Penn Medicine
Center for Evidence-based Practice

Rapid Guidance Summary reports

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A Rapid Guidance Summary is an ultra-rapid evidence report intended to support Penn Medicine healthcare teams (acute care and ambulatory based) in delivering care based on the best available guidance during the COVID-19 pandemic and afterwards. Key steps that help ensure the quality and reliability of traditional systematic reviews are deliberately omitted in the interest of rapidly synthesizing guidance for the most pressing clinical and operational questions. In particular, the scope of each topic is very narrowly focused, and the search for evidence is limited to a small number of key US and international public health guidelines, professional society guidelines, health technology assessment (HTA) reports and other evidence summaries, and publicly-available hospital policies and algorithms.

Topic acquisition

Topics are proposed by Penn Medicine clinicians and managers and may come through informal channels in addition to the established CEP intake process. Topics may also be proposed by national and international collaborators (e.g. AHRQ, VA Evidence Synthesis Program). The decision to accept and prioritize topics is made by the Center Director and CEP core staff. One of the most important considerations in delivering a brief, ultra-rapid, and easily-actionable report is to narrowly focus the topic. CEP staff may find it necessary to limit the scope of a report or divide a topic across multiple reports. Dividing topics may also be indicated during the update process, when additional evidence is found and guidance can be made more specific.

Staffing

CEP core staff will assign a Lead Analyst, who is responsible for finding the guidance and associated evidence and writing the draft report. During the COVID-19 pandemic, students and personnel from other departments may be seconded over to CEP to assist with researching and writing reports. In these cases, a CEP core staff member will be assigned to the project to provide methodological support and initial review.

Guidance sources

To expedite completion of these reports, analysts will not conduct a de novo systematic search for evidence for each report. Analysts will not search evidence databases, such as Medline, nor will primary studies be reviewed or analyzed. Instead, analysts will review sources found and catalogued by the CEP evidence team and obtain their latest guidance (if any) on the topic. These sources may include US and international public health agencies, key professional societies, health technology assessment agencies and evidence clearinghouses, and major academic medical centers that have posted their algorithms and policies on publicly-accessible web sites. Included guidelines and policies are limited to those where we can locate and cite an official agency, society, or health system source. Information provided through e-mails from providers and other informal communications are not included because one cannot verify

whether or not that guidance has been updated or superseded. Follow-up searching of specific sources may be done on a case-by-case basis with the approval of a member of CEP core staff.

Due to the circumstances that call for rapidly producing and revising guidance, many of the sources cited in these reports will not meet ideal standards for evidence-based practice. For instance, guidance may be based on indirect evidence from studies of SARS, influenza, and other viral respiratory infections, or on evidence from preliminary clinical studies and local experience, and/or on expert opinion, rather than on systematic searching for best evidence. Our goal is to select the best available guidance from highly trusted resources.

Selecting guidance sources

In the weeks since the introduction of the Rapid Guidance Summary on March 24, the available guidance for hospitals and health systems responding to the COVID-19 pandemic has increased both in quantity and scope. Professional societies are beginning to issue their own guidelines instead of referring to CDC or WHO guidance. Some of these guidelines use formal evidence-based practice methods and some include rapid reviews of available clinical evidence.

A growing number of hospitals are publicly sharing algorithms, policies, and other guidance documents. To maintain an ultra-rapid report turnaround time, the lead analyst may limit the hospital guidance sources to those most recently updated, those specifically citing clinical evidence for guideline recommendations, and those including useful implementation details.

Evidence is also being assembled and catalogued by research organizations and academic institutions. Rapid reviews of primary studies are now available for some topics and are being updated routinely. CEP now is searching for systematic reviews via evidence dissemination channels like COVID-END, Evidence Aid and the Oxford Center for Evidence-Based Medicine. Medline and Embase searches are still not included in the Rapid Guidance Summary method.

Report structure

Rapid Guidance Summary reports include little or no background or discussion text: they are simply a synopsis of relevant sources. These are presented in separate tables for guidelines, systematic reviews, evidence reports, and hospital policies and algorithms. Together, the guidelines say what to do, the evidence reports say why, while the policies and algorithms say how to do it.

The report structure includes:

1. The date when the report was completed, and the date when evidence sources were last checked by the analyst and evidence team.
2. Key questions addressed in the report, with a note about subjects outside the scope of the report if deemed necessary to clarify the scope.
3. Bullet points summarizing the guidance relating to those questions.
4. Tables for each category of guidance, reporting source and recommendations or findings.

Additional sections may be added as necessary, specifically

5. A list of sources referenced in the report.
6. A list of sources that were searched but did not yield any relevant guidance.
7. Appendices with detailed information potentially useful for implementation purposes.

In the guidance section, information is presented in separate tables, organized by type of source (e.g. public health agency guidance, systematic literature reviews, medical center policies). This section may be subdivided by key question or application to better organize the guidance. The same source may cited within multiple tables to facilitate review by report readers.

In each table, the first column lists the source and the date the guidance was most recently updated. Hyperlinks to the original source are embedded within the source title for content traceability and also to facilitate further review by readers. Content is sorted by date, with most recent guidance listed first.

Depending on the number of sources and complexity of the recommendations, the analyst may add a concordance table to facilitate comparison of guidance across the various sources. A concordance table lists key recommendations in the first column and source across the first row. Agreement, disagreement, or no information are presented by source and recommendation as "yes", "no", or "NA". Footnotes can be used to elaborate if necessary. The notes should be set immediately below the table and numbered sequentially (e.g. NOTE 1).

If there are systematic reviews, health technology assessment reports, or other evidence summaries found in guidelines or other sources, an evidence review table will be included in the report, after the table of guidelines and before the table of hospital and health system guidance. If the strength of the evidence is evaluated in the review, that information should be included in the evidence review table along with the review findings.

Data collection and abstraction

Relevant content from each source will be abstracted directly from sources with little to no alteration and pasted into the relevant table of the report. Data for each source will be organized into the following categories to facilitate comparison, summarization, and concordance table development: sub-populations (e.g. pregnant patients, stratifications by disease severity), care sub-setting if available (e.g. ICU vs. ward), evidence synthesis (e.g. expert opinion, society guideline, systematic review for primary study, no information provided, etc). Where explicitly provided by the guidance source, tables will also include strength of recommendation findings

Summary points

A list of summary points is provided on the first page of the report. This summarizes recommendations, suggestions, and findings consistently included in the guidelines and hospital policies, plus key findings (including strength of the evidence base) from any evidence reviews cited. Areas where there is disagreement across guidelines or practices will be called to the reader's attention. Gaps in the available guidance will also be called out.

The lead analyst will make note of weaknesses in the evidence base. Such weaknesses may include guidelines that are based on indirect evidence or expert opinion because of a lack of direct evidence and hospital guidelines that all trace back to the same source. Even if formal GRADE analysis is not feasible because of the lack of evidence, GRADE principles are useful for explaining why the evidence base for a guideline is weak.

Appendices

If a guideline includes an algorithm or other real-world practical information that will not fit easily in the evidence table, it may be placed in an appendix at the end of the report. Likewise,

detailed findings of an evidence review will be reproduced as an appendix rather than in the main table. Appendices will be used sparingly.

Review and approval

In the case where seconded staff have produced the report, an initial review will be conducted by a CEP lead analyst. Final drafts will submitted to the CEP Director for review and approval before publication; however, the Director may delegate this responsibility to another senior clinician on a topic-by-topic basis. External review of Rapid Guidance Summary reports is not necessary, but may be called for at the CEP Director's discretion. Names of external reviewers will be included in the credits section of the finished report.

Dissemination

Reports are distributed by e-mail to key Penn Medicine stakeholders and are published to the Penn Medicine intranet site. Reports may also be published to public-facing web pages with the case-by-case approval of the CEP Director. Due to the rapidly-changing nature of the evidence, we limit posting of full-text reports to Penn Medicine servers and to specific partners, so we can ensure that outdated versions of these reports are replaced as updates are issued.

Updating

In the kinds of situations where Rapid Guideline Summaries are most useful, we expect that guidance and hospital procedures will be constantly evolving. Therefore we expect that frequent updates will be required. Depending on the topic, updates could be weekly or even more frequently.

A member of the evidence team will be assigned and will be responsible for periodically checking the sources cited in the report (weekly, at a minimum, but may be more frequently depending on how rapidly content is evolving). Likewise, new guidelines and hospital policies will be identified to the Lead Analyst for consideration. Reports with updated content will be reviewed and approved in the same way as new reports, and a summary of changes will be included in the updated report. If there is no update to the content, the date of source rechecking will be added to the report and the new edition will be posted to Penn Medicine web sites.