Participant Window Summary

Background

- This evolving page a key component of the ACTS COVID-19 Guidance to Action Collaborative Learning Community's effort to enhance the COVID-19 knowledge ecosystem (see here for an overview of this effort). It contains overviews of in-process work by Collaborative participants to enhance the knowledge ecosystem for COVID-19.
- The key use case we're focused on initially in this effort is optimizing how 'living guidance' (e.g., CDS, eCQMs, eCase Reports) being deployed by Collaborative participants focused on targets such as anticoagulation and testing/triage for COVID-19 can be kept up to date most efficiently and effectively by leveraging 'living recommendations/guidelines' on these topics. And, in turn, informing these guidelines with living systematic reviews that are likewise fed in more automated ways by proactive signaling about important new studies on these targets.
- Collaborative participants such as the Veterans Administration, American College of Emergency Physicians, University of Minnesota, the AU Living Guidelines/University of Melbourne, NACHC, C19HCC Digital Guidelines WG and others have ways they're currently managing this supply chain - and they'll be documenting these in the 'Participant Windows' that are 'child pages' under this Participant Summary Window.
- The tables below synthesize how Collaborative participants are managing the COVID-19 knowledge supply chain - augmented with best practice tools and strategies from GIN and its members, SRDR, COKA and other Collaborative participants. The knowledge ecosystem/supply chain approaches and resources documented in these tables should include enhancements that Collaborative participants (and others) can use to improve their current efforts and results.
- Pages under this page are 'Participant Windows' for Learning Community members to share information about their Collaborative-related knowledge supply chain efforts with others - and to provide raw material for this Participant Window Summary page. The goal is for the teams maintaining the individual Participant Window pages to enable others to benefit from what they are doing and learning within the evidence /guidance ecosystem. And in return, enable others to provide strategies, tools and other input help to the teams responsible for each page accelerate their own ecosystem enhancement efforts.
- The 3 tables below synthesize highlights about ecosystem approaches, tips, and needs across Collaborative participants - as reflected in what they are sharing in their respective Participant Windows. These tables also include other key information (e.g., regarding tools, strategies, needs) provided by other Collaborative participants and not otherwise captured in individual Participant Windows.
- This Collaborative Learning Community aims to generate important benefits to participants (and patients they ultimately serve) from this sharing and cross fertilization. We will use the table at the bottom of this page to document and amplify/spread these benefits.

	Identify (Search/Screen) Primary Studies (See this CoP page)	Synthesize Evidence (including assessing quality) (See this CoP page)
Current Approach	• manual key word literature searches, SME awareness of studies (ACEP/EC) • Monitoring new trials and reviews on the L*VE Epistemonikos platform and the Cochrane COVID-19 study register (COVID-NMA Initiative)	• SMEs review content, track in spreadsheet (ACEP/EC) From COVID-NMA Initiative: • For each new RCT record and publish key information in a trial network map • Undertake risk of bias assessment • Extract data relating to pre-determine outcomes, create and publish forest plots of quantitative data as appropriate • Undertake GRADE evidence profiles for all comparisons • Update and maintain GRADE evidence profiles as more trials are published
Pearls /Tips Learned /Tools	(From Sara Loree: CDC and WHO are combining their COVID databases; OSF databased of COVID-19 intervention trials; WHO Librarian Reserve Corps) We have determined that monitoring and searching the two sources above precludes the need for other individual database searches. (COVID-NMA Initiative)	Resources and tools for researchers considering and conducting COVID-19 evidence syntheses (From COVID-END Synthesizing WG) Rapid Cochrane review on anticoagulation in COVID-19 patients L*VE/Epistemonikos search on antithrombotics; can send email when new study/review /guideline is published. (from Sara Loree: OSF protocol for living evidence summary) We have developed a tool for monitoring the preprint servers to identify changes to the data presented. (COVID-NMA Initiative)
Desired Approach	Curated article, review every few weeks based on keywords and filters, with direct links to PDFs to speed content access (ACEP/EC). Map of all RCTs for prevention and treatment of COVID-19 including vaccines and rehabilitation. (COVID-NMA Initiative)	3rd party reviews the studies and provides summary of key data in easily digestible format (ACEP/EC) Standards for sharing (ACEP/EC) We have initiated communication with all trialists to try to ensure consistent approaches e.g. selection of outcomes, reduction of risk of bias, and to invite them to contribute missing data. We also aim to request individual participant data. (COVID-NMA Initiative)

Needs to Achieve Desired Approach	Check all that apply __Better source/input materials [Details:] __Common format/terminologies for managing/sharing data [Details:] __Other [Details:] Check all that apply (COVID-NMA Initiative) __Better source/input materials [Details:] _x_Common format/terminologies for managing/sharing data [Details:] __Other [Details:]	COVID-END Needs: Use an online administrative interface for processing records (rather than Excel) and a more elegant front-end solution for displaying the inventory _x_Better source/input materials [Details:] Harvest from all high-yield, high-quality sources _x_Common format/terminologies for managing/sharing data [Details:] COVID-END taxonomy _x_Consistency of outcomes [Details:] _x_Engagement with primary researchers and upstream stakeholders [Details: When gaps in the best-available evidence related to the pandemic response are identified (e.g., a taxonomy category in the inventory has no high-quality evidence synthesis available) engaging researchers and research funders may help to set priorities for research needed to fill gaps)] _x_Engagement with decision makers and other downstream stakeholders [Details:] Regulator interactions with government officials in many Canadian provinces and in many other countries Check all that apply (COVID-NMA Initiative) _x_Better source/input materials [Details:] __Common format/terminologies for managing/sharing data [Details:] _x_Consistency of outcomes [Details:] _x_Engagement with primary researchers and upstream stakeholders [Details:] _x_Engagement with decision makers and other downstream stakeholders [Details:] __Other [Details:] --- Check all that apply __Better source/input materials [Details:] __Common format/terminologies for managing/sharing data [Details:] __Other [Details:]
Support We Can Provide Other Participants	Living network mapping of RCTs: Metadata and other details of primary studies included in our evidence syntheses (COVID-NMA Initiative)	From COVID-END Identify published systematic and rapid reviews from trusted sources (including VA ESP Covid-19 Evidence Reviews and Cochrane) and present these in the COVID-END inventory; Add decision-relevant information to each document included in the inventory in order to support easier assessments of relevance, including: flagging review search dates (to support assessments of how up-to-date the evidence is); appraising and reporting quality using AMSTAR 1 tool (to provide information about the quality of each review); identifying which reviews are living and which have a GRADE evidence profile; and creating declarative titles for ease of understanding and applicability for policymaker end user. The COVID-END Inventory aims to identify best current evidence in the four taxonomies, and to identify those reviews that are living, up to date, high quality and where there is a GRADE evidence profile. Inventory also provides link to the underlying reviews in addition to outputs described above. COVID-END ... aims also to commission living systematic reviews to address high priority areas that may not have been sufficiently addressed by evidence synthesis researchers. Further outputs include resources for researchers and guidelines developers that are proposing to conduct a systematic review or develop clinical practice guidelines – aimed at reducing inadvertent and inappropriate duplication of effort and increasing the quality of reviews and guidelines produced --- Living comprehensive assessment of all RCTs that address prevention and treatment of COVID-19 Living evidence syntheses and network meta-analysis as appropriate. (COVID-NMA Initiative)

	Produce Guidance (See this CoP page)	Make Guidance Computable (See this CoP page)
Current Approach	Using the Agile Approach to CPG Development (inclusive of Integrated Process) to concurrently Produce Guidance and Make Guidance Computable in Agile CPG Team (C19 DGWG)	Currently shared NACHC COVID-19 data dictionary to partnered CHCs/HCCNs modified from the COVID-19 Interoperability Alliance value sets (NACHC)
Pearls /Tips Learned /Tools	2011 NAM (IOM) Standards for Guidelines	getting variables coded/mapped is key but time consuming (UMN) **Approach Used by C19 DGWG** Using CPG-on-FHIR standard for representing/ expressing the full intent of the Guidance in computer-interpretable artifacts (part of HL7 CPG-IG) Using the Agile Approach to CPG Development (inclusive of Integrated Process) to concurrently Produce Guidance and Make Guidance Computable (part of HL7 CPG-IG) Use Agile Knowledge Engineering methods, principles, and tools Cross-functional Integrated team (Agile CPG Team) Leverage composite nature of CPGs (e.g. can develop logic for inferences on patient information- CPG_CaseFeatures) to build incrementally and iteratively with rapid feedback Pull knowledge engineers into Content design/reviews; pull domain SMEs into knowledge representation design/reviews Leverage CPG-on-FHIR as a faithful expression of Guidance and its ability to create computationally derived CDS and Cognitive Support, patient-specific, practice-level digital Quality Measures/Metrics, eCaseReports, etc. to create computable artifacts used downstream in the Learning Health System and to provide closed-loop feedback /feedforward. Leverage established tools and capabilities (e.g. BPM+ process and tooling, Clinical Ontology) to author computable Guidance and Open Source tooling to translated into HL7 CPG-on-FHIR to leverage derivative and native compute **Additional Pearls from C19DGWG** Engage consumers/ users early and often Engage downstream vendors (e.g Terminology vendor USED in the EHRs) early Just because everyone everyone is using the same terminology systems doesn't mean they're agreeing how to use the actual terms- this needs to be considered and addressed to make ecosystem/supply chain work properly (feedforward from Evidence, but also feedback of data semantics back into evidence) Learn from related communities of practice (e.g. Agile Software Engineering)
Desired Approach	Harmonize latest evidence from multiple sources and serve/push the guidance to partnered HCCNs (NACHC) Seamless collaboration of clinical stakeholders to determine best practice approach in a constantly evolving environment; More asynchronous work processes to optimize efficiency (ACEP/EC)	**From C19DGWG** Build computable artifacts/assets on Real-World data to enable better design/ specification and Test-driven Development (Agile) Leverage mature Knowledge Base to implement Knowledge Architecture (e.g. CPG profiles) and design, develop, test, maintain, and reuse artifacts/ assets Concurrent Validation and Development using above **Others** better mapping approaches/collaboration with terminology vendors to speed mapping (UMN) Pull together multiple fit-for-purpose standards addressing the whole stack: BPM+, SNOMED, FHIR, ANF (VA) Interoperable format leveraging CPG-on-FHIR (working with C19 digital guideline WG on this) (UMN)

Needs to Achieve Desired Approach	Check all that apply __Better source/input materials [Details:] __Common format/terminologies for managing /sharing data [Details:] __Other [Details:] Better collaboration structure to bring parties together consistently (ACEP/EC)	Check all that apply __Better source/input materials [Details:] __Common format/terminologies for managing/sharing data [Details:] Collectively Improve data dictionary for prospective use case: collect patient-level COVID-19 data (NACHC) __Other [Details:]
Support We Can Provide Other Participants	Engagement with ACEP's group of clinical expert (ACEP/EC)	Data dictionary development (NACHC) Workshop on COVID-19 Ontologies (WCO-2020) details of the workshop here: https://github.com/CIDO-ontology/WCO

	Implement Guidance (e.g., as CDS, eCQMs) (See **this CoP page**)	Analyze Results (e.g., care outcomes) (See **this CoP page**)	Apply Results (e.g., Quality Improvement, create evidence) (See **this CoP page**)
Current Approach			
Pearls/Tips Learned /Tools	Need for CDS to be malleable to facilitate interoperability as various sites (even within same system) may have variation in practices; Need to have expertise in house to implement these solutions (UMN) Non-standardized workflows/terminology/modeling allow ambiguity in guideline implementation and do not support platform agnostic sharing. (VA)		
Desired Approach		more real-time tracking of results (UMN) Gain insights on any specific intervention and patient outcomes at an aggregate for each health center controlled network (NACHC)	Feed real-time info on guideline adherence to providers (UMN) Long-term implementation of data capture / workflow improvements (NACHC)
Needs to Achieve Desired Approach	Check all that apply __Better source/input materials [Details:] __Common format/terminologies for managing/sharing data [Collaboration with others so that decisions we make about standards to use are compatible with choices made by others (VA)] __Other [Details:] Certification/trainings so current CDS builders can quickly learn new skills - e.g., CDS hooks/Smart on FHIR/etc. (UMN)	Check all that apply __Better source/input materials [Details:] __Common format/terminologies for managing/sharing data [Details:] Collaborative effort to harmonize and standardize data capture and automated, continuous data extraction. (NACHC) __Other [Details:]	Check all that apply __Better source/input materials [Details:] __Common format /terminologies for managing /sharing data [Details:] __Other [Details:]
Support We Can Provide Other Participants			

Stakeholders can place comments at the bottom of any Learning Community page. If you need editing access to these Participant Window pages, please contact support@ahrq-acts.org.

Benefits Realized by Collaborative participants from their engagement in this work

Organization	Activity Generating Benefit	Impact from the Activity (to organizations, patients, other)

Quick Links to Participant Windows

UMN Window

VA Window

ACEP/EvidenceCare Window

NACHC Window

Australia Window

Evidence/Guidance Community Window

SRDR Window

COKA Window

C19 Digital GL WG Window

Meeting Notes