WASHINGTON UNIVERSITY IN ST.LOUIS
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DIRC Implementation Guideline-Related Research Toolkit

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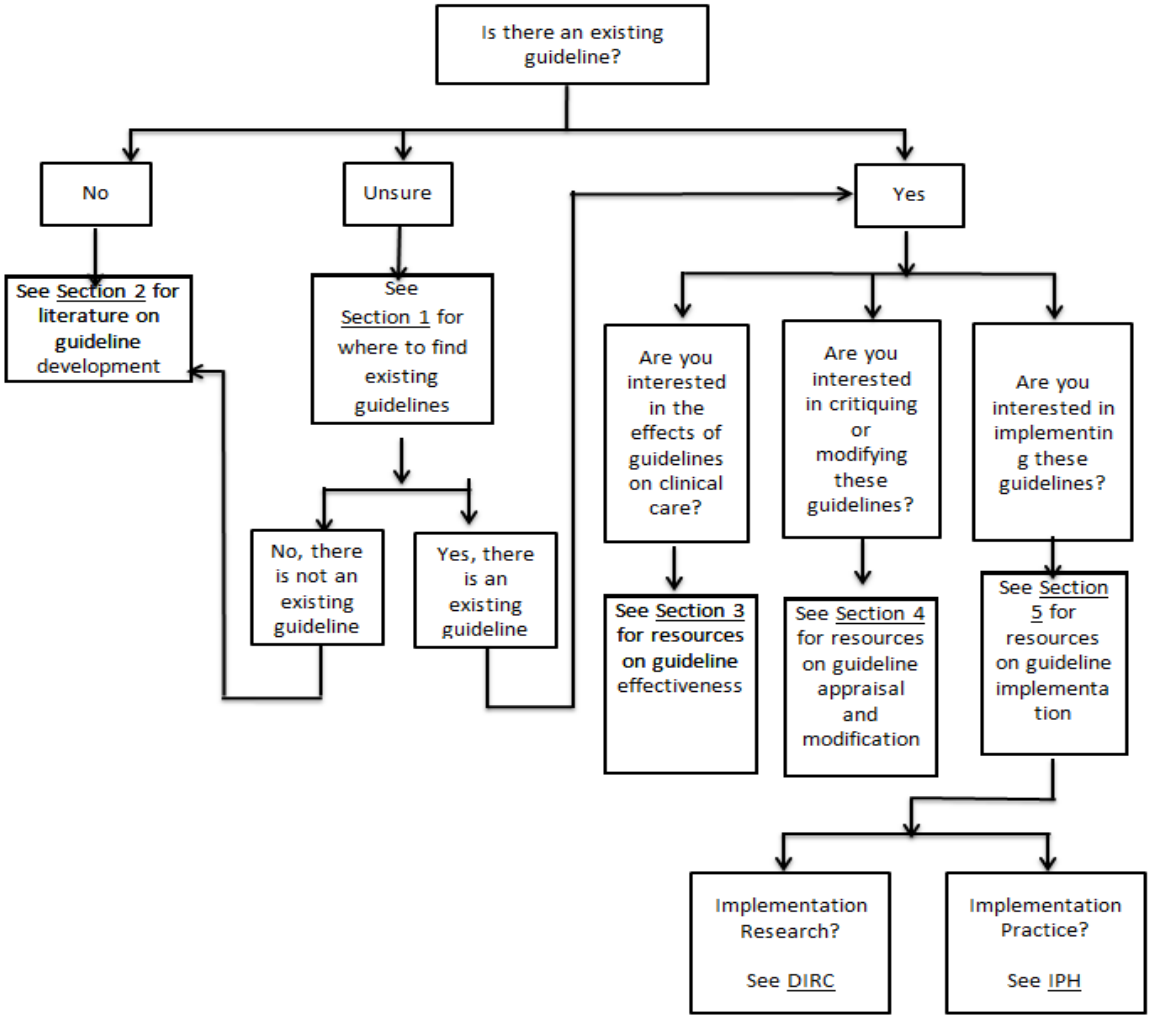

Choosing a Guideline Decision Tree

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National		
Sponsoring organization	**Topics**	**Website**
Agency for Healthcare Research & Quality National Guidelines Clearinghouse (AHRQ NGC)	Individual guideline summaries and 1241 archived (updated) guidelines. Search by topic with Medical Subject Headings (MeSH) terms. There are also options to compare similar guidelines directly or by method of production (see "Guideline Matrix") and to view guideline syntheses.	http://www.guideline.gov
National Cancer Institute (NCI)	Cancer Screening (lung, prostate, colorectal, and breast cancer)	http://cisnet.cancer.gov/publications/topic.html - screening_header
National Institute for Health and Care Excellence, UK (NICE)	Various types of published and in-development guidelines: clinical, public health, social care, safe staffing, medicines practice, quality standards, intervention processes, technologies, and diagnostics.	http://www.nice.org.uk/
U.S. Preventive Services Task Force	Preventive medication, screening, and behavioral counseling recommendations related to Adult, Adolescent/Child care, and immunizations.	http://www.ahrq.gov/professionals/clinicians-providers/guidelines-recommendations/guide/index.html
Substance Abuse and Mental Health Services Administration (SAMHSA)	Systematic reviews of topics related to mental health promotion, substance abuse prevention, and mental health and substance abuse treatment.	http://nrepp.samhsa.gov/LearnLanding.aspx
World Health Organization (WHO) Institutional Repository for Information Sharing (iris)	Published and archived guidelines. Use advanced search to select topics and/or global region. The WHO Framework Convention on Tobacco Control (FCTC) has a separate search option.	http://apps.who.int/iris/ More information on the development and use of WHO guidelines can be found here.
Centers for Disease Control and Prevention (CDC)	CDC Stacks is a one-stop shop for guidelines in disease and public health topics. Use advanced search tool to identify health topic and status (current, retired, superseded) of guideline. The MMWR offers recommendations as well.	CDC Stacks: http://stacks.cdc.gov/cbrowse/?parentId=cdc%3a100&pid=cdc%3a100&type=1&facetRange=960 MMWR: http://www.cdc.gov/mmwr/indrr_2014.html

Specific to Professions		
Sponsoring organization	Topics	Website
American College of Physicians (ACP)	ACP develops three different types of recommendations: Clinical Practice Guidelines, Clinical Guidance Statements, and Best Practice Advice. Succinct summaries are available in the Comparative Guideline Tables.	http://www.acponline.org/clinical_information/guidelines/
American Society of Clinical Oncology (ASCO)		http://www.asco.org/quality-guidelines/guidelines
American Psychological Association (APA)		http://www.apa.org/practice/guidelines/
National Association of Social Workers (NASW)		http://www.naswdc.org/practice/standards/index.asp

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Resources for guideline development			
Resource	**Sponsoring organization**	**Focus**	**Website/ How this can help me**
Clinical Practice Guidelines We Can Trust	Institute of Medicine (IOM)	This report includes and outline of the development process for CPGs and Systematic Reviews. Additionally, the report identifies 8 Standards for Developing Trustworthy CPGs.	http://www.iom.edu/Reports/2011/Clinical-Practice-Guidelines-We-Can-Trust.aspx
Standards for Systematic Reviews	Institute of Medicine (IOM)	This report identifies standards for initiating a systematic review, finding and assessing individual studies, synthesizing the body of evidence, and reporting systematic reviews.	http://www.iom.edu/Reports/2011/Finding-What-Works-in-Health-Care-Standards-for-Systematic-Reviews/Standards.aspx
Clinical Guidelines	The National Institute for Health and Clinical Excellence (NICE)	NICE clinical guidelines are recommendations for the care of people by healthcare and other professionals.	You can find about the process of developing guidelines here: http://www.nice.org.uk/article/PMG6/chapter/1%20Introduction And here are the different NICE guidelines: http://www.nice.org.uk/guidance
National Guideline Clearinghouse	Agency for Healthcare Research and Quality	AHRQ provides guidelines for several disease/conditions; treatment/interventions; and health services administration	http://www.guideline.gov/browse/by-topic.aspx
Lenzer, J. (2013). Why we can't trust clinical guidelines. *BMJ*. doi: 10.1136/bmj.f3830			- Understand the potential source(s) for bias within guideline development and why it is important to avoid.
Guideline Implementability for Decision Excellence Model (GUIDE-M)	The AGREE Enterprise and KT-Canada Guideline Implementation Project	Improving the intrinsic components of practice guidelines (PGs) to increase their quality, acceptability, and ability to drive action is viewed as a cost-effective, feasible, and impactful approach to improve the uptake of PG recommendations.	http://guide-m.ca/

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Examples of research testing the effect of guideline adherence on outcomes	
Publication	How this can help me
Institute of Medicine: Clinical Practice Guidelines We Can Trust. http://www.iom.edu/reports/2011/clinical-practice-guidelines-we-can-trust.aspx	This report recommends eight standards to ensure the objective, transparent development of trustworthy guidelines.
Dziedzic et al. (2014) Implementing the NICE osteoarthritis guidelines: A mixed methods study and cluster randomized trial of a model osteoarthritis consultation in primary care – the Management of OsteoArthritis In Consultations (MOSAICS) study protocol. Implementation Science, 9, 95.	- Understand design elements of a clinical/implementation mixed methods, hybrid study that tests effectiveness in addition to the feasibility/acceptability of practice guidelines.
Geurts, D. H. F., Vos, W., Mill. H. A., & Oostenbrink, R. (2014). Impact analysis of an evidence-based guideline on diagnosis of urinary tract infection in infants and young children with unexplained fever. Eur J Pediatr, 173, 463-468.	- Understand design elements of prospective cross-sectional observational study of implementation of diagnostic guideline to determine impact and compliance.
Michie, S. & Lester, L. (2014). Words matter: Increasing the implementation of clinical guidelines. Qual Saf Health Care, 14, 367-370. doi: 10.1136/qshc.2005.014100	- Understand how the use of “plain English” and high behavioral specificity can increase guideline implementation.
Roman Benjamin R., Feingold Jordyn H., Patel Snehal G., Shaha Ashok R., Shah Jatin P., Tuttle R. Michael, and Epstein Andrew. The 2009 American Thyroid Association Guidelines Modestly Reduced Radioactive Iodine Use for Thyroid Cancers Less Than 1 cm. J.. Thyroid. doi:10.1089/thy.2014.0237.	- Understand how environmental and political factors, including care reimbursement, affect guideline implementation.
Tricoci, P., Allen, J. M., Kramer, J. M., Califf, R. M., & Smith, S. C. (2009). Scientific evidence underlying the ACC/AHA clinical practice guidelines. Jama, 301(8), 831-841.	- Understand variability of guideline development in level of evidence and expert opinion.

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Questions to consider for this section:

- Do the existing guidelines follow the Institute of Medicine (IOM) criteria for development with independence of the guideline committee and the systematic review committee?
- How strong is the evidence undergirding the guideline?
- How strong is the evidence justifying a need to modify the guideline?

Resources for guideline appraisal			
Resource	Sponsoring organization	Focus	Website
Clinical Practice Guidelines We Can Trust	Institute of Medicine (IOM)	This report includes and outline of the development process for CPGs and Systematic Reviews. Additionally, the report identifies 8 Standards for Developing Trustworthy CPGs.	http://www.iom.edu/Reports/2011/Clinical-Practice-Guidelines-We-Can-Trust.aspx
Standards for Systematic Reviews	Institute of Medicine (IOM)	This report identifies standards for initiating a systematic review, finding and assessing individual studies, synthesizing the body of evidence, and reporting systematic reviews.	http://www.iom.edu/Reports/2011/Finding-What-Works-in-Health-Care-Standards-for-Systematic-Reviews/Standards.aspx
The Appraisal of Guidelines for Research and Evaluation (AGREE)	Canadian Institutes of Health Research	The Appraisal of Guidelines for Research and Evaluation (AGREE) Instrument evaluates the process of practice guideline development and the quality of reporting	http://www.agreetrust.org/
The Grading of Recommendations Assessment, Development and Evaluation (GRADE)	Informal collaboration; endorsed by many health organizations	The Grading of Recommendations Assessment, Development and Evaluation Working Group provide two tools: (1) CERQual to assess confidence in the evidence form reviews of qualitative research; (2) GRADEpro to create Summary of Findings (SoF) tables in Cochrane systematic reviews.	CERQual: http://www.gradeworkinggroup.org/toolbox/index.htm GRADEpro: http://tech.cochrane.org/revman/gradepro

Literature on guideline appraisal	
Publication	How this can help me
Shaneyfelt, T. M., & Centor, R. M. (2009). Reassessment of clinical practice guidelines: go gently into that good night. Jama, 301(8), 868-869.	Understand key elements of development, appraisal, and evolution of practice guidelines.

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Questions to consider for this section:

- How does my study inform practice or national guidelines?
  - How?
  - Where will my data fit?
- Does this require systematic review for the update of existing guidelines?
  - Who is responsible for that?

Conceptual Frameworks for Guideline Dissemination and Implementation	
Publication	**How this can help me**
Kitson et al (2008). Evaluating the successful implementation of evidence into practice using the PARiHS framework: Theoretical and practical challenges. Implementation Science, 3, 1.	- Understand dynamic definitions and concepts important to knowledge translation when using PARiHS framework.
Rycrof-Malone, J. (2004). The PARIHS framework – A framework for guiding the implementation of evidence-based practice. J. Nur. Care Qual, 4, 297-304.	- Understand practical information about using PARiHS model for direct-care settings and quality improvement leaders.
Lobb, R., & Colditz, G. A. (2013). Implementation science and its application to population health. *Annual review of public health*, *34*, 235.	- Provides conceptual model to increase the fit of evidence-based interventions in real-world settings

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Examples of successful guideline dissemination		
Publication	**Disease/Condition**	**Setting**
Manfredi, C., Cho, Y. I., Warnecke, R., Saunders, S., & Sullivan, M. (2011). Dissemination strategies to improve implementation of the PHS smoking cessation guideline in MCH public health clinics: experimental evaluation results and contextual factors. *Health Education Research, 26*(2), 348-360.	Smoking	Maternal and Child Health Clinics (MCH)
Banait, G., Sibbald, B., Thompson, D., Summerton, C., Hann, M., & Talbot, S. (2003). Modifying dyspepsia management in primary care: a cluster randomised controlled trial of educational outreach compared with passive guideline dissemination. *British journal of general practice*, *53*(487), 94-100.	Dyspepsia	General medical practice (England)

Systematic Reviews and General Literature of Guideline Dissemination Literature	
Publication	**How this can help me**
Grol, R., Zwaard, A., Mokkink, H., Dalhuijsen, J., & Casparie, A. (1998). Dissemination of guidelines: which sources do physicians use in order to be informed?. *International Journal for Quality in Health Care*, *10*(2), 135-140.	- Understand effective methods for dissemination
Garrett, N. Y., & Yasnoff, W. A. (2002). Disseminating public health practice guidelines in electronic medical record systems. *Journal of Public Health Management and Practice*, *8*(3), 1-10.	- Understand which dissemination strategies have been used for various health conditions and settings
Lisa A. Bero and Drummond Rennie (1996). Influences on the Quality of Published Drug Studies. International Journal of Technology Assessment in Health Care, 12, pp 209-237. doi:10.1017/S0266462300009582.	- Provide examples of published drug studies that are defective and provide recommendations on how to avoid these defects.

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Examples of successful guideline implementation		
Publication	**Disease/Condition**	**Setting**
Powell, C.V.E, Maskeell, G. R., Marks, M. K., South. M., & Robertson, C. F. (2001). Successful implementation of spacer treatment guideline for acute asthma. Arch Dis Child, 84, 142-146.	Asthma	Hospital emergency department with ~60,000 ED attendances and ~25,000 yearly admissions (Australia)
Gifford, D. R., Holloway, R. G., Frankel, M. R., Albright, C. L., Meyerson, R., Griggs, R. C., Vickrey, B. G. (1999). Improving adherence to dementia guidelines through education and opinion leaders. *Annals of Internal Medicine, 131*(4), 237-246.	Dementia	Urban neurology specialists; setting varied from solo practice to group practice to medical school/university

Systematic Reviews and General Literature of Guideline Implementation Literature	
Publication	**How this can help me**
Barbui C, Girlanda F, Ay E, Cipriani A, Becker T, Koesters M. Implementation of treatment guidelines for specialist mental health care. Cochrane Database of Systematic Reviews 2014, Issue 1. Art. No.: CD009780. DOI: 10.1002/14651858.CD009780.pub2 - See more at: http://summaries.cochrane.org/CD009780/SCHIZ_implementation-of-treatment-guidelines-in-mental-health-care - sthash.qJvOC1qZ.dpuf	- Understand initial evidence of improved mental health practice/ outcomes from systematic review of implementation of treatment guidelines.
Flodgren G, Eccles MP, Grimshaw J, Leng GC, Shepperd S. Tools developed and disseminated by guideline producers to promote the uptake of their guidelines. Cochrane Database of Systematic Reviews 2013, Issue 8. Art. No.: CD010669. DOI: 10.1002/14651858.CD010669 - See more at: http://summaries.cochrane.org/CD010669/EPOC_plain-language-title - sthash.WPwomgij.dpuf	- Understand effectiveness of tools developed by guideline producers to improve implementation of practice guidelines. Focus on various approaches, including education components and embedding of guideline into usual practice.
Mazza et al. (2013) Refining a taxonomy for guideline implementation: Results of an exercise in abstract classification. Implementation Science, 8, 32.	- Understand efficacy of various implementation strategies through identification of current classifications.
Field, M. J., & Lohr, K. N. (Eds.). (1992). Guidelines for Clinical Practice: From Development to Use. National Academies Press.	- Understand development, implementation, and evolution of practice guidelines. Special chapters illustrate case studies, strategies, quality, and costs of implementing guidelines.
Medves, J., Godfrey, C., Turner, C., Paterson, M., Harrison, M., MacKenzie, L., Durando, P. (2010). Systematic review of practice guideline dissemination and implementation strategies for healthcare teams and team-based practice. *International Journal of Evidence Based Healthcare, 8*(2), 79-89.	- Understand common professional, patient-centered, organizational, and structural dissemination and implementation strategies used in team-based care settings
Gagliardi, A. R., Marshall, C., Huckson, S., James, R., & Moore, V. (2015). Developing a checklist for guideline implementation planning: review and synthesis of guideline development and implementation advice. *Implementation Science*, *10*(1), 19.	- Users can apply the Guideline Implementation Planning Checklist to prepare for and/or undertake guideline implementation.