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About FSMB

At the Federation of State Medical Boards (FSMB), we proudly support state medical boards within the United States, its territories, and the District of Columbia. We serve our member boards as they fulfill their mandate of protecting the public's health, safety, and welfare through proper medical regulation, licensing, and disciplining of physicians, physician assistants/associates (PAs), and other healthcare professionals.

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About FSMB

FSMB's top priority is supporting state medical boards in their critical mission of public protection. Our support is vast and diverse and includes:

- Advocacy, Policy, and Communications
- Technology and Information Services
- Educational Programming
- Assessment Services
- Licensing and Disciplinary Data

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What are the Learning Objectives?

 Defining AI

 Regulating AI

 Uses of AI

 Future of AI

Defining AI

What is



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What is AI?

- Artificial Intelligence
- Augmented Intelligence
- Machine Learning
- Generative AI
- Natural Language Processing (NLP)
- Large Language Models (LLM)
- Multi-Modal
- Fine-Tuning
- Digital Twins
- Agents

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Why AI like ChatGPT has gotten so good, so fast

2016 2022 2023

Images that three AI systems generated from the same prompt

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The cat went to the litter box.

Previously, AI models would analyze the sentence sequentially, processing the word “the” before moving onto “cat” and so on. This took time, and the software would often forget its earlier learning as it read new sentences.

The cat went to the litter box

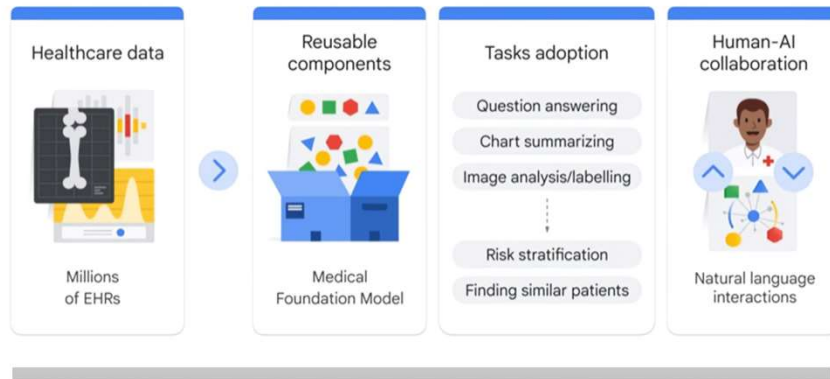
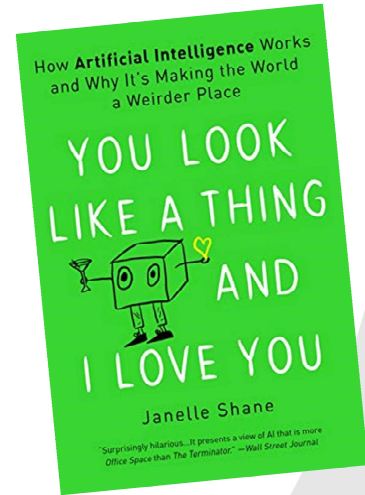
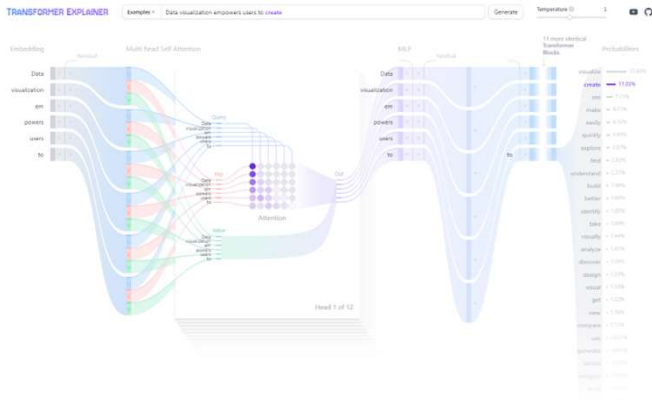
The cat went to the litter box

“cat” and “litter” are closely related

The transformers model immediately processes the relationships between words — a method called attention. New AI models can examine “cat” alongside “litter” and “box.”


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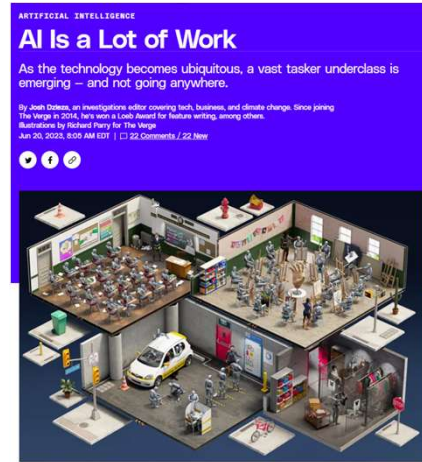
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 Where is the data coming from?

 How is the data “verified”?

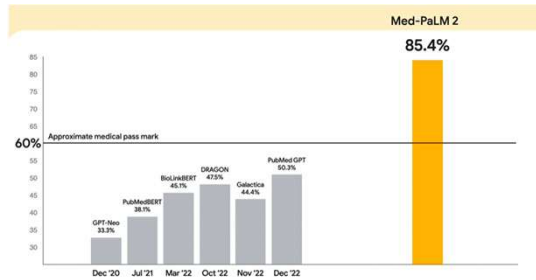
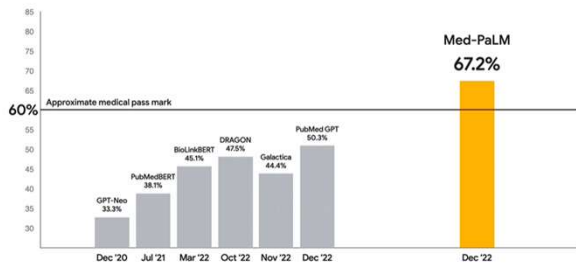
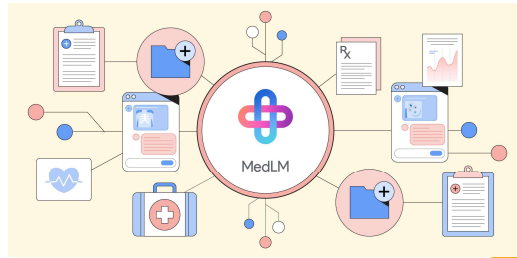
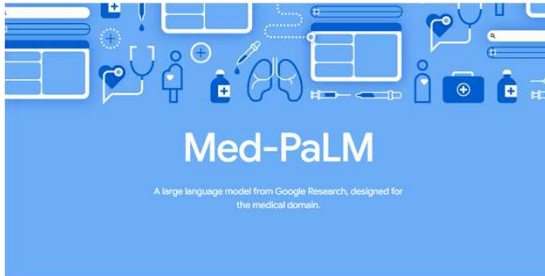
 What role do humans play?



This article is a collaboration between New York Magazine and The Verge.



Uses of AI



Google Cloud Unveils New AI-enabled Claims Acceleration Suite to Streamline Health Insurance Prior Authorization and Claims Processing, Helping Experts Make Faster, More Informed Decisions

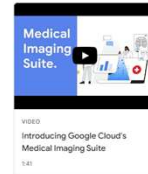
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Medical Imaging Suite

Accelerate development of AI for medical imaging by making imaging data accessible, interoperable, and useful.

[Contact us](#)

- ✓ Support convergence of diverse storage formats to the DICOM standard
- ✓ Seamless integration with on-premises storage via NetApp or Change Healthcare cloud-native PACS
- ✓ AI-assisted annotation environment powered by NVIDIA and the MONAI open framework
- ✓ Support healthcare-specific security and compliance



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ARTIFICIAL INTELLIGENCE / TECH / GOOGLE

Google's medical AI chatbot is already being tested in hospitals



Illustration: The Verge

/ The Mayo Clinic has reportedly been testing the system since April.

By [Wes Davis](#), a weekend editor who covers the latest in tech and entertainment. He has written news, reviews, and more as a tech journalist since 2020.

Jul 8, 2023, 6:01 PM EDT | [11 Comments](#) / [11 New](#)



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Automatically document care with the Dragon Ambient eXperience

Enhance quality of care and the patient experience, increase provider efficiency and satisfaction, and improve financial outcomes with the Dragon Ambient eXperience (Nuance DAX), an ambient clinical intelligence solution that automatically documents patient encounters accurately and efficiently at the point of care.

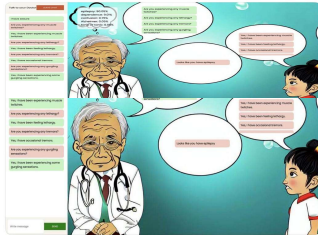
[Explore Nuance DAX](#)



AI anthropical 1d ...

Third prize went to Dr. Claude: a tool that fuses conversational AI with symbolic reasoning across patient interactions and medical knowledge for more accurate, transparent diagnoses.

Congratulations Arthur, Wian, Fady and Sukrut!



1 reply · 3 likes

Talk to your Doctor LEAVE COMMENT

I have seizure

Are you experiencing any muscle twitches?

Yes, I have been experiencing muscle twitches.

Are you experiencing any lethargy?

Yes, I have been feeling lethargy.

Are you experiencing any tremors?

Yes, I have occasional tremors.

Are you experiencing any gurgling sensations?

Yes, I have been experiencing some gurgling sensations.

epilepsy: 90.05%
dependence: 9.01%
confusion: 0.75%
Alzheimer: 0.05%
tonic or tonic: 0.05%

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Introducing GPTs

Doctor SOAP Note

You Write a SOAP note for a patient with asthma exacerbation.

S:
The patient is a 35-year-old female presenting with complaints of increased shortness of breath, wheezing, and coughing more than usual over the past two days. Reports that symptoms have worsened despite using a salbutamol inhaler "a few times a day." Denies fever, chest pain, or other systemic symptoms. History of asthma, usually controlled with a daily low-dose inhaled corticosteroid. No recent changes in asthma medications. Last exacerbation was approximately 6 months ago.

O:

- **General:** Alert, oriented, in mild distress due to dyspnea
- **Vital Signs:** BP 120/80 mmHg, HR 102 bpm, RR 22/min, Temp 98.6°F, O2 Sat 94% on room air
- **Lungs:** Diffuse wheezing on auscultation, prolonged expiratory phase
- **Cardiovascular:** Regular rate and rhythm, no murmurs
- **ENT:** No nasal flaring or use of accessory muscles
- **Skin:** No cyanosis or peripheral edema

A:
Acute asthma exacerbation, likely triggered by an unidentified allergen or recent respiratory infection, considering the lack of systemic symptoms and the patient's report of progressive dyspnea and wheezing despite the use of rescue medication.

P:

1. **Medication Adjustments:**

- Increase frequency of Salbutamol inh ↓ to 2 puffs every 4 hours as needed for wheezing or

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BUSINESS

OpenAI disbands safety team focused on risk of artificial intelligence causing 'human extinction'

By Thomas Barrabi
Published May 17, 2024, 4:40 p.m. ET

30 Comments

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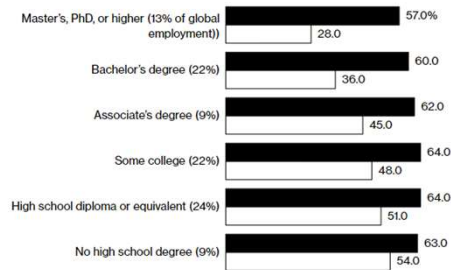


Regulating AI

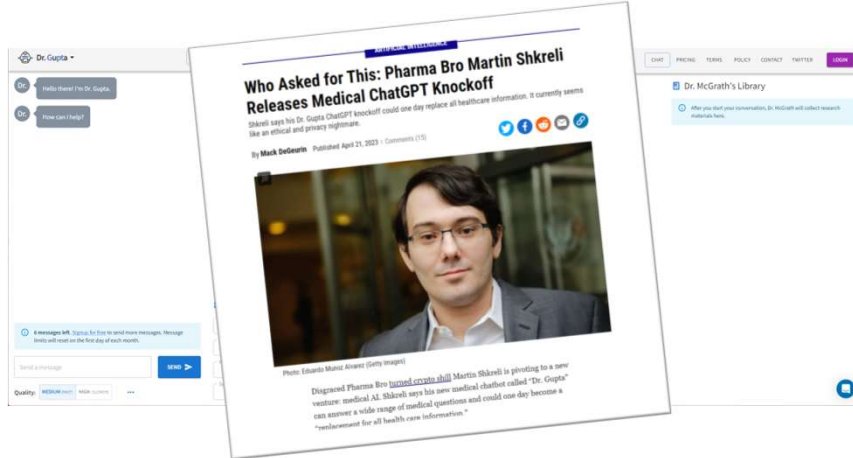
AI Will Increase Vulnerability of Most Educated Workforce

Share of work that can be automated, by education level of employee

■ With generative AI □ Without generative AI



Source: McKinsey Global Institute analysis
 Note: Educational includes share of global employment



AMAZON / TECH / ARTIFICIAL INTELLIGENCE

Amazon insists Just Walk Out isn't secretly run by workers watching you shop



Image: Amazon

/ Amazon says human reviewers only annotate shopping data for its cashierless tech.

By Emma Roth, a news writer who covers the streaming wars, consumer tech, crypto, social media, and much more. Previously, she was a writer and editor at MUO.
Apr 17, 2024, 12:38 PM EDT

[11](#) Comments (11 New)



LUMINETICSCORE™
AI Diagnostic System Formerly IDx-DR

LumineticsCore is an AI diagnostic system that autonomously diagnoses patients for diabetic retinopathy (including macular edema)

- ✓ Diagnostic results at the point-of-care
- ✓ No need for specialist overread or telemedicine call backs
- ✓ A simple user interface
- ✓ Customized workflow integration solutions

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Biotech & Health
Pearl raises \$58M to help dentists make better diagnoses using AI
 miss rate by 50 percent

New A.I. Tool Diagnoses Brain Tumors on the Operating Table
 A new study describes a method for faster and more precise diagnoses, which can help surgeons decide how aggressively to operate.

Image Credits: HUIZENG HU / Getty Images

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Schumer Lays A.I., Without
 The Senate majority leader course in a technology to build bipartisan support

FACT SHEET: President Biden Issues Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence
 OCTOBER 30, 2023

Today, President Biden is issuing a landmark Executive Order to ensure that America leads the way in seizing the promise and managing the risks of artificial intelligence (AI). The Executive Order establishes new standards for AI safety and security, protects Americans' privacy, advances equity and civil rights, stands up for consumers and workers, promotes innovation and competition, advances American leadership around the world, and more.

As part of the Biden-Harris Administration's comprehensive strategy for responsible innovation, the Executive Order builds on previous actions the President has taken, including work that led to voluntary commitments from 15 leading companies to drive safe, secure, and trustworthy development of AI.

first-ever
 erent AI

emotion recognition,
 was AI-generated
 be high-risk

Trustworthy AI and protect its harmful effects.

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Enrolled

S.B. 149

ARTIFICIAL INTELLIGENCE AMENDMENTS

2024 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Kirk A. Cullimore

House Sponsor: Jefferson Moss

LONG TITLE

General Description:

This bill creates the Artificial Intelligence Policy Act.

Highlighted Provisions:

This Bill:

- defines terms;
- establishes liability for use of artificial intelligence (AI) that violates consumer protection laws if not properly disclosed;
- creates the Office of Artificial Intelligence Policy (office) and a regulatory AI analysis program;
- enables temporary mitigation of regulatory impacts during AI pilot testing;
- establishes the Artificial Intelligence Learning Laboratory Program to assess technologies, risks, and policy;
- requires disclosure when an individual interacts with AI in a regulated occupation; and
- grants the office rulemaking authority over AI programs and regulatory exemptions.



An Act

SENATE BILL 24-205

BY SENATOR(S) Rodriguez, Cutter, Michaelson Jenet, Priola, Winter F., Fenberg;
also REPRESENTATIVE(S) Titone and Rutinel, Duran.

CONCERNING CONSUMER PROTECTIONS IN INTERACTIONS WITH ARTIFICIAL INTELLIGENCE SYSTEMS.

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. In Colorado Revised Statutes, **add** part 17 to article 1 of title 6 as follows:

PART 17
ARTIFICIAL INTELLIGENCE

6-1-1701. Definitions. AS USED IN THIS PART 17, UNLESS THE CONTEXT OTHERWISE REQUIRES:

(1) (a) "ALGORITHMIC DISCRIMINATION" MEANS ANY CONDITION IN WHICH THE USE OF AN ARTIFICIAL INTELLIGENCE SYSTEM RESULTS IN AN UNLAWFUL DIFFERENTIAL TREATMENT OR IMPACT THAT DISFAVORS AN INDIVIDUAL OR GROUP OF INDIVIDUALS ON THE BASIS OF THEIR ACTUAL OR

Capital letters or bold & italic numbers indicate new material added to existing law; dashes through words or numbers indicate deletions from existing law and such material is not part of the act.



CALIFORNIA REPUBLIC



Navigating the Responsible and Ethical Incorporation of Artificial Intelligence into Clinical Practice

Adopted by FSMB House of Delegates, April 2024

EXECUTIVE SUMMARY

Artificial Intelligence (AI) holds tremendous potential to aid healthcare providers in diagnosis, treatment selection, clinical documentation, and other tasks to improve quality, access, and efficiency. However, these technologies introduce risks if deployed without proper "guardrails" and understanding which may impact considerations in clinical practice as well as regulatory processes of state medical boards. By taking a proactive and standardized governance approach anchored in ethical principles, state medical boards can promote safe and effective integration of AI in its various forms, while prioritizing patient wellbeing.

This report summarizes expert opinion and proceedings to develop guidance from the FSMB Ethics and Professionalism Committee to aid physicians and state medical boards in navigating the responsible and ethical incorporation of AI centered on (1) education, (2) emphasizing human accountability, (3) ensuring informed consent and data privacy, (4) proactively addressing responsibility and liability concerns, (5) collaborating with experts, and (6) anchoring AI governance in ethical principles.

Clinical systems and processes making use of AI must be continually monitored and refined. This should not occur in a vacuum but should be the focus of collaborative efforts among physicians, health systems, data scientists, and regulatory agencies, including state medical boards. By thoughtfully addressing the opportunities and challenges posed by AI in healthcare, state medical boards can promote the safe, effective, and ethical use of AI as a tool to enhance, but generally not replace, human judgment and accountability in medical practice. In fulfilling their missions to ensure that patients benefit from and are not harmed by applications of AI in their care, it is essential that state medical boards avoid over-regulation and regulatory overreach by attempting to regulate that which is not in their purview. With focused efforts on the current and future state of the use of AI by licensees, state medical boards may sustain regulatory efficiency, achieve consistency across jurisdictions in the regulation of AI in clinical practice, help secure the benefits of AI, and proactively safeguard patients while upholding professional standards.

- 🎓 Education is critical.
- ⚖️ Physicians remain accountable.
- 🔒 Informed consent and data privacy are paramount.
- 🌟 Proactively address bias and access.
- 🕒 Anchor AI governance in ethics.
- 🤝 Collaboration is key.



Future of AI

What makes the Empathic Voice Interface (EVI) special?

Pause

0:59



nuclei.io

Let physicians have full control of AI.

Our digital pathology AI framework "nuclei.io" is designed to innovate pathology diagnosis with artificial intelligence and machine learning.

By providing real-time single nucleus & tissue-level diagnosis, nuclei.io aims to assist pathologists with digital pathology slide diagnosis and improve turn-around time, quality, and clinical workflow.

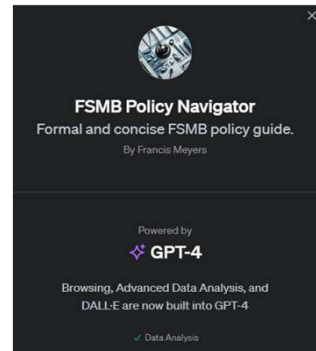
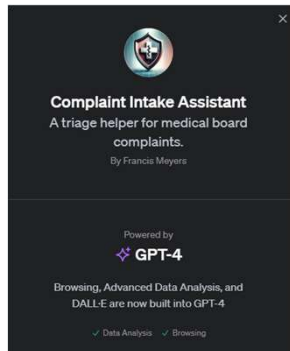
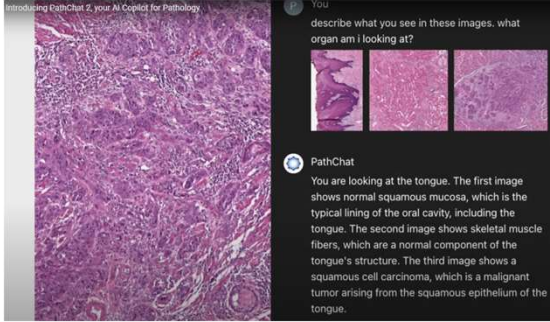


For Pathologists-AI user study published in *Nature Biomedical Engineering*, please visit our research summary page:

[Research website](#)

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You
*On 11-15-22 I went in for spinal cord surgery at yavapai regional Medical Center main campus in

Complaint Intake Assistant

Step 4. Analyzing Applicable Statutes
As the relevant Arizona statutes are not in my knowledge base, I am unable to match the complaint details with specific Arizona statutes. For a proper analysis, the statutes and regulations governing medical practice in Arizona would need to be reviewed.

Step 5. Investigation Recommendations
Considering the complaint's nature:

- Further investigation could involve interviewing the involved medical staff, including the intake nurse, the first nurse, the nurse's assistant, and the night nurse.
- Reviewing the hospital's medication management policies and procedures, especially regarding surgery intake.
- Examining the hospital's records of the complainant's stay, focusing on medication administration and staff-patient interactions.
- Assessing the training and qualifications of the involved medical staff.
- Investigating the hospital's protocol for handling patient complaints and distress during postoperative care.

This recommendation is based on the details provided in the complaint and would need to be adjusted based on the relevant statutes and hospital policies.

caused significant emotional and physical distress to the complainant.

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DC Health Virtual Agent

Who should I reach out to about my medical license? 24 Apr - 3:05 pm

To get information about your medical license in Washington D.C., you should reach out to the Health Regulation and Licensing Administration (HRLA) Processing Center.

The context indicates that the HRLA Processing Center handles health professional licensing and renewals. To check on the status of a pending application or submit documents, you can:

- Call the HRLA Processing Center at 1 (877) 672-2174
- Email the appropriate Health Licensing Specialist:

Type your questions here

DC Health Virtual Agent

pharmaceutical detailer, and pharmacy technician licenses:

- Ms. Karin Barron: karin.barron@dc.gov
- Ms. Luanne Greenaway: luanne.greenaway@dc.gov

For controlled substance registrations (new):

- Ms. Leatrice Lee: leatrice.lee@dc.gov

For controlled substance registrations (renewals):

- Ms. Karin Barron: karin.barron@dc.gov
- Ms. Luanne Greenaway: luanne.greenaway@dc.gov
- Ms. Sabrina Lewis: sabrina.lewis@dc.gov
- Ms. Leatrice Lee: leatrice.lee@dc.gov

References: <https://dchealth.dc.gov/ocd>
<https://dchealth.dc.gov/service/health-professionals>

Type your questions here

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? Questions & Answers

 fmeyers@fsmb.org

 <https://www.linkedin.com/in/frankbmeyers/>