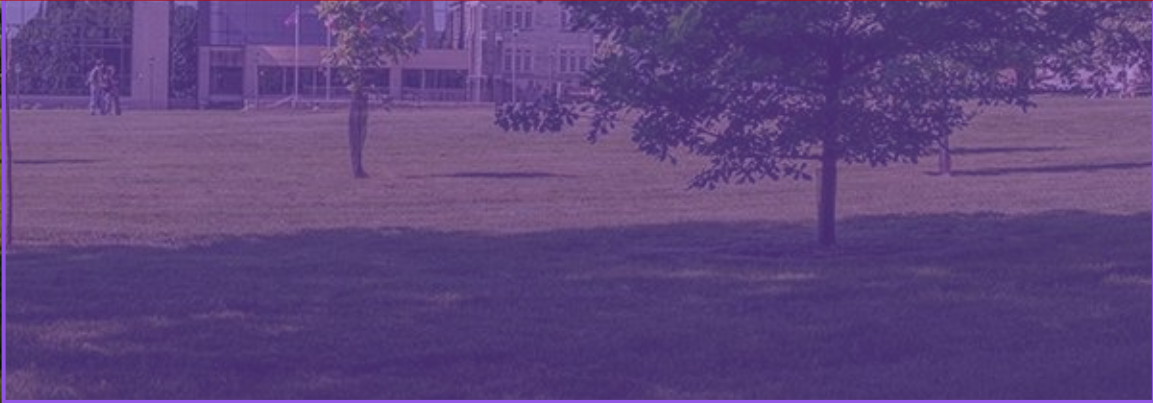
- **Ask**
- **Co-Design**
- **Test**

And remember IAP2...





Decolonizing KMb

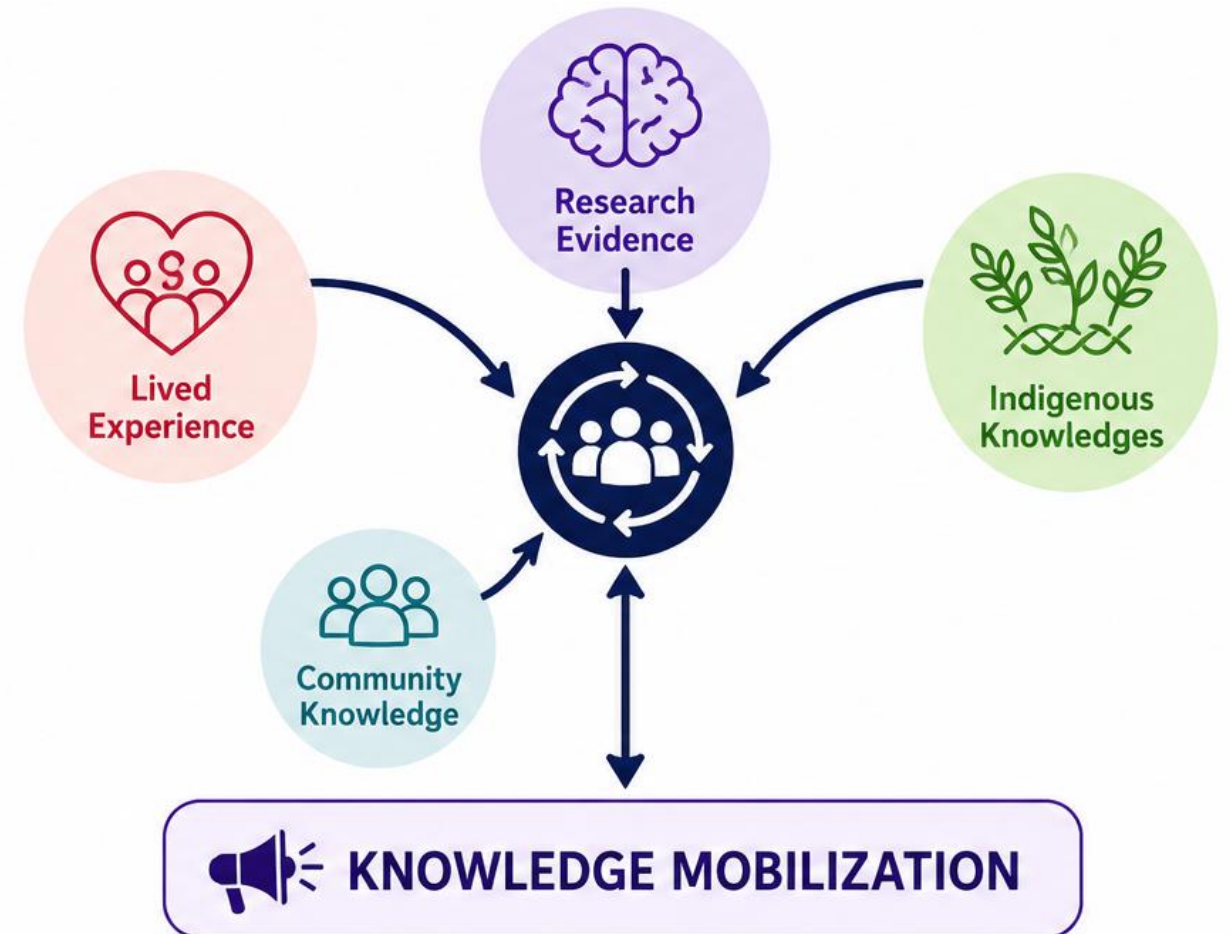




Decolonizing Knowledge Mobilization

Decolonization asks us to reconsider **not only how knowledge is shared, but whose knowledge is prioritized, who has authority, and who benefits**

Good KMb values multiple ways of knowing, not just published evidence



How CARE Shapes Indigenous Health Research



Collective Benefit

Who benefits?

Does this knowledge create value for Indigenous communities?



Authority to Control

Who decides?

Who controls interpretation and sharing?



Responsibility

Who is involved?

Are Indigenous communities partners throughout?



Ethics

How is knowledge shared?

Does mobilization respect Indigenous priorities and protocols?



CARE helps ask if KMb is accountable to Indigenous communities, not just about them



Example to Apply the CARE Lens

A provincial health study compared chronic disease rates between Indigenous and non-Indigenous populations using administrative data

The study:

- Reported **disparities**
- Used **rigorous methods**
- Interpreted findings without **Indigenous governance** or **voice**
- Did not **return findings** to Indigenous communities
- Offered **no collective benefit** to Indigenous communities
- Reinforced **deficit narratives**

While this study is methodologically rigorous, discuss what makes it inequitable from a CARE perspective?



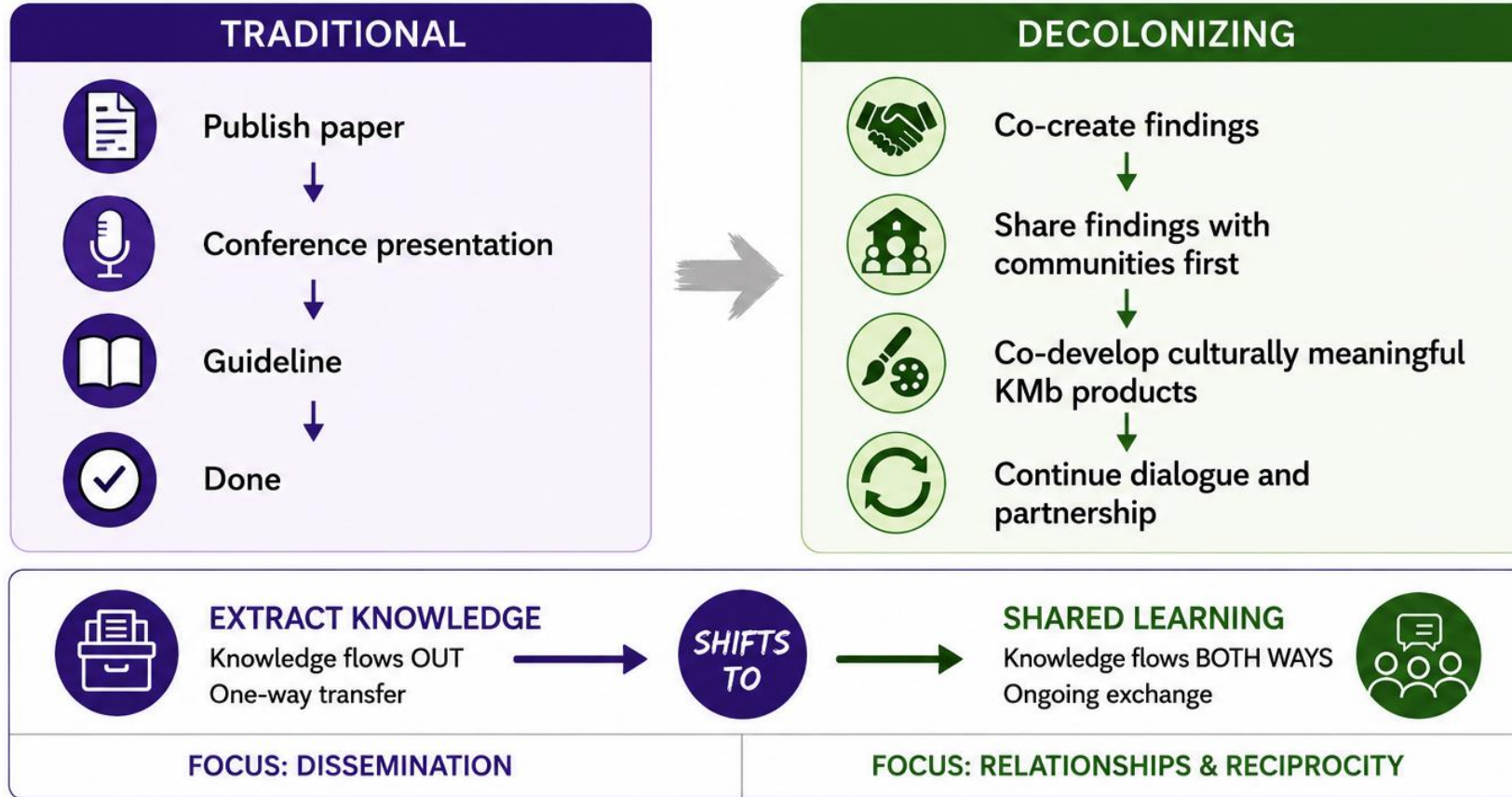
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What does Decolonizing KMb Look Like?

From **dissemination** to **reciprocity**



Decolonizing KMb is not simply sharing knowledge differently. It changes who shapes knowledge, who interprets it, and who benefits from it



What This Means for Graduate Researchers

When planning KMb involving Indigenous Peoples ask:

- **Who has authority** over interpretation?
- **Who benefits** from this knowledge?
- **Are findings returned** in meaningful ways?
- Are **Indigenous priorities reflected**?
- Are **Indigenous partners shaping KMb** products?

Practice shift: Move from mobilizing knowledge *about* Indigenous communities to mobilizing knowledge *with* Indigenous communities



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Carroll et al., 2020; 2022



Wrap-Up

5 Questions Every Knowledge Mobilizer Should Ask



- 1. Who are we trying to reach?**
- 2. What assumptions are we making?**
- 3. What barriers exist?**
- 4. How should our strategy change?**
- 5. How will we know it worked?**



One Message. Different KMb Products

Research Finding = Exercise Helps with Knee Osteoarthritis Symptoms



**Patient
infographic**

Patients and
caregivers



Podcast

People who prefer
listening



**Policy
brief**

Policymakers and
decision makers



**Community
workshop**

Community
members



**Clinical
summary**

Clinicians and
health professionals



**Instagram
Reel**

Social media
audience



The audience determines the strategy.



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Same Format. People Have Different Needs



E.g., Infographic showing therapeutic exercise helps with knee OA symptoms



2S/LGBTQIA+ communities

-  Use affirming language & inclusive imagery
-  Reflect diverse gender identities & relationships
-  Avoid assumptions; focus on needs not identities
-  Share LGBTQIA+ affirming resources & supports



Newcomers / language diversity

-  Translated versions (key languages spoken locally)
-  Use culturally relevant examples & images
-  Plain language & short sentences
-  Include local community information



Indigenous communities

-  Co-create content & seek guidance from community
-  Use culturally safe language & visuals
-  Acknowledge land, traditions, & ways of knowing
-  Direct to Indigenous-led resources & supports



Low literacy / learning diversity

-  Use more visuals, less text
-  Break into clear steps with icons
-  Focus on key takeaways
-  Add QR code to short explainer video (optional)



Deaf / hard of hearing

-  QR code to captioned video or ASL video
-  Written key messages (plain language)
-  Use clear visuals & minimal text
-  Provide plain-language text summary

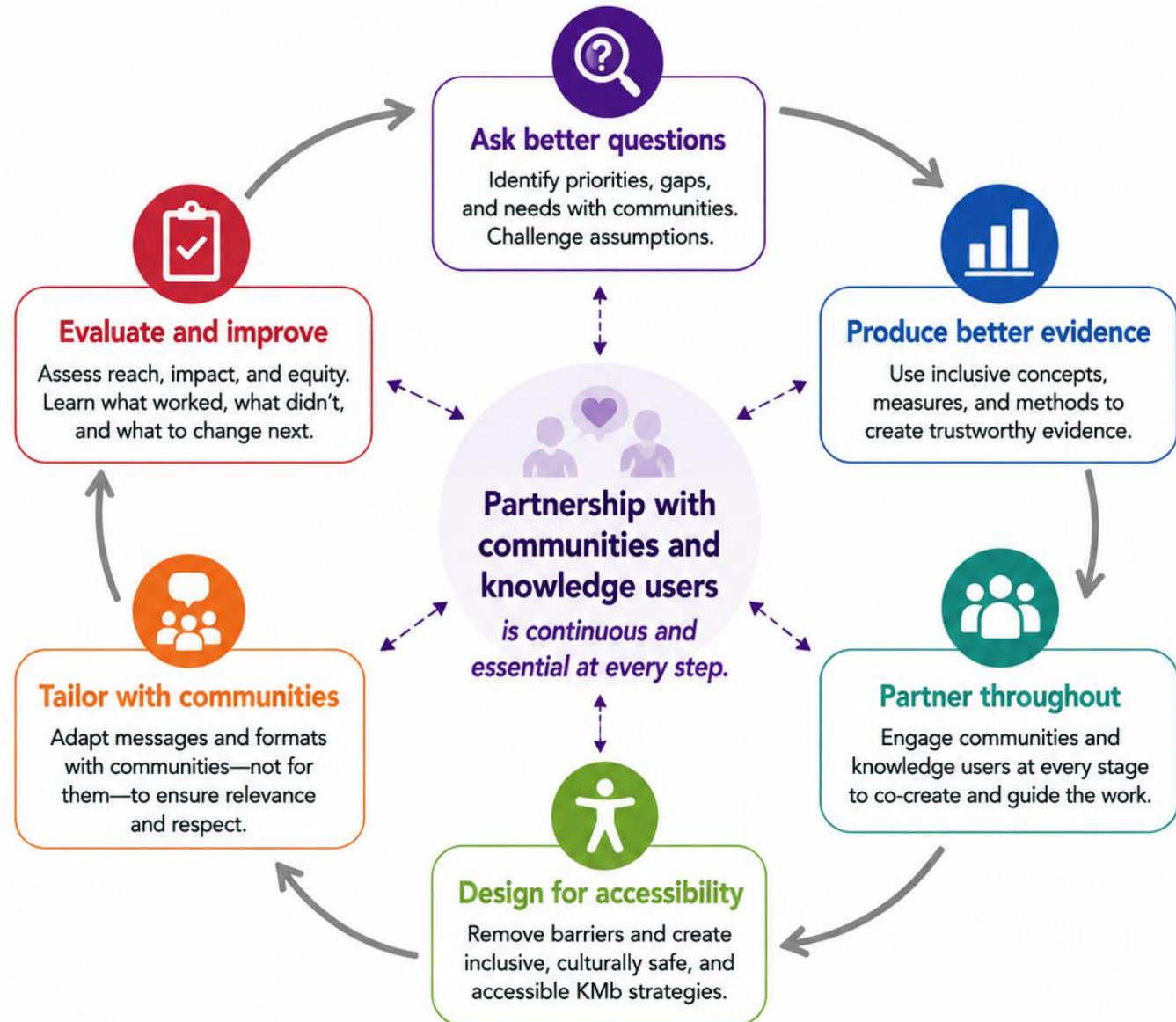


Equity happens in the details.

Equitable Knowledge Mobilization Is A Process



Equity is not something we “add” to KMb, it is something we build into every stage of research





**CANADIAN MUSCULOSKELETAL
REHAB RESEARCH NETWORK**

Thank you!



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