



Adapting Clinical Guidelines for the Digital Age

We're Changing!

As part of CDC Moving Forward, we're forming a new Office of Public Health Data, Surveillance, and Technology. Stay tuned to this website for updates.

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Connect. Collaborate. Understand.

Clinical guidelines are systematically developed statements to assist practitioners and patients make decisions about health care based on the latest evidence. The long, narrative format of guidelines can make adherence difficult. The *Adapting Clinical Guidelines for the Digital Age (ACG)* initiative can improve patient care and health outcomes by ensuring that evidence-based guidance is easily accessible, and any translation is consistent with the guidelines.

Why It Matters


In today's hyperconnected world, delivering swift, accurate information to patients and providers saves lives. CDC guidance must be in the right hands at the right time so that clinicians and patients can make the best decisions for the best health outcome. The ACG initiative aims to reduce the time it takes to apply guidance to patient care and the methods, standards, and tools are also applicable more broadly. CDC programs are applying standards like Fast Healthcare Interoperability Resources (FHIR®) and the integrated process to improve the way clinical guidance is used in practice.

ACG provides several benefits and better ways to translate critical information into digital approaches or products.

- **Speeds up application:** Scientific information can take an average of 17 years to apply to patient care. That information lag is a challenge, especially in the case of public health emergencies or outbreaks. Developing the long narrative and computable guidance concurrently helps provide the information in a more actionable format.
- **Facilitates dissemination and translation:** CDC guidance is often transmitted to clinicians at the point of care through Clinical Decision Support systems. Streamlining the way guidance is released and translated eliminates unnecessary redundancy, confusion, and misinterpretations, ensuring patients receive the correct advice or care.
- **Enhances connection with patient care:** Clinicians are expected to stay current on new guidance. Removing the challenge of trying to review, interpret, and retain new guidance information that quickly changes, clinicians can focus more on patient care.



Finding What Works

In 2018, the ACG project brought together experts in guidance creation, informatics, communications, implementation, and evaluation for a five-day meeting. Over 200 participants generated ideas how to apply clinical guidance more easily, quickly, accurately, and consistently to patient care. Partners continue to collaborate on various projects stemming from this meeting, including:




- An integrated process to develop and implement narrative and computable guidance in parallel.
- A new standard for developing computable guidance using FHIR®: [FHIR Clinical Guidelines](#) .
- An evaluation framework for determining if the integrated process and new FHIR standard have improved the process, products, or outcomes of the computable guidance.
- Partnership with the World Health Organization (WHO) to develop computable guidance.

Connect with Us

Publications

- [To Share is Human! Advancing Evidence into Practice through a National Repository of Interoperable Clinical Decision Support](#) 
- **Computable Guidelines and Clinical Decision Support for Cervical Cancer Screening and Management to Improve Outcomes and Health Equity:** Saraiya M, Colbert J, Bhat GL, Almonte R, Winters DW, Sebastian S, O'Hanlon M, Meadows G, Nosal MR, Richards TB, Michaels M, Townsend JS, Miller JW, Perkins RB, Sawaya GF, Wentzensen N, White MC, Richardson LC. *Computable Guidelines and Clinical Decision Support for Cervical Cancer Screening and Management to Improve Outcomes and Health Equity.* *J Womens Health (Larchmt).* 2022 Apr;31(4):462-468. doi: 10.1089/jwh.2022.0100. PMID: 35467443; PMCID: PMC9206487. <https://www.liebertpub.com/doi/full/10.1089/jwh.2022.0100> 

Additional Resources

- [Fast Healthcare Interoperability Resources \(FHIR\)](#) 
- [CDS Connect – CDS Repository and Authoring Tool](#) 
- [eCQI Resource Center](#) 
- [CDC Stacks – Guidelines and Recommendations](#)

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