Deborah A. Marshall, PhD

Biosketch

Professor, Department of Community Health Sciences, University of Calgary

Svare Chair in Health Economics, Value and Impact, University of Calgary

Scientific Director, Research and Partnership Evaluation and Impact, Alberta Children's Hospital Research Institute (ACHRI)

Lead, Value, Impact, & Knowledge Mobilization, One Child Every Child, University of Calgary

Arthur J.E. Child Chair, 2012 – 2022

Canada Research Chair (Health Services and Systems Research), 2008 – 2018

Fellow Royal Society of Canada Fellow (FRSC)

Fellow Canadian Academy of Health Sciences (CAHS)

A. Expertise Keywords

Patient Preferences; Patient Engagement; Health Economics, Health Services Research; Simulation Models; Cost Effectiveness; Personalized Medicine; Osteoarthritis; Musculoskeletal; Discrete Choice Experiment; Child Health and Wellness, Rheumatology, Inflammatory Diseases, Rare Diseases

B. Education & Training/Employment

EDUCATION & TRAINING				
PhD	University of North Carolina, Chapel Hill	Health Services Research and Health Economics	1998	
MHSA	University of Alberta, Edmonton	Health Sciences	1990	
BSc (Hons)	University of Toronto	Biochemistry	1988	

SELECTED EMPLOYMENT		
2024 – Present	Royal Society of Canada Fellow	
2024 – Present	Svare Chair in Health Economics, Value and Impact, University of Calgary	
2024 – Present	Adjunct Professor, University of Alberta School of Public Health	
2021 – Present	Scientific Director, Research and Partnership Evaluation and Impact, Alberta Children's Hospital Research Institute	
	(ACHRI)	
2015 – Present	Professor, Cumming School of Medicine, Department of Community Health Sciences, University of Calgary	
2014 – Present	Senior Scientist, Arthritis Research Centre of Canada (ARC)	
2012 - 2022	Arthur J.E. Child Chair in Rheumatology Outcomes Research	
2008 - 2018	Canada Research Chair Tier II in Health Services and Systems Research, University of Calgary	
2015 - 2017	Associate Professor, Institute of Health Policy, Management and Evaluation (IHPME), University of Toronto	
2008 – 2015	Director of Health Technology Assessment, Alberta Bone and Joint Health Institute	
2008 - 2015	Associate Professor, Department of Community Health Sciences, University of Calgary	

C. Awards and Distinctions

ISPOR Marilyn Dix Smith Leadership Award		
Royal Society of Canada Fellow		
Top 10 Articles of the 2023 Year as part of the Canadian Institute of Health Research (CIHR) Institute of Health		
Services and Policy Research (IHSPR) and Canadian Association for Health Services and Health Policy Research		
(CAHSPR) Article of the year (Currie GR, Harris M, McClinton L, Trehan N, Van Dusen A, Shariff M, Kuzmyn T, Marshall		
DA. Transitions from Pediatric to adult rheumatology care for juvenile idiopathic arthritis: a patient led qualitative study. BMC		
Rheumatology, Nov 2022;6(1):85).		
Canadian Academy of Health Sciences (CAHS) Fellowship Award, University of Calgary		
Killam Annual Professorship Award		
Dr. Jill M, Sanders Award of Excellence in Health Technology Assessment, Canadian Agency for Drugs and		
Technologies in Health (CADTH)		
Peak Scholar Award, University of Calgary		
O'Brien Institute Research Excellence Award, University of Calgary		
Distinguished Achievement Cochrane Award for Research, Faculty of Medicine		
Early Career Excellence in Graduate Education Award, Graduate Science Education, University of Calgary		
Board of Directors President, International Society for Pharmacoeconomics and Outcomes Research (ISPOR)		
Canadian Institutes of Health Research Celebration of Excellence in Health Research Knowledge Translation Prize,		
Arthritis Research Centre (ARC) of Canada Research Scientist for New Digital Media Knowledge		
Canadian Institutes of Health Research and Canadian Medical Association Journal Top Achievements in Canadian		
Health Research Award.		

Ozdemir S, Veldwijk J, van Til J, Hollin IL, **Marshall DA**, Reed SD. Unlocking patient preferences: The potential of stated-preference methods in clinical decision-making. Value Health, Sept 2025;S1098-3015(25):02532-X https://doi.org/10.1016/j.jval.2025.08.016

Gerber B, Currie GR, Mosoiu A, Bernier A, Bernier FP, Boycott KM, Fiebelkorn G, Hens K, Knoppers BM, LeBlanc C, Scherer SW, Shaw D, Viney C, Virtanen C, Benseler SM, Yeung RSM, **Marshall DA.** A roadmap for navigating child health research data sharing across Canada and beyond – building on UCAN CAN-DU. Pediatric Rheumatology Online, Sept 2025;23(1): 89. https://doi.org/10.1186/s12969-025-01139-7

Marshall DA, MacDonald KV, Suryaprakash N, Mirza RM, Sewitch MJ, Nguyen GC. Incorporating best-worst scaling (BWS) questions into focus groups to improve understanding of patient preferences and refine BWS attributes. The Patient: Patient-Centered Outcomes Research (PTTA), Sept 2025;18(5):481-493. https://doi.org/10.1007/s40271-025-00736-8

Johnson JA, Itiola AJ, Rahman S, Smith C, Soprovich A, Wozniak LA, **Marshall DA**. Usability testing of an individualized decision aid for total knee arthroplasty. PEC Innovation, Aug 2025;7:100421. doi.org/10.1016/j.pecinn.2025.100421

Crosland P, Ho N, Nguyen KH, Tran K, Hosseini S, Vacher C, Skinner A, van Rosmalen J, Rosenberg S, Iorfino F, Loblay V, Iannelli O, Piper S, Song Y, Morson S, Piccone J, Connell, **Marshall DA**, Hickie I, Occhipinti J. Modeled estimates of the health outcomes and economic value of improving the social determinants of mental health. Nature Mental Health, Aug 2025;3(1):943-956. (Open Access). https://doi.org/10.1038/s44220-025-00459-7

MacDonald KV, Gonzalez Sepulveda JM, Johnson FR, **Marshall DA.** Strong preferences or simplifying heuristics? Using internal-validity tests and latent-class analysis to better understand stated preference survey results. A case example in health preferences research. Value in Health, July 2025;S1098-3015(25)02430-1 https://doi.org/10.1016/j.jval.2025.06.015.

Morin SA, Horta A, Greer K, Priya Rai P, Gross H, Reiter R, Nielssen I, Bruce M, Giroux K, **Marshall DA.** Seeing the Invisible Resiliency (STIR): Chronic autoimmune conditions and post-secondary education experiences in young adulthood. Health Expectations, Aug 2025;28(4):e70332. https://onlinelibrary.wiley.com/doi/10.1111/hex.70332

Oedingen C, MacDonald KV, Stein BD, Batist G, Cheung WY, Gill S, Goldenberg BA, Ko Y-J, **Marshall DA**. Patient Preferences for Metastatic Colorectal Cancer Treatment: A Multi-method Approach Using Discrete Choice Experiments and Best–Worst Scaling. The Patient – Patient-Centered Outcomes Research, July 2025 https://doi.org/10.1007/s40271-025-00760-8)

Marshall DA, Sidhu S, Oddone Paolucci E, Lopatina E, Gallant N, Pohar Manhas K, McGrail K, Wasylak T, Zelinsky S, Stirling B, Noseworthy T. A national curriculum and community of practice for health services and policy research training: Insights from the Health System Impact Fellowship National Cohort Training Program (HSIF NCTP). Learn Health Sys (Open Access), July 2025;e70025:1-12. https://doi.org/10.1002/lrh2.70025

Crossnohere NL, Golder J, de Bekker-Grob EW, Sepulveda JM, Gunasekaran K, Hanna A, Levitan B, Liden B, **Marshall DA**, Poulos C, Reed SD, Janssen EM. Developing Tools for the Efficient Design of Health Preference Studies: Taxonomy of Attributes and Prototype of an Attribute Library. Patient, July 2025. https://doi.org/10.1007/s40271-025-00751-9

MacDonald KV, Nguyen GC, Sewitch MJ, **Marshall DA**. Identifying and managing fraudulent respondents in online stated preferences surveys: A case example from best-worst scaling in health preferences research. The Patient – Patient-Centered Outcomes Research, July 2025;18(4):373-390 Doi: 10.1007/s40271-025-00740-y

Mirza RM, Salim S, Bell JAH, Esplen MJ, MacDonald KV, Stein BD, **Marshall DA**. Exploring How Values of Colorectal Cancer Patients and their Caregivers Influence Treatment Decision-Making. The Patient. July 2025;18(4):317-327 https://link.springer.com/article/10.1007/s40271-024-00716-4

Raskin N, Hiligsmann M, Rebutoc AR, Bansback N, Boonen A, Buchbinder R, Falahee M, Fraenkel L, **Marshall DA**, Maxwell L, Nieuwlaat R, Proulx L, Saadat P, Shea B, Tugwell P, Wiercioch W, Beaton D, Richards P, Schunemann H, Guillemin F, Hazlewood GS. Standardizing health outcomes for people with rheumatoid arthritis receiving disease modifying drug therapy: A rapid review of patient-decision aids and preference studies to inform the development of OMERACT health outcome descriptors. Seminars in Arthritis and Rheumatism, June 2025;74:1527659. 10.1016/j.semarthrit.2025.152769

Kao D, Wong K, Jijon H, Moayyedi P, Franz R, McDougall C, Hotte N, Panaccione R, Semlacher E, Kroeker KI, Peerani F, MacDonald KV, Xu H, Narula N, Turbide C, **Marshall DA**, Madsen KL. Preliminary Results From a Multicenter, Randomized Trial Using Fecal Microbiota Transplantation to Induce Remission in Patients With Mild-to-Moderate Crohn's Disease. Am J Gastroenterol. June 2025;120(6):1334–44. doi: 10.14309/ajg.0000000000003196

Mazzei DR, Whittaker JL, Faris P, Wasylak T, **Marshall DA.** Estimating budget impact and joint replacement avoidance by implementing a standardized education and exercise therapy program for hip and knee osteoarthritis in a publicly insured health care system. Arthritis Care & Research (Open Access), June 2025;77(6):744-752 https://doi.org/10.1002/acr.25492

Marshall DA, Veldwijk J, Janssen EM, Reed SD. Stated-preference survey design and testing in health applications. The Patient-Patient-Centered Outcomes Research, May 2025;18(3):187-197. https://link.springer.com/article/10.1007/s40271-023-00671-6

Stevens Smith H, Buchanan J, Goranitis I, IJzerman MJ, Lavelle TA, **Marshall DA**, Regier DA, Ungar WJ, Weymann D, Wordsworth S, Phillips KA, Jansen JP. Distributional cost-effectiveness analysis in genomic medicine: Considerations for addressing health equity. Value In Health, May 2025;S1098-3015(25):02327-7. https://doi.org/10.1016/j.jval.2025.04.2162

Stevens Smith H, Reiger DA, Goranitis I, Bourke M, Ijzerman MJ, Degeling K, Montgomery T, Philips KA, Wordsworth S, Buchanan J, **Marshall DA**. Approaches to incorporation of preferences into health economic models of genomic medicine: A critical interpretive synthesis and conceptual framework. Applied Health Economics and Health Policy, May 2025;23(3):337-358 10.1007/s40258-025-00945-0

Degeling K, Tagimacruz T, MacDonald KV, Seeger TA, Fooks K, Venkataramanan V, Boycott KM, Bernier FP, Mendoza-Londono R, Hartley T, Hayeems RZ, **Marshall DA**, on behalf of Care4Rare Canada. Exome sequencing in the diagnostic pathway for suspected rare genetic diseases: Does the order of testing affect its cost-effectiveness? Applied Health Economics and Health Policy. May 2025;23(3):453-466. https://doi.org/10.1007/s40258-024-00936-7

MacKenzie NE, Chambers CT, Marshall DA, Cassidy CE, Corkum PV, McGrady ME, Parker JA, MacDonald KV, Birnie KA. Unique and shared partner priorities for supporting engagement in knowledge mobilization: a best worst scaling experiment. BMC Health Research Policy and Systems. April 2025;23(1):49

D'Silva A, Hua N, Wicks C, Modayil M, Seidel J, **Marshall DA.** E-health tools in irritable bowel syndrome management. International Journal of Integrated Care, April 2025;25(2):1-11

<u>Mazzei DR</u>, Whittaker JL, Faris P, Wasylak T, **Marshall DA**. Real-world cost-effectiveness of a standardized education and exercise therapy program hip and knee osteoarthritis compared to usual care. Arthritis Care Research (Hoboken), April 2025; https://doi.org/10.1002/acr.25555

<u>Liu X</u>, Patel A, Seidel JE, Mosher DP, Hagens J, **Marshall DA**. Informing equitable access to care: a cross-sectional study of travel burden to primary and rheumatology care for people with rheumatoid arthritis. International Journal for Equity in Health, March 2025;24(1):84-98 https://doi.org/10.1186/s12939-025-02439-w

Currie GR, Storek J, MacDonald KV, Hazlewood G, Durand C, Bridges JFP, Mosher D, **Marshall DA.** Measuring Patient Preferences to Inform Clinical Trial Design: An Example in Rheumatoid Arthritis. Patient, March 2025;18(2):161-171. https://doi.org/10.1007/s40271-024-00724-4

<u>D'Silva A, Hua N, Modayil MV, Seidel J, Marshall DA.</u> Digital health interventions are effective for irritable bowel syndrome self-management: A systematic review. Dig Dis Sci, Feb 2025;70(2):644-664. <u>10.1007/s10620-024-08672-7</u>

Abenoja A, Theodorlis M, Ahluwalia V, Battistella M, Borkhoff CM, Hazlewood GS, Lofters A, MacKay C, **Marshall DA**, Gagliardi AR. Strategies to Improve Equitable Access to Early Osteoarthritis Diagnosis and Management: An updated Review. Arthritis Care & Research, Feb 2025;77(2):218-227

Harmer V, Ammendolea C, Ryan M, Boyle F, Werutsky G, El Mouzain D, **Marshall DA**, Thomas C, Heidenreich S, Lu H, Krucien N, Payan JM, Aubel D, Danyliv A, Pathak P, Harbeck N. Patient preferences for HR+/HER2-Early breast cancer adjuvant treatment: A multicountry discrete choice experiment. Breast Care, Jan 2025;20(1):16-26. https://doi.org/10.1159/000543320

Bernstein CN, Nugent Z, Panaccione R, **Marshall DA**, Kaplan GG, Dieleman LA, Vanner S, Graff LA, Otley A, Jones J, Buresi M, Murthy S, Borgaonkar M, Bressler B, Bitton A, Croitoru K, Sidani S, Fernandes A, Moayyedi P. Symptoms in persons with either active or inactive Crohn's Disease are agnostic to disease phenotype: The Magic in IMAGINE study. J Clin Gastroenterol, Jan 2025 10.1097/MCG.00000000000002137

Bernstein CN, Panaccione R, Nugent Z, **Marshall DA**, Kaplan GG, Vanner S, Dieleman LA, Graff LA, Otely A, Jones J, Buresi M, Murthy S, Borgaonkar M, Bressler B, Bitton A, Croitoru K, Sidani S, Fernandes A, Moayyedi P. Crohn's disease phenotypes and associations with comoribidities, surgery risk, medications and nonmedication approaches: The MAGIC in IMAGINE study. Inflammatory Bowel Diseases, Jan 2025;31(1):113-122. https://doi.org/10.1093/ibd/izae055

E. Selected Active Research Grants

(Role: Co-Lead Work Package 3 and Lead Juvenile Idiopathic Arthritis Use Case) Using framework for patient-centred clinical-study endpoints derived from digital health technologies; Funding Agency: European Commission, Horizon Innovative Health Initiative JU Call 8, 2024; Awarded Amount: €12.6M; 2025 to 2028

(Role: Co-PI) Validity and responsiveness of the EQ-5D-Y-5L instruments in the juvenile idiopathic arthritis; Funding Agency: EuroQol Research Foundation; Awarded Amount: €45,000 (*Deborah €31,910*); 2025 (1 year)

(Role: PI) Rare Disease Administration Data Research (RADAR) Team: Putting the health system impact of rare diseases on the radar; Funding Agency: Canadian Institute for Health Research Team Grant – Improving health and administration data and monitoring for rare diseases; Awarded Amount: \$1,598,238; 2024 to 2028

(Role: PI) Enhancing a Community of Practice for the Health System Impact Fellowship Program: Advancing Capacity for Sustainable & Patient-Centred Learning Health Systems across Canada (Supplemental Direct Funding); Funding Agency: Canadian Institute of Health Research (CIHR), Institute of Health Services and Policy Research (IHSPR); Awarded Amount: \$100,000; 2023 – 2025

(Role: Co-investigator) Collaborative, participatory co-production of a clinical dashboard for patients with inflammatory arthritis to enhance patient-centred care and shared decision-making; Funding Agency: Canadian Initiative for Outcomes in Rheumatology (CIORA); Awarded Amount: \$116,400; 2023 – 2026

(Role: Co-PI of Impact, Value and Knowledge Mobilisation Lead) One Child Every Child (OCEC): A transformational child health research initiative; Funding Agency: Government of Canada, Canada First Research Excellence Fund (CFREF); Awarded Amount: \$1.26M; 2023 – 2030

(Role: Co-PI) Effectiveness of an individualized decision aid for total knee arthroplasty implemented in routine clinical practice; Funding Agency: EuroQol; Awarded Amount: \$269,981; 2023 – 2025

(Role: PI) Enhancing a community of practice for the Health System Impact Fellowship Program: Advancing capacity for sustainable & patient-centred learning Health Systems across Canada (Suppl/Extension); Funding Agency: Canadian Institute of Health Research (CIHR), Institute of Health Services and Policy Research (IHSPR); Awarded Amount: \$350,000; 2022 – 2025

(Role: Co-PI) IMAGINE 2.0 (Inflammation, Microbiome, and Alimentation: Gastro-Intestinal and Neuropsychiatric Effects) SPOR Clinical Disease Network – Knowledge Translation Implementation; Funding Agency: Canadian Institute of Health Research (CIHR); Awarded Amount: \$3.75M; 2022 – 2026

(Role: PI) Producing and Arthritis Value-Framework with Economic Evidence – Paving the Way for Rare Childhood Disease (PAVE); Funding Agency: European Joint Programme Rare Disease; Awarded Amount: €1,314,403; 2022 – 2025

(Role: PI) Enhancing a community of practice for the Health System Impact Fellowship Program: Advancing capacity for sustainable & patient-centred learning Health Systems across Canada; Funding Agency: Canadian Institute of Health Research (CIHR), Institute of Health Services and Policy Research (IHSPR); Awarded Amount: \$200,000; 2021 – 2023

(Role: Co-investigator Economics Lead) TIGeR: Translational Implementation of Genomics for Rare diseases Funding Agency: Genome Alberta; Awarded Amount: \$2M; 2020 – 2024

(Role: Co-investigator Economic Lead) Care4Rare Canada: Harnessing multi-omics to deliver innovative diagnostic care for rare genetic diseases in Canada (C4R-SOLVE); Funding Agency: Ontario Genomics, Genome Canada; Awarded Amount: \$1.86M; 2018 – 2022

(Role: Co-investigator Economics Lead) UCAN CAN DU and beyond: Towards a genomic partnership for childhood arthritis; Funding Agency: Canadian Institute of Health Research (CIHR); Awarded Amount: \$5.13M; 2021 – 2024

(Role: Co-investigator Economics Lead) UCAN CURE: Precision decisions for childhood arthritis; Funding Agency: Genome Canada and Ontario Genomics; Awarded Amount: \$10M; 2018 – 2024

(Role: Co-PI) IMAGINE 1.0 (Inflammation, Microbiome, and Alimentation: Gastro-Intestinal and Neuropsychiatric Effects): the IMAGINE-SPOR chronic disease work; Funding Agency: Canadian Institute of Health Research (CIHR); Awarded Amount: \$12.45M; 2016 – 2025