Current Events in Healthcare & Their Solutions

***** PLEASE READ *****

I have left many of my answers in for you to read so that you can get you a sense of what I believe to be an example of a strong answer. However:

- These are **real** and **important** experiences to me.
- The intention is **not** for you to **copy** these answers or adapt my experiences for your own use.
- Please display **integrity** and **honesty** when using this document to prepare for your interviews.

Document Key:

- Purple = my answer
  - I have left many of my answers in, however some have been removed as they are specific to my experiences and would not be relevant for you as the reader.
- Blue = space to fill in your answer
  - Click File → Make a copy to create a copy of this document in which you can write in and prepare your own answers.

🩺 ***Rural physician shortage***

What is the solution to the rural physician shortage?
What can be done to encourage more students to pursue rural medicine?

Chris' answer:

- **Scope of problem:**
  - There is an uneven distribution of the physician supply
    - 🇨🇦 While approximately 20% of the Canadian population lives rurally, fewer than 10% of physicians work in rural areas
    - 🏴 While over 40% of the Nova Scotian population lives rurally, only 20% of Nova Scotia physicians work in rural areas
  - Furthermore, approximately 1/10 Ontarians and Nova Scotians do not have a family physician, with the rural population disproportionately represented within this cohort.
    - Thus, rural communities of Ontario and Nova Scotia are chronically under-serviced.
- **Solutions:**
  - 🇨🇦 🏴 **RECRUITMENT strategies:**
    - **Preferential admission to medical school if they are from rural communities**
      - Currently only about 10% of medical students are from rural and remote areas
      - But we know that medical students from rural backgrounds are more likely to go back and practice rurally compared to their urban peers
      - Preferential admission to medical school makes it fairer for the population of chronically under-serviced rural areas, whose tax dollars contribute to paying for those seats and thus it seems only right that the schools are training doctors that will serve rural communities.
    - **Exposure in the curriculum**
      - Research suggests that exposure to learning in rural settings can play a significant role in a physician's interest and decision to practice rurally.
  - 🏴 **RETENTION strategies:**
    - **Improve locum services** and **physician compensation**
      - Surveys suggest that among rural physicians, the greatest sources of dissatisfaction are:
        - **working hours / lack of time off**
        - **financial compensation**

- In 2019, 2.8 mil was invested into Nova Scotia's Enhanced Locum Incentive Program (ELIP)
- Currently, NS GPs are compsented either through fee-for-service *or* salary-based models
    - Could NS benefit from family physicians having the option to be compensated through a blended- or capitation-based model, similar to what is available in ON?
    - e.g. NB adopted a version of a blended model a few years ago
- March 2022 - Premier Tim Houston announces 'Primary Care Physician Incentive program', $25k sign on then $20k x 5 years, "Come Home to Nova Scotia" website that says you'll be contacted in 24h and could have a job offer in 10 days!
    - (🔗)

Stats/links:

- Our-Care - national data on access to primary care in Canada (🔗)
- SWOMEN discussion (good discussion, starts ~halfway down page) (🔗)
- Mythbuster: IMGs Are the Solution to the Doctor Shortage in Underserviced Areas (🔗)
- Rural Canadians constitute 22% of the population (🔗)
- 42.6% of Nova Scotians live rurally (🔗)
- Nationally fewer than 10% of physicians work in these areas (🔗)
- 11% of medical students are from rural and remote areas (🔗)
- 8% (81k) of Nova Scotians are *seeking* a family doctor (🔗)
- 10% on Ontarians don't have a family doctor (🔗)
- 'Why would you come?' Nova Scotia family doctors the worst paid in the country (🔗)

Your answer:

- _____

🩺 ***Future of healthcare***

What are the challenges facing medicine/health care presently and in 10 years time, and how will this affect family doctors?

Chris' answer:

- ISSUE: Canada's aging population and the stresses that it imposes on an already overburdened healthcare system
- STATS:
    - There is a serious healthcare crisis on the horizon as the baby boomer generation retires.
        - Seniors in Atlantic Canada make up 22% of the population, a number much higher than the national average (18%, same as Ontario)
        - It is projected that by 2040, seniors will comprise nearly a quarter of the Canadian population
    - This will be a huge burden on an already stretched healthcare system. It is already creating great strain on our family physicians, our emergency departments, our hospitals, and our long-term care facilities.
- SYSTEM SOLUTIONS:
    - (1) Improved **resource allocation**
        - As the elderly and chronically-ill continue to make up a greater proportion of healthcare consumers, our resource allocation to those areas should reflect this
    - (2) Improved **training of healthcare workers**
        - At all levels of training, medical learners need to have increased training to better understand the **needs** of elderly people and how we as providers can support seniors both in the community and in institutions, to help mitigate the strain that elderly care puts on our system.
        - I can count the number of lectures I had in medical school on Geriatric issues, yet I would argue that perhaps every single person in my class, bar perhaps the future Pediatricians, will encounter Geriatric issues as part of their daily practice.
- FAMILY MEDICINE'S ROLE:
    - Of course, the aging population will be reflected in our patient population too
    - (1) Promote **preventative medicine**
        - A key component of this is promoting **healthy aging**; that is:
            - **physical** and **mental** health
              through
            - physical activity
            - socialization
            - nutrition/diet
            - injury prevention
            - and community-based healthcare.

        - This will hopefully decrease patients' dependency on formal healthcare institutions.

Statistics:

- % of population over the age of 65 (2021; 🔗)
    - Atlantic Canada: 22.2% (much higher than national average)
    - National: 18.5%, Ontario close to this
    - All others (see tagged comment)
- "By 2040, seniors are projected to comprise nearly a quarter of the Canadian population" (🔗)
- Health care experts hope for long-term reform, 'shift in philosophy' for Ontario's system (🔗)

Chris' answer; extensive version:

- ISSUE: Unsustainability of our current overburdened healthcare system
- PREFACE: This is an extremely complex issue that justifies a whole conversation of its own, but I will do my best to cover the key points concisely
- THE SCOPE OF THE ISSUE:
    - In developed countries such as Canada, there are ever-growing stresses imposed on the healthcare system by the ever growing burden of chronic disease and the need for long-term care.
    - There are a great number of contributing factors to this increasing demand, but one that I'd like to focus on is our aging population.
    - There is a serious healthcare crisis on the horizon as the baby boomer generation retires.
        - Atlantic Canada has ~22% of its population over the age of 65, much higher than the national average / Ontario has ~18% of its population over the age of 65, close to the national average
        - It is projected that by 2040, seniors will comprise nearly a quarter of the Canadian population
    - Because of the increasing rates of disability and chronic disease among seniors, the demand for health services naturally increases as Canada's population ages.
    - Furthermore, changes in family structure reduces the level of 'community-level healthcare' going on, i.e. family members aren't tending to their sick and elderly relatives, as they did in the past. As a result, aged people are increasingly starting to rely on formal health-care instead.
    - This will be a huge burden on an already-resource-stretched healthcare system. Our current healthcare system simply cannot keep up with the growing demand for this resource-intensive care. It is creating great strain on our family physicians, our emergency departments, our hospitals, and our long-term care facilities.
- SYSTEM SOLUTIONS
    - (1) Improved **resource allocation**

        - As the elderly and chronically-ill continue to make up a greater proportion of healthcare consumers, our resource allocation should consider this demographic shift and look to distribute more resources to these areas of need.
    - (2) Improved **training of healthcare workers** to support seniors living both in institutions and in the community.
        - Why did we have so many lectures on Surgical topics in medical school when I can count the number of lectures on Geriatric topics on one hand, yet only 10% of my graduating class will go on to become a surgeon, yet I would argue that perhaps every single person in my class, bar perhaps the future Pediatricians, will encounter Geriatric Issues are part of their daily practice.
        - At all levels of training, medical learners need to have increased training to better understand the **needs** of elderly people and how we as providers can help mitigate the strain that elderly care puts on our system.
- FAMILY MEDICINE'S ROLE:
    - (1) Promote **preventative medicine**
        - With greater education and opportunities surrounding health and factors that can affect an aging individual's wellbeing, and a focus on decreasing patients' dependency on hospitals while increasing community-based health care, the demands on formal healthcare institutions will lighten.
        - A key component of this is promoting **healthy aging**; physical, social, and mental health through physical activity, injury prevention, nutrition/diet, and socialization.
- CLOSING THOUGHT:
    - On top of our healthcare system's ill-preparation to deal with the ever increasing strain imposed by our aging population and the chronically ill, the COVID-19 pandemic has now exposed the fragility of our healthcare system in managing acute illness too.
    - We've seen that in the face of an emergency like a pandemic, we are ill-equipped to handle the surge in hospitalizations and ICU admissions.
    - And furthermore, we are already starting to see the fallout (and will continue to for the next few decades) of the care that was missed throughout all of this; undetected cancers, canceled surgeries, staffing shortages, etc., which will only exacerbate the impending healthcare crisis.

Your answer:

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🩺 ***Indigenous health***

Introduction & History (🔗)

- Indigenous peoples are comprised of **First Nations**, **Inuit**, and **Métis**; three distinct peoples with unique histories, languages, cultural practices, and spiritual beliefs
    - Indigenous people make up approximately 5% of the national population
    - There are over 50 different Indigenous Nations in Canada, living in over 600 communities
- From the late 18th century, European Canadians (and the Canadian government) encouraged assimilation of Indigenous culture into what was referred to as "Canadian culture" – eurocentric, with ideals of Christianity, sedentary living, agriculture, and education.
- Under the Indian Act of 1876 came the creation of 'Indian reserves', which were subject to restrictive laws such as restrictions on eligibility to vote, decreased hunting and fishing areas, and inability for status Indians to visit other groups on their reservations.
- The final government strategy of assimilation was the Canadian residential school system (1847 – 1996) – a system of 130 boarding schools nation-wide, designed to lead children most effectively out of their "savage" communities into "higher civilization" and "full citizenship".
    - Children were prohibited from speaking their native tongue or carrying out their cultural traditions and customs.
    - These schools were underfunded and plagued by death and disease (e.g. TB) alongside physical, emotional, and sexual abuse. And of course, Indigenous and non-Indigenous inhabitants of Canada (Turtle Island) have recently been confronted with these horrors with the discovery of multiple mass unmarked graves across the nation, starting with the discovery of the remains of 215 children at the former Kamloops Indian Residential School.
    - The residential school experience in Canada meets the UN criteria for genocide.
        - A legal case resulted in a settlement of $2b in 2016 and the establishment of the Truth and Reconciliation Commission (TRC) which confirmed the detrimental effect on children and all Indigenous Canadians and looks to remedy the lasting effects of the historic mistreatment.

What are the health challenges facing Indigenous peoples in Canada, and what are some solutions? (🔗) (🔗)

Chris' answer:

- **THE PROBLEM**
    - Significant health disparities exist between Indigenous and non-Indigenous people, firstly in terms of the social determinants of health…
        - SES

        - Education
        - Employment rates and income
        - Housing conditions
    - …but also in virtually every indicator of health:
        - Access to healthcare
        - Life expectancy
        - Mortality rates
        - Smoking/drinking rates
        - Obesity rates
    - These health disparities reflect the lasting effects of:
        - colonization,
        - the residential school system,
        - ongoing systemic racism
- **THE SOLUTION**
    - Our commitment to closing this gap should align with the calls to action by the Truth and Reconciliation Commission, TRC):
    - ① **REPRESENTATION:**
        - Increasing the number of Indigenous professionals in the health-care field.
            - e.g. designated seats in each entering medical school class
        - Approximately 5% of the population identifies as Indigenous, yet <1% of physicians are from Indigenous backgrounds
    - ② **EDUCATION:**
        - Requirement of all medical and nursing to learn about Indigenous health issues, including the history of residential schools, Indigenous rights, treaties, teachings, and practices.
        - Health-care professionals must learn and understand Indigenous health issues, and gain an appreciation for Indigenous culture, teachings, practices
    - ③ **RESOURCE ALLOCATION:**
        - More appropriate funding allocation for services from the government.
    - ④ **RECOGNITION:**
        - Recognition of the Indigenous **right to self-determination**
        - Prior to European contact, had fully functional systems of health knowledge that were practiced
        - Thus, we must work with communities to **transfer varying levels of healthcare responsibilities** (e.g. provision of on-reserve health-care services) back to the Indigenous communities and councils, as **increased ownership** and **control** of health services are an important step towards closing the gaps that exist in health outcomes between indigenous and non-indigenous people (🔗)

Your answer:

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🩺 ***Equity, Diversity, Inclusion (EDI)***

How would you promote equity, diversity, inclusion (EDI) on your team?

Chris' answer:

- Introduction:

- Equity, diversity, and inclusivity (EDI) is a **commitment** to **representation** of characteristics such as culture, race, gender, sexuality, ethnicity, and SES across various levels of training and workplace
    - Includes our **healthcare workers and physician pool**, but also our **patient population**
- It is important because a **lack of representation** in medicine creates a **gap** in **cultural dexterity** when serving patients.
    - Physicians are required to treat a diverse array of patients, and thus should themselves be a diverse cohort.

- Stats/facts:

- INDIGENOUS:
    - 5% of Canada's population is Indigenous, but <1% of physicians are
- BLACK:
    - 4% of Canada's population is Black, but 2% of physicians are
        - Canada wide (🔗)
        - Ontario specific (🔗)
- SES:
    - ⅔ of medical students come from households with an income of >$100,000/year, a proportion almost eight times that of the general Canadian population (🔗)

- Strategies:

- ① **Advocacy**
    - e.g. mentorship programs for undergraduate or medical students from marginalized communities.
- ② **Policy**
    - Equitable and inclusive admissions processes
        - e.g. Indigenous and black streams
    - As a resident, should **advocate** for EDI in the residency admissions process
- ③ **Education**
    - Provide **culturally-safe** and relevant **educational content** during training for medical students, so we are all aligned in our **actions** and our **thinking**.
    - Important to understand the historical roots of inequities as well as the institutional/embedded policies that continue to propagate them.

Your answer:

- _____

How would you promote equity, diversity, inclusion (EDI) in your patient population?

Chris' answer:

- ① **Education**
  - …of myself and coworkers in my practice, so that we can continually reflect and learn more about the:
    - **historical roots of inequities**
    - **institutional/embedded policies** that continue to propagate them.
    - **cultural practices, values, and differences** between us and our patients
  - Such that we can deliver inclusive and sensitive care
- ② **Health advocacy**
  - Using our position to advocate for EDI on a community level
    - e.g. Writing letter to local MP about access to safe drinking water for Indigenous communities
    - e.g. Participating in city-council meetings to advocate for improved social conditions of poverty (e.g. housing, income)
    - e.g. Community-level events such as awareness campaigns about health disparities in certain populations, or charity fundraiser to raise funds for education in underserved communities
  - Our patient populations are part of that community, and so to advocate on a community-level is to advocate indirectly for EDI in our patients too.

Your answer:

- _____

🩺 ***COVID***

Why do you think people are hesitant to get the Covid vaccine?

Chris' answer:

- ① **Misinformation**
  - From:
    - Social media
    - Influencers (e.g. Joe Rogan and Spotify controversy)
    - Politicians (e.g. Donald Trump)
  - Speaks to the importance of strong education, specifically around scientific topics and critically appraising information… we as a population need a higher rate of basic health literacy
- ② **Mistrust**
  - Mistrust in healthcare and in science in general
  - Stems from a variety of mistreatment and deception in the past, e.g.
    - Mistreatment of Indigenous people
    - Tuskegee syphilis experiment (U.S.)
  - Important for us as a profession to continue to regain this trust through ethical practice and regulation

Your answer:

- _____

How has Covid exacerbated inequalities both in healthcare and in society?

Chris' answer:

- In society:
  - **Stay home**
    - During stay-at-home, we saw influential people and higher SES talking about how this was a great time to spend time with family, learn new skills, etc.
    - For the working class, this was instead a time of financial insecurity, difficulty making ends meet, inability to take time off work if sick, etc.
      - e.g. I experienced a patient who didn't want to get a COVID test because that'd shut his car repair shop down and he couldn't afford that
- In healthcare:
  - **Vaccine access**

        - e.g. globally
        - e.g. locally; vaccine clinics only available during working hours, or vaccine clinics inaccessible for people in communities that may have reduced access to transportation
    - **Baseline health level**
        - The health disparities that exist between say high SES and low SES, or non-marginalized vs marginalized, mean that the baseline health level of these groups is lower, and COVID disproportionately affected those with underlying conditions, and thus COVID-19 has unequally affected many racial and ethnic minority groups, putting them more at risk of getting sick and dying from COVID-19
    - **Barriers to healthcare**
        - People from some racial or marginalized backgrounds already face multiple barriers to accessing healthcare
        - Lack of transportation, child care, ability to take time off of work, discrimination
        - COVID has of course made many of these aspects harder. e.g. child care challenging with schools closed, increased rates of discrimination, etc.

Your answer:

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🩺 ***Opioid Crisis***

History

- Pharmaceutical companies have a vested financial interest in the production of and prescription of opioid painkillers, with little interest for regulation and control of their highly addictive product.
- These companies invested a great deal of money into the lobbying of doctors and law makers, and also into misleading marketing, presenting their pain medications as safer and more effective than the alternatives, when in reality they are addictive and dangerous.
- This led to doctors over-prescribed opioid pain medications to address the population's chronic pain problem
- Patients then either remain on large doses of prescribed opioids, or if they lose their access they may switch to non-prescribed alternatives (e.g. heroin, fentanyl, fentanyl-laced narcotics), which may have been smuggled in from other countries, or may have been from patients rediverting prescriptions.
- "There's a lot of money to be made preying on people who need help"
- This epidemic has led to **widespread death** alongside a **massive drain of societal resources** (e.g. health care systems to provide addiction treatment, police to manage drug-related crime, paramedics to respond to overdosing, etc.)

How is this different from other drug epidemics?

- **Susceptible population**
    - The opioid epidemic is affecting **young, white people in the suburbs**, compared to say the crack cocaine epidemic of the late 80s and 90s in the U.S. that affected inner city black communities.
        - As a result, the opioid epidemic gets a lot more attention, media coverage, and actual proposed solutions.
- **Pharmaceutical company involvement**
    - Medical companies as the 'supplier' can throw millions of dollars to lobbyists, slowing the progress of regulation of prescription opioids.
- **Fentanyl and its analogs have contaminated nearly all narcotics.**
    - Due to their potency, death from overdose is happening much more commonly than any other drug wave in modern history (e.g. crack epidemic, meth epidemic) and now kills more than the HIV/AIDS epidemic at its peak, and more people than gun homicides and car crashes combined.
    - Illicit street drugs **lack quality control** and as a result the **dose is unpredictable.**

What do you propose as some solutions to the opioid crisis?

Chris' answer:

- (1) **OVERDOSE PREVENTION SITES**
  - Staff or volunteers onsite are trained and ready to administer rescue medications (e.g. naloxone/Narcan) if overdose occurs
  - Clean needles or needle-exchange programs to reduce transmission of blood-borne pathogens and infection (ultimately, reduces the morbidities associated with illicit drug use to improve general health of addicts)
  - Family physicians should use their position of influence and respect in society to advocate for overdose prevention sites
- (2) **DILIGENT PRESCRIBING**
  - Family physicians commonly inherent patients on large amounts of prescription narcotics for chronic non-cancer pain (CNCP), which is an *inappropriate use of opioids*
  - Gradually escalating doses of opioids leads to increasing **dependence** and **side-effects**, but…
    - *without improvement in function*
    - *non-superior pain endpoints* compared to non-opioid therapy
    - *higher mortality ratio* - opioid users have a 15x higher standard mortality ratio than non-opioid users
  - So firstly, we need to be avoiding inappropriate prescribing of opioids for CNCP
  - However, when physicians *do* prescribe opioids appropriately (e.g. short term for acute pain), they need to show great diligence and right off the bat create a plan to manage pain once the prescription runs out
- (3) **MEDICATION-ASSISTED TREATMENT**
  - Family physicians can promote harm-reduction through **suboxone therapy** or connecting patients with **methadone clinics**, which are safer alternatives that can be used in conjunction with psychosocial treatment

Your answer:

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🩺 ***Medical-Assistance In Dying (MAID)***

Background:

- MAID was legalized in June 2016 following overwhelming public support for “death with dignity”.
- Canadian legislation:
    - No minors (<18 y/o)
    - Must be eligible for Canadian health care services already (to prevent ‘suicide tourism’)
    - No relief for mental illness, long-term disabilities, or curable conditions (only irremediable and grievous conditions, whereby death is reasonably foreseeable and the patient is in an advanced state of irreversible decline)
    - No permission of MAID. through advance/personal directives (e.g. cannot consent to medically-assisted dying for yourself in the future)
    - 2 independent witnesses and 2 independent medical opinions who bear no legal or financial interest in the outcomes of the patient must confirm that the decision was made willingly, free of coercion.
    - Consent must be repeatedly expressed, not implied.
    - 10-day wait period after signing their written request, due to the “irrevocable nature of ending a life”

Chris’ answer:

- ‘For’:
    - **1) Values <u>Autonomy</u>** – right of patients to make autonomy choices about the time and manner of their own death, and to relieve their suffering.
        - “If I cannot give consent to my own death, whose body is this? Who owns my life?” – Sue Rodrigeuz
    - **2) Values <u>Non-discrimination</u>**
        - If practices such as *palliative sedation* or *withdrawal of life-sustaining* treatment are available to some patients, why shouldn’t the ethically-indistinguishable practice of MAID be available to those who don’t have the means, such as someone who is terminally ill
- ‘Against’:
    - **1) <u>Diminishes the value of life</u> / <u>Slippery slope argument</u>**
        - Rebuttal: Fears of what *could* happen (i.e. the slippery slope argument) shouldn’t trump the violation of ethical principles of autonomy and non-discrimination
    - **2) <u>Religious objections</u>** that oppose practices destructive to life or the medical progression to ‘playing a higher power’.
        - Rebuttal: Religion, as it pertains to healthcare, should be a personal consideration. If somebody wishes to forgo a medical intervention because of their religious beliefs then that is a completely acceptable choice for them to

make, but others who don't share that religious belief should have the freedom to make that decision for themself.

FOR REFERENCE:
Chris is in favour of MAID when implemented safely, but it is important to be able to 'argue' or debate both sides of the argument for your interview

Your answer:

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🩺 ***Abortion Rights***

Canadian abortion laws:

- Nation-wide, women can book abortions directly (i.e. no need for a referral from a doctor)
- Within the past few years, legislation in Ontario makes it illegal to protest 50-150m outside and near abortion clinics, and within 150m of practitioner homes.
    - Canada generally values **peaceful living** over **freedom of speech**.
    - Your freedom ends where someone else's freedom starts.
        - "The right to swing your first ends where my nose begins"
- A law in Texas was recently enacted that means that if you perform or assist in an abortion after 6-weeks, you can be sued for $10,000 or more.

Chris' answer:

- Pro-choice:
    - **Autonomy**
        - A woman's body is her right. As an informed and capable adult, she has the right to choose.
        - To ban abortion is to value the rights of non-sentient fetus over a sentient adults.
    - **Non-discrimination**
        - Canadian law protects discrimination based on race, religion, sex, gender, sexual orientation
        - To ban abortions is to strip women of a healthcare right. The lack of male-equivilency to pregnancy makes a comparison hard, but imagine banning female tubal ligation but not male vasectomies - or even better, how would the male anti-abortion law makers in Texas feel if vasectomies were banned.
- Pro-life:
    - **Diminishes the value of life / Slippery slope argument**
        - Rebuttal: Fears of what *could* happen (i.e. the slippery slope argument) shouldn't trump the violation of ethical principles of autonomy and non-discrimination
    - **Religious** ("life begins at conception" / "playing god")
        - Rebuttal: Religion, as it pertains to healthcare, should be a personal consideration. If somebody wishes to forgo a medical intervention because of their religious beliefs then that is a completely acceptable choice for them to make, but others who don't share that religious belief should have the freedom to make that decision for themself.

- Interesting study:
    - A study in JAMA Pediatrics showed that, in a high school-based sexual education intervention that focused on prevention of STDs and unintended

pregnancies, $2.65 in total medical and social costs were saved for every $1.00 invested into the program

FOR REFERENCE:
Chris is pro-choice, but it is important to be able to ‘argue’ or debate both sides of the argument for your interview

Your answer:

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