

Responding to Community Questions During a Pandemic:
Development of a COVID-19 Inquiry Group

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THE INNOVATION

The COVID-19 pandemic created an unprecedented time of quickly evolving information.^{1,2}

Oregon Health & Science University (OHSU) Department of Family Medicine (DFM) formed the COVID-19 Inquiry Group to rapidly identify, evaluate, synthesize, and disseminate existing evidence to answer COVID-19-related questions for our community.

WHO & WHERE

The Inquiry Group consists of OHSU students, DFM and Internal Medicine faculty, retired physicians, residents, and administrators. OHSU is an academic medical center in Portland, Oregon.

HOW

In the context of a statewide stay-at-home order, OHSU DFM faculty created a FM COVID Response student elective (Appendix A). Supervised by the Inquiry Group Faculty, elective students and residents answer COVID-19 frequently asked questions (FAQ). Faculty are responsible for the final content of disseminated materials.

See Figure 1: Group Process. The COVID-19 Inquiry Group meets virtually every morning to assign new questions received from stakeholders. After the morning huddle, individuals research, draft and review answers. The group reconvenes virtually to discuss complicated questions

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through facilitated group review at the end of each day. These rigorously reviewed answers are disseminated through a daily report shared through various outlets.

Community stakeholders provide clinician questions through a series of state-wide conference calls between Oregon clinicians and state health authority officials (Project ECHO³). Patient FAQs are gathered from the OHSU COVID-19 Care Connection Center triage line. In addition to new questions, the Inquiry Group reviews and updates past answers every seven days. Group administrators collate questions and assign them to a primary author using an online collaborative work platform. This platform allows for assigning, planning, tracking, tagging, and managing questions within a single shared document in real-time.

Medical students, supervised by faculty, serve as the primary authors, researching assigned questions using primary sources and governmental and educational websites. Students draft a brief and detailed answer, and cite publicly available, relevant sources. Appendix C provides information gathering resources and tips for group success.

After the learner drafts their answer, there are multiple stages of review. A primary reviewer (resident or faculty member), offers initial edits, comments, and/or needed additional information. Once approved, a secondary reviewer (faculty member) examines the draft and offers further guidance. At any point during this process, team members may submit the draft for

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group review, further refining answers through discussion and sharing of expertise from all team members.

After answers are finalized, team administrators submit answers for authorization by an institutional oversight committee. At the end of each day, a report of approved answers is disseminated through the Oregon Academy of Family Physicians, the Oregon Health Authority, the Oregon Rural Practice Research Network and the OHSU Covid-19 Care Connection Center.

LEARNING

The COVID-19 Inquiry group is a novel strategy for streamlining the consolidation and dissemination of rapidly changing information. It also allows students, currently unable to engage in clinical work, to serve their community.⁴

By consolidating information to provide evidence-based accessible answers to complex questions, our learners and faculty were able to gain knowledge on quickly changing information as well as provide a valuable resource to the community. The structure of the group could be used to collate knowledge for future emerging clinical topics.

For any institution looking to implement a similar program, we recommend the support of your institutional emergency oversight committee, and any statewide health organizations, to ensure the success of the program.

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CONFLICTS

The authors have no potential conflicts of interest.

SUPPORT

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ACKNOWLEDGMENTS

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A generous donation from the Andrew and Corey Morris-Singer Foundation supported the establishment of an OHSU phone hotline and telemedicine service to enable many more Oregonians to access the COVID-19 primary care resources and information.

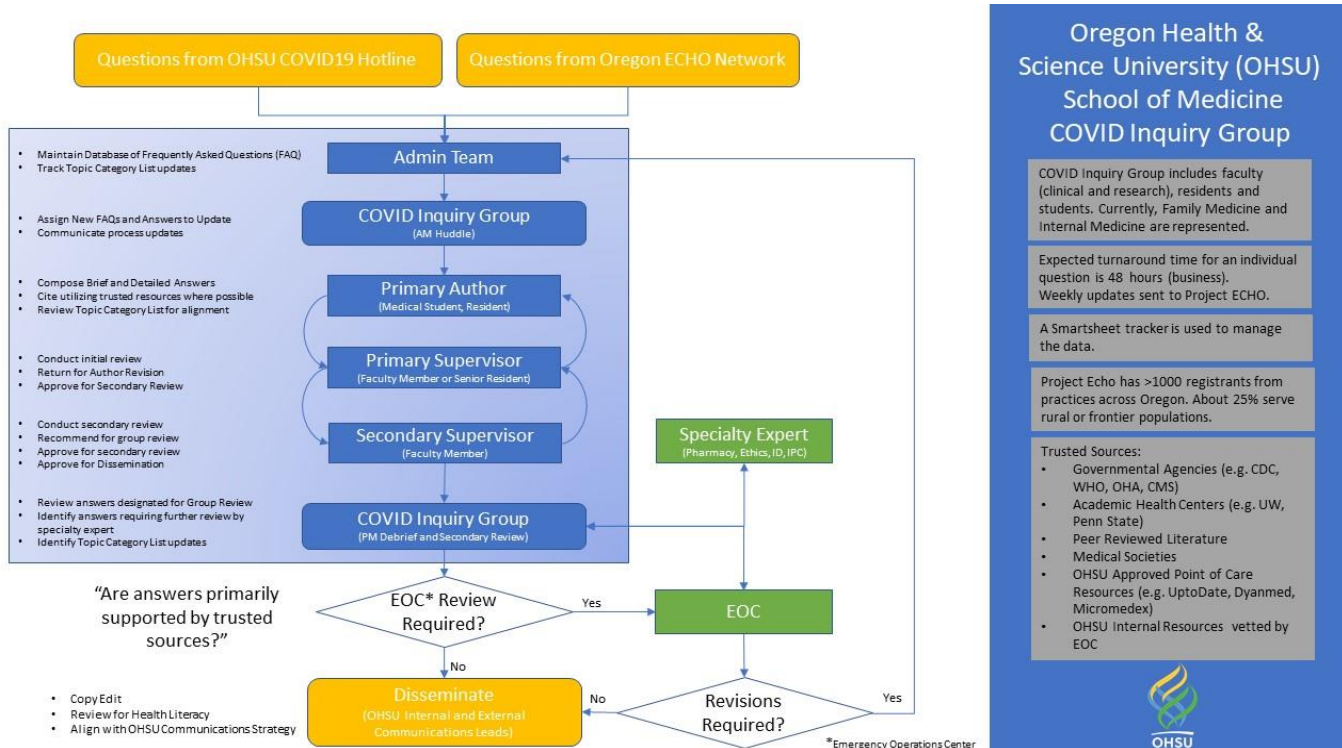
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FIGURE 1. COVID-19 Inquiry Group Process



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APPENDIX A. Oregon Health & Science University (OHSU) Department of Family Medicine
COVID Response Elective – OHSU School of Medicine
Curriculum authors: Robinson S. Cheng A. Biagioli FE.
 Spring 2020

Descriptor

Most OHSU patients who call OHSU primary care or specialty clinics will have the option to be directly routed to a COVID-19 hotline. This service will be available for the majority of OHSU clinics seven days a week, with extended hours, for at least the next three months. The hotline will initially be available to OHSU patients, with the potential to build out future phases to serve non-OHSU patients and primary care providers. Medical students have been identified as a vital part of the team to build out and help create supporting documentation for this service. The student will work with faculty and in small groups to work on phasing in and rolling out the first stage of this newly created hotline.

Course Length: 2 weeks

of hours of workload per week:

48 hours per week: Monday through Sunday availability, one scheduled day off a week.

- 8 hours per day
 - 1-2 hours per day small group WebEx with faculty: M-F, 8 AM and 1-hour end of day debrief at 4-5 pm.
 - Self-directed learning with faculty guidance and group debrief
 - Weekend literature and review assignment
 - Ad hoc, clinical COVID updates such as Oregon Health Authority phone conference

Week 1&2 schedule

Mon	Tues	Wed	Thursday	Friday	Saturday	Sunday
8-5pm M-F 8am-9am WebEx huddle with faculty: group review of day’s assignments, communication strategies, and iterative process change 9:00-3:30 remote independent and group work, ad hoc clinical update phone conferences. Prepare written resource for assigned question(s)-brief answers with references 3:30-5:00: Group WebEx debrief with faculty: Group sharing of results, group evaluation of quality of					A&B: OFF B&C: On call for new question research, literature assignment and reflection work	A&B: On call for new question research, literature assignment and reflection work B&C: OFF

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resources, discussion of successful information search strategies. Create updates to the COVID call resources.	Week 2, day off switches
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Prerequisite: None

First offering date: Spring 1

Max # of learners per offering: 4

Grade: Pass/No Pass

Learning Goals:

- Students will work with faculty, newly formed COVID-19 hotline team, to answer clinical questions and create documents to assist in the formation of this hotline's repository of clinical answers. (PBLI 7)
- Students will apply evidenced based literature search and evaluation skills and produce a short-referenced document summarizing findings and appropriately cite available references. (PBLI 7)
- Supervised by faculty, students will review group work products and the group will come to consensus on a final product to be shared with COVID clinical response team. (PBLI 8)
- Through daily feedback sessions, students will share methods of searching and evaluating reputable sources for emerging evidence. Students will apply feedback to maximize workflows for the emerging hotline and implement these lessons with the aim to improve health outcomes of the broader community. (PBLI 8)
- Student will apply quick cycle measure and change analysis. Students will identify one area of the process to iteratively change and can improve the methods based on the feedback from the students and faculty. (PBLI 1)
- Students will experience how a health care system needs and services flex throughout different phases of the global COVID-19 pandemic and how different health care providers and professions fit into the different systems. Students will submit a one to two paragraph reflection about a resultant change in behavior, role, or communication strategy (PPPD 11).

PPPD:

11: Recognize that ambiguity and uncertainty are part of clinical care and respond by demonstrating flexibility and an ability to modify one's behavior.

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PBLI:

1: Demonstrate skills necessary to support independent lifelong learning and ongoing professional development by identifying one's own strengths, deficiencies, and limits in knowledge and expertise, set learning and improvement goals, and perform learning activities that address gaps in knowledge, skills or attitudes.

7: Participate in scholarly activity thereby contributing to the creation, dissemination, application, and translation of new healthcare knowledge and practices.

8: Incorporate feedback received from clinical performance data, patients, mentors, teachers, and colleagues into clinical practice to improve health outcomes.

Assessment:

Clinical performance evaluation form and written feedback from clinical preceptor (Dr. Biagioli). Competency evaluations of PBLI 1,7, 8 will utilize the standard competency wording for competency achievement.

Reflection exercise for PPPD 11:

Ambiguity and uncertainty are part of clinical care during natural disasters, pandemics, and other unexpected mass threats to health. Flexibility and an ability to modify one's behavior is a required skill of medical professionals during such instances.

Students will submit a brief reflection (one to two paragraphs) describing how the student or a health professional managed their ambiguity and uncertainty during the COVID-19 pandemic.

Alternately students may choose a different form of expression to best capture their experience (music, photographic montage, video, poetry, etc.); if choosing an alternate form, students will submit a one phrase, written description of the reflective piece and email the course director a link to review the work.

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APPENDIX B: COVID-19 Inquiry Group Resources and Tips

Helpful Resources for answering COVID-19 related questions:

- Government and Regulatory Organizations
 - Centers for Disease Control and Prevention:
 - For providers: <https://www.cdc.gov/coronavirus/2019-nCoV/hcp/>
 - For patients: <https://www.cdc.gov/coronavirus/2019-ncov/index.html>
 - World Health Organization Database of Publications:
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/global-research-on-novel-coronavirus-2019-ncov>
 - Local health authority websites
- Institutional Sites
 - Johns Hopkins University: <https://coronavirus.jhu.edu/map.html>
 - Harvard University: <https://www.health.harvard.edu/diseases-and-conditions/coronavirus-resource-center>
 - Oregon Health & Science University: <https://www.ohsu.edu/health/coronavirus-resources>
 - University of California San Francisco:
<https://infectioncontrol.ucsfmedicalcenter.org/coronavirus>
 - University of Washington: <https://covid-19.uwmedicine.org/Pages/default.aspx>
 - Penn State University: <https://med.psu.edu/coronavirus/news>
- Primary Sources of Information
 - Medrxiv (pre-print manuscripts): <https://www.medrxiv.org/>
 - Cochrane COVID-19 special collections: <https://www.cochranelibrary.com/special-collections>
 - Oxford COVID-19 Center for Evidence Based Medicine: <https://www.cebm.net/covid-19/>
 - Evidence AID COVID-19 collection: <https://www.evidenceaid.org/coronavirus-covid-19-evidence-collection/>
 - Epistemonikos Living Evidence for COVID-19: <https://www.epistemonikos.cl/living-evidence/>
 - New England Journal of Medicine COVID-19 Journal Watch:
<https://www.jwatch.org/na51020/2020/04/01/covid-19-nejm-journal-watch-coverage>
 - Global MediXchange Handbook of COVID-19 Prevention and Treatment (from China):
<https://covid-19.alibabacloud.com/>

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- Multilingual COVID-19 patient resources: https://switchboardta.org/blog/a-round-up-of-multilingual-resources-on-covid-19/?fbclid=IwAR2FErK6TEt2Y3I6zyet4KuS7B5G_5HiU5mk-o2cZ46TmW8pvVBWr7ST1kY

Workflow Tips for COVID-19 Inquiry Group:

- Pre-assign questions to student primary authors before the morning huddle.
- Share cell phone numbers (or preferred method of immediate contact) with faculty and residents for ease of asking quick questions.
- Learners should use a combination of video chat and messaging throughout the day to stay in contact and get assistance from peers.
 - If students or residents find a source that they think may be helpful for another student's question, send the resource to the other student over chat.
 - Include a summary of what you are sharing to help them utilize the resource effectively.
- Keep the audience of the answer in mind.
 - Think about whether the answer is appropriate for a healthcare provider versus a patient.
 - Think about what information should go into the brief answer versus the detailed answer.
- Brief answers should focus on directly answering the question in the most succinct way possible.
- Detailed answers can provide a more in-depth description of current literature regarding the topic at hand.
- If unsure about what goes into the brief answer, write the detailed answer first then summarize your finding into the brief answer.
- It is helpful to have students assigned to certain categories (i.e. one student answers all PPE-related questions).
 - It is more efficient and helps the student develop an area of expertise.
 - Students can learn about other content areas during group review.
- There should be a low threshold to submit an answer for group review or through study of the final disseminated product
 - It is good to have additional input from the team on complicated topics.

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