

Thank you all for joining us this afternoon or morning or evening depending on where you are for catching up with PubMed. My name is Mike Davidson. I work in the Office of Engagement and Training at the National Library of Medicine and I'm going to be your host today and we have a great panel of experts and a wonderful presenter to hopefully bring you up to speed with what's been going on with PubMed lately.

So we'll have a couple of little bit of housekeeping to take care of at the beginning, but after that we're going to dedicate a good portion of today's time to a presentation from Kathi Canese, who is the program manager for PubMed at the National Center for Biotechnology Information. Also known as NCBI, which is one of the divisions of the National Library of Medicine.

After Kathi finishes up, we're gonna spend the rest of the time answering your questions. We've got a handful of questions submitted ahead of time, but we encourage you to submit your questions as you think of them during the session using the Zoom Q&A feature, there should be a button at the bottom of your zoom I believe, which will let you pop that open and ask some questions. Looks like we've already got a couple of questions in there.

When we get to the Q and a portion of the session, sort of after Kathi's presentation, I'll be reading some of your questions allowed for Kathi to answer and to help us answer your questions. We also have with us today, my colleagues, Kate Majewski from the Office of Engagement and Training, as well as Jessica Chan and Amanda Sawyer from NCBI.

During the Q&A segment, our experts will answer some of your questions right in the Q&A panel, so we'll do some of them aloud, and then some of them, in written form, just to make sure that we can answer as many questions as possible in the time that we have.

Speaking of question and answer, we actually have a few questions that we'd like for all of you to answer, just to sort of get a sense of who we're talking with, what are your experiences with PubMed recently, what sort of features you are aware of and less aware of, just a quick poll with a few questions. I'm gonna open that up right now to get as I said, get a sense of who we're talking with. So let me just go ahead and open that real quick. Should pop up on your screen.

And we'll give folks a couple of minutes to answer those questions. This is not a test. You're not being graded on this. This is just for us to get a sense of of who's in the audience today. Alright, looks like we're getting some good responses so far, we will just, we're just gonna give it like another minute or so. Maybe not quite a full minute to to let people finish up answering. Looks like some of the responses started to slow down already, but we'll let you, will let you finish up.

Alright, it looks like our response rate has slowed down a little bit, so I'm just going to go ahead and end the poll and you might have a moment or two to finish up your answers. And

here we go alright, let's take a look at the results. Our questions, I'm gonna share these results with you as well so you can see them.

So our first our first question, have you used the PubMed clinical queries tool in the last six months? Looks like 57% yes, 41% sorry 57% no 41% yes. Looks like most of you overwhelming majority of you have saved your email, PubMed results in the last six months. 77% have used a custom date filter in the last 12 months. OK, and oh, 87% of our attendees today teach PubMed to others, which is great.

Thank you. Thank you for all the work that you do with with helping others use PubMed. The reason we asked about these questions is that these are some of the features that we're going to be talking about today. So even if you you answered, no that you haven't used these things, or perhaps if you have used these things but maybe haven't noticed any change, I will be talking about about some of these topics as as we move forward.

And the person who's going to be talking about this topic is Kathi Canese. Kathi is the program manager for PUB Med as I mentioned before, as well as the NCBI MeSH database and the NLM catalog databases at the Center for Biotech National Center for Biotechnology Information, she and her team are also responsible for the submission and editing of citation data by publishers vi the PubMed Data Management System. Kati received her master's degree in Library and Information Science from New York University at Albany. And I am now happy to turn things over to her. So Kathi, if you wanna go ahead and get your slides shared and unmute yourself and go ahead at your leisure.

Thank you Mike. Let me just try and get myself together here. OK, thank you. Hopefully everybody can see. Perfect thank you, Mike. So let's get started. PubMed launched 25 years ago and throughout its tenure it has evolved over both the short and long term. But as we are fond of saying PubMed development is never done. To that end, PubMed has significantly updated over the last few years. In October of 2017 we launched PUBMed Labs as a Test site to let us experiment with new designs and necessary technology upgrades without impacting the millions of daily users of PubMed.

The lessons we learned from user feedback on this development process led to the launch of the new PubMed with its new home page in November of 2019. We continued refining and improving this new version of PubMed throughout the following months. In May of 2020, the new version of PubMed became the default for all users, and the legacy version of PubMed was retired in October of last year.

Since the formal launch of new PubMed just over two years ago, PubMed has continued to change and grow. In that time, we've added over 3,000,000 new citations to PubMed. 2.9 million of those citations include links to the full article. PubMed averages over 3.4 million users each day. Those users come from all over the world on every continent, including Antarctica. As always, we diligently work to be responsive to our user needs.

Since November 2019, the PubMed team has responded to over 16,000 customer service requests about PubMed. These requests range from asking for help. Submitting bug reports, providing feedback on existing features, suggestions for new features and an occasional kudos. In addition, since the introduction of this new version of PubMed, we've continued to work on upgrading and improving the user experience. We've been focusing on adding features and refining the interface to make it easier to use PubMed to efficiently accomplish your search needs.

We'll spend most of the rest of this presentation looking at some of the modifications and features that have been rolled out over the last few years. But first I'd like to chat about how we developed the new PubMed. You may have heard us discuss the agile development model that led to the creation and release of the new version. This process started in 2017 with the release of PubMed Labs. PubMed Labs let us capture feedback from the initial users of the new site.

We continue to add new features and modifications based on the principles of technical excellence and good design. We also continue to listen to user feedback to help us uncover PubMed functionality that would benefit from additional improvements. A few of the features we'll be discussing today grew directly out of user feedback, will highlight some of those during this chat.

Apologies, somehow I unmuted myself. As I mentioned. Since the launch of the new PubMed two years ago, we've continued to add and improve features and functionality. Some of these may be familiar to you, while others may have slipped under your radar. Let's start with the feature that was prioritized in large part due to user feedback. A quick and easy way to limit your results by a custom publication date range in addition to the filters in the left sidebar for articles published in the last year, the last five years, and the last 10 years. We've also added a custom range filter.

Selecting the custom range filter will pop up a box where you can limit your search results by start and end to publication dates. Filter selections are applied to your searches until you clear them. A feature you may not have noticed is the link bar that provides easy access to mesh and other literature databases from any page in PubMed. At the bottom of every page, including the PubMed homepage you'll see a footer with NCBI literature resources listed. It provides links to the mesh database, PMC, and bookshelf. This is another feature that was requested by our users.

In July of this year, we released an updated version of the PubMed clinical queries page. While the clinical query filters have not changed, this update was more than just a visual touch up to match the new public design. We conducted a usability study of the previous version of the page. The study explored user goals for conducting searches with clinical queries. Identified strengths and weaknesses of the original interface, and recommended improvements to help users search more confidently and efficiently while using PubMed clinical queries.

We also took the opportunity to give a home to the COVID-19 filters. These filters were introduced in the fall of 2020. Also, Please note that the systematic review filter that was previously included on this page is now available as a default sidebar filter for all PubMed searches on the main search results page.

Another page that was given a visual refresh was the PubMed single Citation Matcher which was updated earlier this year to match the new PubMed design and to work in the new PubMed cloud environment. Another set of modifications were specifically designed to help advance searchers. When building a complex search in the advanced search builder, or even just in the regular search box, it can be relatively easy to make a mistake such as leaving off a closing parenthesis or entering a term it doesn't appear in the PubMed index.

We've added clearer warnings both to the main search page and more notably to the search history. These warnings are flagged with a red exclamation point when PubMed detects a potential problem in your search strategy. These warnings appear in your search history, so you can go back and review them and fix those that may need your attention.

We have also focused our development efforts on expanding the options to customize your results display. I'll walk through a few of these features now. These features are mostly available from the display options menu near the top of the results page. These preferences are stored in a browser cookie, so if you choose to customize any of these settings, they will be automatically saved when you use the same browser to search again in PubMed.

Since the new PubMed launched, we have expanded the list of formats you can use to view your search results. In addition to seeing your results in the classic summary format or the full abstract, you can also display results as lists of PMIDs or view results in the PubMed tagged text format. The permit format is the same format previously known as Medline in Legacy PubMed. You can also download citations in the PubMed format to easily import results to citation manager.

Another user requested feature was the option to turn off the abstract snippets shown in the search results summary display. The snippets are a relatively new feature in PubMed and can often be helpful for quickly deciding whether a citation is relevant or not. If you are reviewing many citations, snippets do take a bit of screen real estate, so unchecking the show snippets box will disable them for your searches.

We have also expanded the options for sorting your results. You can now sort your results by publication date, first author and journal. In addition to sorting by best match and most recent. Additionally, most sort orders can be flipped to sort from descending to ascending. For example, letting you see either the oldest or newest results at the top depending on what works well for you.

While we are chatting about sort order, let's take a moment to talk about the updated PubMed default sort order best match similar to the sort orders of most recent first author

and publication date. Best match modifies the order of your results. You get the exact same results for searches in PubMed, regardless of the sort order you select. Selecting the most recent sort order sort your results with the new citations on the top. Best Match uses an algorithm to determine which of your results are likely to be the most relevant based on your search terms, and then places those citations on the top.

Providing best match as an option for sorting search results is key as user analytics show that most users never look beyond the first page of results. Best match helps ensure that users can easily find what they're looking for immediately after running a search.

As some of you probably already know, best match is not entirely new to PubMed. Almost five years ago, an earlier version of the best match algorithm was introduced in Legacy PubMed. This version, after its released, Sorry, this first version of Best Match was developed on the same architecture we now use in the current version of PubMed.

Another significant thing to note about this match is the sort order is continuing to learn and improve using a learn to rank process. That means that the more people that use best match, the better it becomes in correctly sorting the most relevant results to the top. Just to reiterate, since there has been some confusion about this, the best match sort order only changes the order your results appear, not what results you get.

If you are interested in learning more about best match, please see the user guide for details regarding the algorithm. Some of the other improvements we have implemented may appear relatively minor, but they were designed to help ease pain points and frustration and make PubMed easier to use.

One example of this is the button set that you save email or download results. These buttons appear at the top of your results list, just below the search bar. Previously, if you scroll down through your results list and checked off a few items you wanted to save or email, you would have to scroll back up to the top of the page to use the buttons.

Now, as soon as you check off an item, a new toolbar with the saved email and send to buttons will appear at the top of your screen regardless of how far down the results you have scrolled. While we are on the top of topic of emailing citations, I'd like to mention a couple of other quality of life improvements. You can now email up to 1000 citations at a time. Additionally, you have the option to include mesh terms, grant support information, and other data in the emails.

If you prefer to keep your emails more streamlined, that's an option as well, as you may already know, the email messages include links to view the full records in PubMed. One of the more prominent improvements we have added just went into production last month, changes to help with navigating your search results. You will now notice new navigation options at the top and bottom of each result page. These options were designed to help you easily page

forward and backward through results. Jump to the beginning, the end or any specific page of results.

These updates are a great example of our agile design approach. We began exploring these changes in part based on user feedback sent to the NLM helpdesk. We then conducted video interviews and hands on testing with PubMed users throughout the development process to ensure that the changes would meet user needs without negatively affecting the existing user experience. As we have said previously, PubMed is never done, so before we wrap up, I wanted to mention a few things we are currently working on. Some of these items are relatively routine, although important, such as our annual year end processing that updates both the PubMed system and citations to reflect the annual changes to MeSH. We anticipate this process will conclude the week of December 13th.

Another resource we are currently working on is an update to the PubMed Utilities API. The existing utilities will be updated to be compatible with the web version of PubMed. This will ensure that users programmatically accessing public data will retrieve the same results as users searching on the web interface, for example, this means that products and services such as citation managers using utilities API to get PubMed citations will now be in sync with the PubMed web interface.

The API updates are projected to launch next spring, but we'll be running server and user tests in advance of the launch. Please stay tuned to the NLM Technical Bulletin NCBI Insights Blog and the E-utilities listserv for further updates.

We also continue to conduct usability reviews of the PubMed interface and existing features as we are always looking for ways to improve our users experience. I'd like to thank you for the opportunity to share what's new with PubMed. I'll now turn the session back over to Mike. Take it away Mike.

Thank you so much. Kathi. I will say that we're going to get into the Q and A portion of this session in just a few minutes and you guys have already been great about submitting questions, so please go ahead and keep doing that in the Q&A panel while I do some wrap up and some covering of a couple of things here, I want to highlight a few places that you can get more information, help or training about PubMed. So if you don't get your question answered today or if a question occurs to you tomorrow, how is the best, the best way to go about getting answers?

Kathi is indicating the PubMed interface is always evolving, so if you're a frequent or even an infrequent user of PubMed, there are a few places to follow to stay up to date on what's new. The NLM Technical Bulletin provides regular updates on new features, often with detailed descriptions about how those new features work. The NCBI Insights blog also posts about features and updates, including announcements of experimental features that are being introduced via the NCBI Labs program. And the PubMed new and noteworthy feed is another great way to stay up to speed on announcements.

Additionally, if you're using PubMed and need help or a better understanding of how something works, especially for those of you who are teaching, I'd encourage you to check out the PubMed user Guide and FAQ, which is available at the URL that appears on the screen now or from any PubMed page. Just go ahead and click on the user guide link.

If the user guide doesn't answer your question, or you're encountering what appears to be some unusual behavior, or you just want to provide some feedback, the best place to do any of those is via the PubMed customer support. You can contact them via the help link that is at the bottom of every PubMed page or via the URL that appears on the screen here. This is absolutely the best way to provide feedback or get help, and as the customer support team is very responsive to these requests, as Kathi mentioned, NLM has responded to over 16,000 PubMed related requests in the last two years and I would emphasize especially that feedback thing because that is, as Kathi mentioned, that's the best way for us to quantify and keep track of feedback which can help inform a future development.

If you wanna dive a little bit deeper into how PubMed works, both NLM and the network of the National Library of Medicine or NNLM offer both on demand and synchronous PubMed training and starting in the New Year, NLM and NNLM will be working together to offer a new NLM office hours series providing updates and information about NLM products as well as an opportunity to ask questions of the teams that support those products.

Which is actually a perfect segue into our Q&A session where you have already been asking some questions of the team that supports PubMed, and we're going to get to answering those right now. So I'm actually going to start with a couple of questions that were submitted ahead of time by those of you who registered. Thank you for submitting your questions.

The first one I'm going to go with here, Kathi is, Somebody asked, do I need to create a complicated search using mesh and keywords to feel that it is a good search and they specify that this is not for a systematic review?

Thanks Mike, and thanks to the questioner asking about that. As you probably already know, but I'll just share again. We've spent quite a bit of time tweaking our automatic term mapping algorithm, adding additional synonyms, with British and American spellings, working with the mesh section, and indexing section to get mesh mapping piles in place. So the good news is that it is not necessary to enter complex queries in the query box, you can just enter those terms that you want to be included in your search results and go if you'd like to review how your search has been translated, you can always click on the advanced search link and open up the search details box to see those additional terms that have been added to your search and make any modifications you'd like there.

Awesome, thank you so much, Kathi. Our next question is actually, I'm gonna sort of summarize and combine a handful of questions that we got both ahead of time and also already in the Q&A I see a number of folks asking about this and this is relating to the dental

and nursing journal subsets as to why those features are no longer available, and what alternatives might exist to replace them.

Great thanks Mike once again. Thanks to everybody who's written already about this topic and for sharing that question with us today, the nursing and dental journal subsets were built to maintain using a labor-intensive method that is no longer sustainable, but you can build your own set of journals from the NLM catalog and create a PubMed search from there. Or you can use the NLM nursing filter which has been posted on the NLM website to create your own nursing journals filter. I also encourage you to read the NLM Technical Bulletin that is discussed this topic and if you still would like some additional information or help with crafting your search, please reach out to us by writing to the helpdesk and our reference staff is ready and willing to help you with your search strategies.

Thank you so much for that. I have a question here from Julia. This might be a little specific, but I think it might be relevant to some folks. Why do we get 2 lines in the search history if your query has zero results? Sometimes we need to show that we search for the term or phrase even if we don't get any results, having the extra entry is inconvenient. I believe this might have to do with some sort of failure recovery or error recovery searches.

right. So a number of years back we did it and analysis of our logs and found that a significant portion of those user searches resulted in 0 results and so we did an extensive analysis to try and aid those searches and to prevent these zero results searches from happening since it was frustrating for users and So what we do now, if you have built a fairly complex search using tags and Boolean operators and you do retrieve 0 results.

We then process that query string through our automatic term mapping without those tagged terms to try and rescue those zero results. I understand it may be frustrating for some people because it does add an additional line to your history, but you may of course always delete individual search statements from your history. That is, if you want to then capture and download your complete history to an Excel spreadsheet. But that effort helped us to significantly decrease the number of 0 results, searches that users perform.

Wonderful, I have a question from Sue here regarding display options in the old PubMed you had to display Medline view to export a full record to citation manager. Do you need to select PubMed view to export full records to citation managers now?

Yes, that's correct. So in the legacy PubMed we the tagged format was Medline and we changed that to PubMed just so that users understood that you weren't just getting the Medline subset of PubMed results when you displayed the Medline format. So if you would want to take your results into a citation reference package, then please choose the PubMed format and it will download all parts of the citation record.



Alright, I have another question here. I think this is from Zhang. I remember in the legacy PubMed on the right of the search results there was a box indicating what mesh terms have been used in the search. Is this feature still there? I could not find it now.

I believe you're talking about the search details button. Let me know if that's not correct or the search details box, and indeed what we've done is move that to the advanced search screen. So after running your search, if you click on advanced search and scroll down to search history, you'll see a column in the search history that is labeled search details. If you open up that search details, you'll see all of the mesh terms and any synonyms that we've used while translating your search.

Thank you, yeah i'm pretty sure that's what they were, that's what they were asking about. Great, we have a couple of questions here about subject lines or comment boxes when emailing results and I know that there was, there was some information about that a while back and maybe you could clarify or explain what's going on with that and why that's not available.

Yeah sure, thank you so much, and unfortunately it was a fabulous feature. We all used it, but unfortunately it was used for nefarious reasons and we had to shut it down because users were just using it inappropriately and causing extreme problems because those messages, as you know, are coming from a.gov site, so we appreciate it that, it is not as convenient for you, especially if you're running searches for users and then emailing them the search results so, That feature unfortunately will not be coming back because of this problem, but you may want to email those results to your own personal or work email address and then forward them on to users.

It is unfortunate that we had to shut that feature down. And actually, I know we've been. we've been asking for questions, but somebody has actually provided a supplemental answer here. Karen has pointed out that with regard to citation managers and the PubMed format, don't forget there is the send to citation manager. So you have two options for exporting results to citation management tools. The PubMed format is best for covenants, but the EnHIP format will work for other tools like Endnote, which is obviously a very good point. Great, thank you, Karen.

Alright, let's take a look at what other questions we have here. Had one here. Let's actually go back to to some of the stuff that was submitted ahead of time. I want to make sure that folks get those questions answered as well. And this is actually more, maybe more of a training related question, so I might turn this over to Kate.

Any plan for sessions on a systematic literature reviews via the new PubMed. There are some limitations that are challenging truncation, length of query, etc. So Kaate Majewski, who is our our leader of our training team in the Office of Engagement and Training? Do you wanna? Do you wanna take a crack at that?

I'd love to. Thanks for that question. So the first thing I want to say about that is be sure that you've taken full advantage of what we already offer. I just answered a related question, so if you look at the question and answer panel you'll see a link to our online training page. And for those who do systematic reviews, I would point you specifically to the how PubMed Works series of classes either live or on demand. Also the mesh changes class which we offer every January and our next session is now available for registration and also our drugs and chemicals class. We think that these cover most of what we can teach you.

What NLM can teach you about the mechanics of searching from a systematic review perspective beyond that, librarians with experience conducting systematic reviews are the real experts on constructing systematic searches. But that said, if you conduct systematic reviews and can help us identify specific knowledge or skills that we can incorporate in our training that would be useful to you. Please, please contact us via the support center with PubMed training in the subject line and we'd love to talk to you about it, thanks.

Alright, wonderful, thank you so much Kate. I have another question. Since you were mentioning mesh a little bit in the, in the upcoming mesh changes webinar, we'll talk about this one. How long does it take for a new article to be indexed with Mesh and I know that this is kind of a kind of a tricky question to answer, so I'll just throw you under the bus there Kathi.

Yeah, thank you, Mike. Well, if you're familiar with PubMed and Medline and mesh indexing, you'll know, Unfortunately it was taking longer and longer to add mesh terms to new citations. It could take up to several months for that to happen. Human indexing was just not sustainable with the amount of information and new journals and new citations pouring into PubMed over 1.5 million each year. So NLM has made the decision after much work and analysis to abort the human indexing and go to automated indexing, of course that automated indexing will include humans in the process.

Humans will be checking the automation, indexing and making suggestions to modify and perfect the algorithm for MTI searching. I encourage you to read the Technical Bulletin that was just released last week discussing this option, but sorry this is a long-winded answer to you're your question. The ultimate goal is to provide mesh indexing within a 48 hour and truly a 24-hour period for new citations which will be helpful because now if you only search using mesh term, unfortunately the newest citations will not be in your result set.

So we're endeavoring to make that change, helping computers and algorithms do a better job so that mesh terms will be added to new citations almost immediately. Yeah, that's a, that's a great thing, and it's something that we've been, we've been sort of looking forward to figuring out how to, how to handle that and I know that they'll be more information coming in as we move forward on this. But that if you have not seen that NLM Technical Bulletin from I believe it was last week, I would definitely encourage you to go check that out if you are at all curious about about mesh indexing.

Alright, I think we're gonna switch to a slightly my NCBI related track here with a couple of my NCBI related questions. Somebody is asking it. Can our terms be highlighted when searching?

Excellent question, because I have an excellent answer for you, which is yes when we first released PubMed the new version of PubMed the My NCBI features were not all in place but that one has been added some time ago. So if you sign into my NCBI and select highlighting you to can now see highlighting on the abstract display for your search terms.

Excellent, alright, and this is, this sort of leads into another My NCBI related question. There's actually a couple of questions about this in the Q&A right now and then there's also were a couple of submitted ahead of time regarding the sort of recent activity in my NCBI, and also specifically when the mesh database in My NCBI will be, I guess converted over or transitioned into the new interface that we love about new PubMed.

Great, thanks for that question. Unfortunately I don't really have an exact timeline for you on my NCBI Recent activity or mesh. What I can tell you is that our companions, or colleagues over at PMC are now working on PMC labs, so that's the next major database that is moving into the cloud and the new look and feel and the other data, we have 40 databases at NCBI.

The other databases will follow on but PMC is Next up as Mike mentioned, if you just stay tuned to the Technical Bulletin or the PubMed new and noteworthy, you'll be in the know on when things should be developing and happening on the new interface front.

Excellent and I now have a couple of questions that are sort of more searching mechanics related so I'm gonna go to Kate with this one. How come some PubMed citations never receive mesh terms?

I love that question. Thank you. So the source for PubMed records include not just Medline journals, but also PubMed central journals and bookshelf citations. So it's only the set of PubMed citations that are, that come from Medline journals that get indexed with the mesh vocabulary. And you can learn a lot more about that in How PubMed Works the Selection class. So please join us.

And I'm actually going to tie that into another searching best practices related question that was submitted ahead of time have the best practices of searching a string of words changed? Is it best to use quotes or hyphenation, etc.

Our guidance for searching PubMed has not changed. If you're looking for a few good articles on a subject, put your significant concepts into the search box without quotes or tags or operators and let PubMed do its thing. If you're looking for a known citation, put what you know about the citation. The author title, words, page number, whatever you got into the search box and let PubMed do its thing.

If however, you're doing comprehensive or systematic searching, you're gonna have to know a little bit more than that, so please now I'm going to sound like a broken record. Take our training. Come to the PubMed online training page, which I put a link to in the Q&A. Join us, thanks.

Excellent and now Kathi. I have a couple of questions and these might be more specific than you're able to answer right now, so if that's, I figured I'd just give you a chance to see if you happen to know this off the top of your head. Pamela asks has PubMed usage dramatically increased since the new release even more than might have been expected, giving the pandemic?

No, I would say not dramatically, although throughout the years of its 25 year history PubMed has gradually increased every year as we go along, so there wasn't a significant bump with COVID-19 hitting our shores. Actually, usage went down a wee bit in the early days of the pandemic, but now we're just continue on a on a steady rise.

Alright, and then the other one is a similar type of question, which again you may not have the number for, which is, which is fine, Isabel saying it's very interesting what you said about most users not going beyond the first page of results. Do you know what the percentage of users that actually do go beyond the first page of results is?

It's relatively small. It's about about 85% of users never go to page 2, and it's interesting because that's not just PubMed user analytics, we find that's Google as well so. Users seem to work similarly in search engines as they do in a biomedical database such as PubMed.

Excellent, alright bear with me, just a moment. We've done pretty good with the question so far. I'm just looking through to see what we've missed. I'm just taking a look here. Some of these, some of these are feature requests which I would, I would encourage those of you who are requesting, Or requesting features to submit that stuff directly to the to the customer service NLM customer support and I mentioned this before but wanted to say the reason is that, I'll say that again, is that in this sort of in this encounter, right here we can answer your questions as best we can. And we can, you know, we can sort of try to give you answers and we'll remember you know what you, what you said, but if whatever you submit to customer support gets tracked can get recorded, can get quantified.

So if you ask for something now, that might just be one person, but if you submit it to customer support and there's another handful of people in there who have who have submitted that same feedback, we can, we can sort of collect that more more solidly together.

And I'm gonna actually say another person here is asking specifically has a question about, specifically about a duplicate PMID for a journal that is exactly the kind of thing that we would encourage you to submit to customer support because our customer support folks can actually look at the record and see what's going on. See if there's a, if there's a valid reason for things or what should be done about that.

Alright, I've talked enough, so let me ask another question to somebody. Check my list here. There was a question that was submitted ahead of time about Docline integration with PubMed that existed in Legacy PubMed. Will it return? Is there any plans for for further reintegration of PubMed and the and DOCLINE?

Thanks for that question. As you may know. Both PubMed and docline have been re-engineered in the last couple of years or so, so unfortunately I don't have a specific answer to you on when that integration will occur in the new system, but I think Kate, who knows a little bit more about DOCLINE than me, can say an easy work around for you Kate, you wanna hit it? Sure, yeah, you may know this already, but just in case folks don't, a really easy way to pull up your PubMed, records in DOCLINE is, you know, do your search in PubMed and from your PubMed results change your display option to PMID. If you have that display as PMID, you can just copy the whole list of PMID's you want to work with and paste them right into DOCLINE.

Excellent, sorry I was just reading some of your great questions and actually there's a handful of questions here that all sort of relate to the AI indexing versus the human indexing versus the algorithmic stuff and the checking of stuff I would and and somebody was actually asking about Accounting for biases that are inherent in algorithms, and I know that NLM is doing some work on that, and a lot of this stuff is still, it is still not, I wouldn't say in development, but it's still being worked through and and more information I think is certainly to be expected on sort of the behavior to the extent to, the behavior of the algorithms to the extent that how much the algorithms are, Excuse me, any differences between algorithmic indexing and human indexing and that sort of information.

We just had this, you know, as I said, the first major announcement of, Of this, in the Technical Bulletin, more information will be forthcoming on this as we move forward. And if I might follow up on that, Mike MTI indexing, which is the name of our automated indexing, has been going on for many, many years now. So it's not a new phenomenon, and they have been tweaking the algorithms for many years. It's just that it was applied to a subset of Medline citations. So now it will be incorporated into all Medline citations, so it's not, it's not new.

Yes, that's that's a very good point. Thank you for for clarifying that. Just looking through the questions give me one moment here folks. And it's been, it's been popping off in the Q&A so. Let me just get some some clarity here on some stuff. We talked about that already. I think we talked about that already.

Here's one from Simina for PICO questions. Do we have to use a combination of mesh and keywords? Thanks. Kate. You wanna handle that?

Sure, so I'll just say that in my experience, for most pico questions in other words, where you're going through with the patron or asking the patron to do to go through the PICO framework themselves, you know the focus is on the terminology and coming up with the right terms for the question and for something like that, I would not expect that you would

have to hunt for mesh for for terms like that. You've constructed a good search, using good terms. You might just do a check afterwards to just make sure that your terms mapped to mesh, but I would not expect you would have to do a great deal of of mesh hunting and pecking to be able to do a good PICO search. Our algorithms work really well with that kind of search, thanks.

Thank you for that Kate. Cat asked a question which unfortunately we're not going to be able to satisfy you right now. I don't think which is, can you give a brief demo of clinical queries? I don't think we're set up to do a good demo in this particular webinar, especially given that the time that we have left. But if that's something that you're interested in, that's definitely something we can consider moving forward. And I believe that there's in our evidence-based practice tutorial there is at least a brief online tutorial that covers clinical queries as well, so there is some information out there and that's something you know. This feature was only rolled out earlier this year, in this in this current form, so it's something that we will continue to look at as we move forward.

We're rounding out a time so I'm just going to see if there's one more quick, something or other that we can answer here. I don't want to keep people too long. Actually this was a question that was sort of answered as part of another question, so I'll just hit this real quick. Concepcion asked was the mesh database will change in the next future? I believe that the plan is for the next interface, changes to be PMC. I know that there's there's in the PMC labs they're working on that now. That's right, Kathi, that PMC is up next?

That's correct, PubMed Central will be the next to hit the cloud, and they're working on usability testing and whatnot now. I encourage you to go to PMC labs and and give it a go and submit your comments and concerns about it, and then we will decide which databases will be up at bat. It looks really good. I mean, that's just, I don't work on it so I can say it looks really good. The new version I'm very excited about it. Right, it is.

Alright it is just a few minutes at the top of the hour, so I think we're probably going to wrap up because I don't wanna, I don't wanna drag this out too long and there's some more advanced, more involved questions I think in here that we don't have time to sort of get to in full, but I would encourage you again. I said this earlier and I will say this. Now if you have, if you have questions about PubMed at anytime. First check the user guide 'cause that thing is great and it has a lot of great information and stuff that you know that I don't always remember and I have to go look up.

But also if you have questions or feedback or suggestions or anything along those lines NLM online customer support is a great place to send that stuff. The folks over there, many of whom are on this webinar have been answering your questions in the Q&A. Also Kathi and also some other folks at NLM as well answer that stuff and they do, they do their darndest to to get all those questions answered and and get good answers for people.

So if you have questions, especially if there are things that are that are more involved than we had time to get to today, I would encourage you to just go over there and and pop your question into MLM customer support and someone will get back to you and someone will get an answer. With that said, Kathi thank you so much for for presenting today.

Thank you Mike. I really appreciated the opportunity to present and answer your questions, and I'll also plug the helpdesk link. Please send us your comments and concerns. Any questions the PubMed team is standing ready to answer those for you, Thanks. And also a huge thanks to Kate and to Amanda and to Jessica who were, who are also helping to answer your questions. And thanks also to our event support team. And thanks to all of you for for giving up an hour of your Monday to come hang out with us and talk about PubMed. And if you still have questions or still wanna know more about PubMed stay tuned for that NLM Open Office Hours coming sometime in January I believe will be the first one of those so thanks all, have a good day. Thank you everybody.