

Article title: An Exploration of the Utility and Impacts of Implementation Science Strategies by Cancer Registries for Healthcare Improvement: A Systematic Review

Journal name: International Journal of Health Policy and Management (IJHPM)

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Citation: Stirling RG, Melder A, Eyles E, Reich M, Dawkins P. An exploration of the utility and impacts of Implementation science strategies by cancer registries for healthcare improvement: a systematic review. Int J Health Policy Manag. 2024;13:8297. doi:[10.34172/ijhpm.8297](https://doi.org/10.34172/ijhpm.8297)

Supplementary file 1

Table S1. Medline Search Strategy

1. seer program/ or "national program of cancer registries"/
2. (registries/ or Databases, Factual/) and exp Neoplasms/
3. ((registries or registry or register or registers) adj2 (cancer* or tumo?r* or neoplas* or carcinoma* or malignan* or adenocarcinoma* or sarcoma* or lymphoma* or leukemi* or blastoma* or oncolog* or adenoma* or chondrosarcoma* or osteosarcoma* or rhabdomyosarcoma* or astrocytoma* or ependymoma* or glioma* or neuroblastoma* or medulloblastoma* or oligodendroglioma* or pheochromocytoma* or retinoblastoma* or cholangiocarcinoma* or melanoma* or mesothelioma* or pheochromocytoma* or paraganglioma* or craniopharyngioma* or esthesioneuroblastoma* or myeloma* or astrocytoma or ependymoma or glioma)).mp.
4. (regist*4 adj2 (quality or clinical quality or disease quality or what works)).mp. and exp neoplasms/
5. seer program*.mp.
6. 1 or 2 or 3 or 4 or 5

7. translational medical research/ or diffusion of innovation/ or information dissemination/ or evidenced-based practice/
8. ((knowledge adj3 (translat* or disseminat* or implement* or exchang* or application* or transfer* or mobili* or diffus* or uptak* or "up tak*")) or ((research or findings) adj3 (translat* or disseminat* or implement* or diffus* or incorporat*))).mp.
9. (("use" or "usage" or "using" or utili* or application* or applying or "'taking up or take up or 'taken up" or uptak* or "up tak*" or implement*) adj3 (research result* or research* finding* or clinical research or medical research or health research or scientific research or knowledge or evidence or innovation*)).mp.
10. (application adj2 (knowledge or research or findings or evidence or science)).mp.
11. (("into practice" or "in to practice" or 'into action' or "in to action" or "applied in practice" or "into routine practice" or "in to routine practice") adj5 (knowledge or research or findings or evidence or science)).mp.
12. ((Knowledge adj2 (interaction or engagement or applying or adoption)) or (adopt* adj2 (innovation* or evidence or research))).mp.
13. (Implementation science or dissemination science or implementation research or dissemination research).mp.
14. ("implementation and dissemination" or "dissemination and implementation").mp.
15. "what we know and what we do".mp.
16. ((implement* adj2 (disseminat* or intervention* or strateg*)) or (disseminat* adj2 (implement* or intervention* or strateg*))).mp.
17. 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16
18. 6 and 17
19. limit 18 to yr="2000 -Current"
20. exp animals/ not humans.sh.
21. 19 not 20
22. limit 21 to (comment or editorial or letter or news or newspaper article)
23. 21 not 22

Table S2. Evidence of utilisation of implementation concept clusters²³

	Aveling 2012	Beckett 2012	Klaiman 2014	Russell 2014	McAlearney 2016	Smittenaar 2019	Tucker 2019	Van der Hout 2020	Largey 2021	Total
Use evaluative and iterative strategies	+	+	-	+	+	+	+	+	+	8
Provide interactive assistance	-	-	-	+	-	-	+	+	+	4
Adapt and tailor to context	-	+	-	-	+	-	+	+	+	5
Develop stakeholder interrelationships	-	+	+	+	+	+	-	-	+	6
Train and educate stakeholders	-	+	-	+	-	+	+	+	+	6
Support clinicians	-	+	-	+	-	+	-	+	-	4
Engage Consumers	-	+	-	-	-	-	+	+	+	4
Utilize financial strategies	-	-	-	-	-	-	+	-	-	1
Change infrastructure	-	-	-	-	-	-	-	-	-	0