

# Science AMA Series: I'm Dr. Kate Greenberg of the University of Rochester Medical Center, and I treat transgender youth and young adults who are looking for medical transition. Ask me anything!

Dr<sub>Kate</sub>Greenberg<sup>1</sup>andr/ScienceAMAs<sup>1</sup>

<sup>1</sup>Affiliation not available

April 17, 2023

## Abstract

Hi Reddit! I'm Dr. Kate Greenberg, assistant professor of adolescent medicine at the University of Rochester Medical Center. Here, I serve as director of the Gender Health Services clinic, which provides services and support for families, youth, and young adults who identify as transgender or gender non-conforming. Transgender men and women have existed throughout human history, but recently, Caitlyn Jenner, Laverne Cox, and others have raised societal awareness of transgender people. Growing up in a world where outward appearance and identity are so closely intertwined can be difficult, and health professionals are working to support transgender people as they seek to align their physical selves with their sense of self. At our clinic, we offer cross-gender hormone therapy, pubertal blockade, and social work services. We also coordinate closely with urologists, endocrinologists, voice therapists, surgeons, and mental health professionals. Hey all! I'm here and answering questions. First, let me say that I'm pretty impressed with what I've read so far on this AMA - folks are asking really thoughtful questions and where there are challenges/corrections to be made, doing so in a respectful and evidence-based fashion. Thanks for being here and for being thoughtful when asking questions. One of my mantras in attempting to discuss trans\* medicine is to encourage questions, no matter how basic or unaware, as long as they're respectful. I will use the phrase trans/trans folks/trans\* people throughout the discussion as shorthand for much more complex phenomena around people's sense of self, their bodies, and their identities. I'd also like to say that I will provide citations and evidence where I can, but will also admit where I'm not aware of much evidence or where studies are ongoing. This is a neglected area of healthcare, and as I tell parents and patients in my clinic, there's a lot more that we don't know and still need to figure out. I'm a physician and hormone prescriber, not a psychologist or mental health provider, so I'll also acknowledge where my expertise ends. Edit: Thanks to everyone for the questions and responses. I will try to come back this evening to answer more questions, and will certainly follow the comments that come in. Hope this was helpful. Moderator Warning: We know that many people have strong feelings about this issue, if you are unable to comment in a civil manner, it would be best to not comment. Our policies on hate-speech will be rigorously enforced, and violators will find their accounts banned without warning. /r/science is about discussing the science of issues, not your personal biases or opinions.

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DR\_KATE\_GREENBERG [R/SCIENCE](#)

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Hey all! I'm here and answering questions.

First, let me say that I'm pretty impressed with what I've read so far on this AMA - folks are asking really thoughtful questions and where there are challenges/corrections to be made, doing so in a respectful and evidence-based fashion. Thanks for being here and for being thoughtful when asking questions. One of my mantras in attempting to discuss trans\* medicine is to encourage questions, no matter how basic or unaware, as long as they're respectful.

I will use the phrase trans/*trans* folks/trans\* people throughout the discussion as shorthand for much more complex phenomena around people's sense of self, their bodies, and their identities.

**I'D ALSO LIKE TO SAY THAT I WILL PROVIDE CITATIONS AND EVIDENCE WHERE I CAN, BUT WILL ALSO ADMIT WHERE I'M NOT AWARE OF MUCH EVIDENCE OR WHERE STUDIES ARE ONGOING. THIS IS A NEGLECTED AREA OF HEALTHCARE, AND AS I TELL PARENTS AND PATIENTS IN MY CLINIC, THERE'S A LOT MORE THAT WE DON'T KNOW AND STILL NEED TO FIGURE OUT. I'M A PHYSICIAN AND HORMONE PRESCRIBER, NOT A PSYCHOLOGIST OR MENTAL HEALTH PROVIDER, SO I'LL ALSO ACKNOWLEDGE WHERE MY EXPERTISE ENDS.**

Edit: Thanks to everyone for the questions and responses. I will try to come back this evening to answer more questions, and will certainly follow the comments that come in. Hope this was helpful.

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CORRESPONDENCE:

Thanks for doing this AMA! Throughout this thread and recent conversations elsewhere on this sub, the issue of labels has been a big point of confusion. I'm hoping you can help us better understand this.

Labeling a condition as an illness (mental or otherwise) has both positive and negative impacts. In our

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society, we need a diagnosis to get medical insurance coverage. A diagnosis provides a way to explain to family and friends what is going on. It legitimizes what you're going through because the act of labeling it medically moves it from "in your head" to scientifically validated. A diagnosis is "proof" in our society that what you're going through is "real." (In contrast, people who are transgender in other societies may have different ways of being socially recognized such as a third gender identification, which is often linked to religious, legal, and historical justifications).

Yet, when individuals move to being a patient or ill-person there can also be many negative aspects. A diagnosis suggests something is wrong and needs to be fixed. It takes a host of experiences and narrowly restricts which ones are part of the "condition" along with sets of expectations. Patients have moral obligations to treat the condition in society. And, especially when it is considered a mental illness, there are stigmas associated with that label. It is unfortunate, but calling someone mentally ill can be lobbied as an insult or a way of dehumanizing and devaluing a person. (*I'm building these brief descriptions largely upon the work of medical anthropologists Kleinman and the Goods.*)

I think this leads us to the contentious issue of how to discuss transgender people in a scientific but socially appropriate way. Transgender people, advocates, medical professionals, laypeople, and transphobic people all seem to come to the issue of labeling with different perspectives and can mobilize "illness" or "mental illness" for positive, neutral, and negative means.

So as an expert on the subject I'm hoping you can give some advice on the following:

- What is the medically and scientifically appropriate way to discuss transgender people regarding their medical needs?
- From a social perspective, what do your patients prefer and how do various labels impact their health and wellbeing?
- What do you think is the best way to discuss it in media such as the news? If different from medical/scientific classifications, why and how do we shift between terms productively?

[firedrops](#)

What is the medically and scientifically appropriate way to discuss transgender people regarding their medical needs?

I think that the DSM-5 (The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition,) released in 2013, made a much-needed change to the way in which medical and mental health providers think about folks whose sense of self is different from their anatomy or their sex assigned at birth. Replacing older diagnoses is the newer "Gender Dysphoria," which refers not to the phenomenon of being trans\* (having a sense of self that does not align with assigned sex) but rather the distress that can be associated with that tension between body and soul.

(<http://www.dsm5.org/documents/gender%20dysphoria%20fact%20sheet.pdf>) This is a critical distinction, in that the dysphoria can be treated and go away, through efforts to help individuals align their physical self with their sense of self, and the diagnosis of "gender dysphoria" can go away as well. The older version "gender identity disorder," could never be treated or cured, since it referred to the fact of being trans\* rather than the distress that some individuals feel.

From a social perspective, what do your patients prefer and how do various labels impact their health and wellbeing?

I'm very careful not to speak for my patients or for trans\* people as a group, since they are individuals and certainly not a homogenous group. What I can tell you is that another important shift in language is to begin by thinking of, and referring to people, as they present themselves. Thus, Laverne Cox and Caitlyn Jenner are transwomen, and Chaz Bono a transman; previously used language was much less respectful, and required knowledge of people's treatment, body parts, etc. Starting with asking people

how they prefer to be addressed is always a good place to start.

What do you think is the best way to discuss it in media such as the news? If different from medical/scientific classifications, why and how do we shift between terms productively?

I'm not clear that I can answer this question differently from the bullet point above; starting by respecting people's sense of self and preferred terminology is where I feel like news media should start as well.

How often does de-transition happen?

How effective is the treatment at improving the well-being of patients? How is this determined?

Do you treat people who identify as non-binary? How common is this, and how does treatment and transition compare for MTF and FTM individuals? Have any studies been done on non-binary people?

At what age can someone get puberty blockers?

What are the potential risks with puberty blockers, and how reversible are the effects?

At what age can patients move on to HRT?

At what age can patients get surgery?

How likely is it that someone at the minimum age for starting puberty blockers will decide not to continue with transition? What are the effects of the blockers in this case when they stop using them?

[Saytahi](#)

How often does de-transition happen?

This is an area where we don't have as much data as I'd like, but the incidence of what we call "post-treatment regret" is considered to be fairly low. Not non-existent, although I feel like the Internet has amplified the voice of those who would like to claim otherwise. The World Professional Association for Transgender Health (WPATH) Standards of Care (SOC) outline the international standard of care for psychological, medical, and surgical treatment of transgender individuals. They strongly recommend collaboration between mental health and physical health providers, specifically to ensure that this is a successful process with minimized post-treatment regret.

That being said, many in the trans\* community see the mental health provider as an unnecessary "gatekeeper" and think that adults who can understand the risks and benefits of treatment should be allowed to make their own decisions without mental health assessment. This is called the "informed consent" model of care, and is seen by many as being more patient friendly. If there is post-treatment regret, it's a decision that the individual has been able to make on their own.

How effective is the treatment at improving the well-being of patients? How is this determined?

This is one of the areas where I wish we had more and better designed literature. A very good, recently published study from the Netherlands showed that individuals who had the entire "Dutch protocol" for treatment starting at puberty did as well or better than their age-matched, non-trans\* peers. This is in huge contrast to what we know about general mental health in the trans\* community, where very high numbers (in some studies >40%) have been suicidal at some point in their lives. (references: <http://www.ncbi.nlm.nih.gov/pubmed/25201798>; <http://www.transequality.org/issues/resources/national-transgender-discrimination-survey-executive-summary>)

Do you treat people who identify as non-binary? How common is this, and how does treatment and transition compare for MTF and FTM individuals? Have any studies been done on non-binary people?

Yes, I see non-binary folks, and I think there's even less research about non-binary identified people than there is about transmen and transwomen. As with the rest of people under the trans\* umbrella, the term "non-binary" represents a very heterogenous group who have a variety of processes of transition and/or treatment. My job is to let all patients know what their options are (social, hormonal, surgical, vocal therapy etc) and they choose what will help resolve their body/soul tension.

At what age can someone get puberty blockers?

When puberty starts, typically anywhere from age 9 to 13.

What are the potential risks with puberty blockers, and how reversible are the effects?

Puberty blockers have been being used for decades to treat other pediatric conditions, so we know that they're safe and 100% reversible. There is a small decrease in bone mineral density for age that goes away after hormonal treatment or biological puberty, and potential effects on height if continued through cross-gender hormones, with transwomen being relatively shorter than they would be after male puberty and a negligible effect for transmen.

At what age can patients move on to HRT?

This is an area of hot debate. The current SOC is to start at age 16, because that's the age of majority in the Netherlands where this protocol was developed. But blocking puberty from 9 until age 16 is a LONG time, and very inappropriate when it comes to having NO development through high school! I'm hoping that the upcoming, new SOC will be more flexible and allow individual patients, families, and providers to make that decision.

At what age can patients get surgery?

Typically age 18, but like hormones (see prior answer) is moving younger. Genital surgeries typically not until 18 or so.

How likely is it that someone at the minimum age for starting puberty blockers will decide not to continue with transition? What are the effects of the blockers in this case when they stop using them?

See previous answer about reversible effects of blockers; the data that we have on what percentage of kids will continue with transition are really poor, so I don't have a great answer for that. I can say that the vast majority of kids who are gender dysphoric enough to come to medical attention at or before puberty, in my practice, are persisting into adolescence and wanting to go through the puberty of their affirmed/identified gender.

Hello doctor! I'm a medical student in my clinical rotations now. I haven't seen any transgender patients in our clinics so I apologize in advance if my question seems ignorant.

If a transgender individual undergoes a medical transition, suppose a male to female, do they go to the gynecologist for their future care, is that not possible given the scope of a gynecologist's practice? What would be their approach to seeking care when it comes to sensitive issues, and how could I, as a future primary care physician, approach the encounter if they have a sensitive patient complaint?

[FatherSpacetime](#)

Hey! Thanks for your interest, and thanks for your commitment to trans\* patients in primary care.

Trans\* patients can need trans-specific care, like hormones or surgery, but also need primary care based on their anatomy. When speaking with patients, I often ask for an "organ inventory" which I phrase as "I need to know what surgeries, if any, you've had so that I know what body parts you have. My job is to make sure those parts are being taken care of as well."

So, a transman who hasn't had a hysterectomy/oophorectomy will need cancer screenings for those body parts as recommended by standards of care for cis-women; a trans-woman who has had vaginoplasty will not need PAP smears, but will need clinical breast exams and breast cancer screenings like a cis-woman. Trans women will always have prostates, regardless of surgery, and so will need screening there. And trans men who've had chest reconstruction still needs breast exams, and with a significant family history of breast cancer may also need additional imaging for cancer screening.

A helpful resource is also the UCSF Transgender Center of Excellence - they have a primary care protocol which is very helpful.

Why is Transgenderism not a mental illness when Gender Dysphoria is in the DSM? Is this a confusion in terms? Is Gender Dysphoria necessary for for Transgenderism? Is being trans and having Gender Dysphoria two different states? Break it down for me here. This is really confusing.

Edit : There sure are a lot of people who aren't Dr. Kate Greenberg pitching in their opinion on my question.

Edit 2: She answered it, and it was a better answer than all of yours ;) Thank you Dr. Kate.

#### [NoBreaksTrumpTrain](#)

So, there's an interesting and important distinction there. Being transgender, or having a sense of self that doesn't align with your assigned sex based on anatomy/chromosomes/etc is a life-long state, and not one that is inherently pathologic.

Gender Dysphoria, the most recent DSM diagnosis (DSM 5 [-http://www.dsm5.org/documents/gender%20dysphoria%20fact%20sheet.pdf](http://www.dsm5.org/documents/gender%20dysphoria%20fact%20sheet.pdf)) refers only to the distress that *some* but not by any means all people MIGHT have stemming from that body/soul disconnect. Gender Dysphoria refers to low mood or distress, but is treated with physical changes like hormones, or surgery, or whatever an individual requires to resolve that disconnect and therefore resolve the distress. Gender Dysphoria can go away once you have appropriate medical treatment, and then being transgender is a happy, healthy, life-long state.

An unfortunate caveat to this is that gender dysphoria does not always get better with treatment, and this is largely due to discrimination, societal oppression, transphobia etc that can go along with the lived experience of trans\* people.

Do you think that there is a greater percentage of transgender people today or just that more are coming out, due to (somewhat) reduced stigma?

#### [Sororita](#)

This is a *great* and fascinating question to which we don't know the answer.

I suspect a large part of the increase is from greater awareness; nearly all my patients tell me "I knew something about me was different and then I knew that trans\* was a thing," usually from the internet or other mass media. Therefore people who might previously have thought they were alone in the world know that this is a "thing" that people can do and have treatment for . . . So, I think the Internet and visibility count for a lot.

However, there may also be an actual increase in the number of people who are trans\* and there are a few studies ongoing to try and see if there are environmental or other factors that could influence brain development. We actually know very little (but more each year) about the brain structures responsible

for gender identity, although in trans\* folks some of these structures appear to look much more like their identified gender than their biological sex. Many more questions than answers at this point in the research.

What percentage of your patients are or have been on antidepressants?

[dogwood81](#)

I don't have that answer specifically for my patients, but do know that trans\* youth and young adults suffer from a disproportionate burden of anxiety and depression.

<https://www.healthychildren.org/English/ages-stages/gradeschool/Pages/Gender-Non-Conforming-Transgender-Children.aspx>

We *always* address mood and mental health in my patients, particularly because the burden of suicidality is very high among trans\* people.

On the bright side, we know that supportive parents and families can and do protect kids from some of these negative sequelae. One of my priorities with patients and families is to figure out the sources of tension and do everything we can to help minimize them.

There was a TV documentary 8-10 years ago where another doctor who treats trans youth said that when a teenaged trans male who's on blockers to suppress puberty decides to take testosterone, he will stop growing in height. Is there truth to this? And if so, then why do cisgender males not stop growing in the same manner? Is it a difference in the level of T being produced?

I'm a moderator of [/r/ftm](#) and we get asked this question.

Also, is there any cheaper alternative to Lupron in the works?

[mightybite](#)

I'm not aware of this documentary or of a negative effect of blockers per se on height. Both testosterone and estrogen act at the long bone growth plates at puberty, with testosterone having a more pronounced effect, hence why men are, on average, taller than women. Trans kids on blockers who are treated with estrogen are likely to be shorter than they would be if they had gone through male puberty, and we think that the effect on height for trans kids treated with blockers and then T is likely to be negligible. There's not nearly enough research to answer this question adequately, although it's underway (<https://www.ucsf.edu/news/2015/08/131301/first-us-study-transgender-youth-funded-nih>)

And, no, I'm not aware of any cheaper Lupron alternative. I know the cost is prohibitive for many people, although insurance coverage is getting better and there's a patient assistance program through Abvie through which we've been able to get some patients covered.

How expensive is the process of transitioning? Is any of it covered by insurance?

I have a child who is non-binary but is interested in the process and would like to know what the psychological ramifications of the procedure are.

Edit: Said child would like me to clarify that said child is not a child but a young adult at 15.

[katoninetales](#)

Depending on where you live in the US, insurance coverage varies. I practice in New York, where

Governor Cuomo recently determined that state public health insurance programs would fully cover trans\* treatment, which should trickle over to our private insurers as well. Just in the last 5 years alone, I've seen a marked improvement in the rates of coverage for my visits, hormone therapy, and pubertal blockade. Surgical coverage is improving as well, but is still "out of network" and so only covered at 80%, typically, which does not cover the cost of transportation, recovery stays near the surgeon, etc.

Re: your second question, I answered a question above about the psychological ramifications of *not* treating. For children I would recommend connecting with a treatment center near you to get some solid psychological support.

Hi Dr. Greenberg, thank you for doing this.

I'm a primary care physician - if I had a transgender patient come into my clinic contemplating gender reassignment surgery, what sort of workup would you want from our end prior to a referral?

[dagayute](#)

Thank you for your question! The WPATH Standards of Care have good guidance for this; many if not most surgeons use their SOC, and require 2 mental health letters prior to genital surgeries.

For general trans\* primary care guidance, I refer people to the UCSF Transgender Center of Excellence Primary Care Guidelines - INCREDIBLY helpful reference for caring for trans patients.

Hello Dr. Greenberg/anyone who happens to see this!

I am a trans girl who is 16 right now. I have two therapists I go to, although neither specializes in gender issues. I have an appointment with a clinic specialized in these, but in October. :(

My question is: as a minor in NC, what options do I have? I read about puberty blockers and hrt but I don't know who to actually go to. Being young, every day not transitioning hurts as I see my body and voice changing. For somewhat personal reasons I would disclose in pm, I really, *really* want to start hormones ASAP, this summer if at all possible. (edit: disclosed below)

I know this is the path I have to take and I could spend hours telling you why but I don't know if that would help. What would help is knowing whether my normal doctor could prescribe hormones or whether planned parenthood does informed consent with minors or why tf the clinic I want to go to has months of waiting for what I assume is "prescribe base levels, check blood once a month, adjust levels."

There is very little information as what to do as a minor, and I feel like I'm stumbling around in the dark. My current situation is that I'm going to a boarding school where I'm gonna be out next year and I really want to avoid "boy in a dress" syndrome. I would appreciate any advice you can give even if it's just to hang tight and that things will get better.

Thank you for taking time out of your schedule to do this AMA.

[lemons-and-limes](#)

You're welcome, and thank you for taking time to ask the question!

Minors need parental consent in New York, and I'd imagine that's the case everywhere. This is a NC resource that would have better information: <http://www.charlotteobserver.com/living/health-family/article36021510.html>

"Hang tight and things will get better" is good advice, but I'm sure doesn't feel like enough. There's a

good, supportive online community that many of my youth participate in, from YouTube transition videos to the Trevor Project (<http://www.thetrevorproject.org/>) which has a site called "TrevorSpace" for social networking for LGBT youth. It *will* get better and I hope you get the support you need.

Do you worry that some children are going through a phase and may regret their decision to surgically transition later in life? At what point can the physiological changes not be reversed?

[briefaspossible](#)

The youngest patients we see for medical treatment are those who are approaching or have just started puberty; they are offered pubertal suppression (see my other answers for more discussion of this) which are fully reversible and very safe. Between suppressing biological puberty being sure that this is not a "phase" and the kid is ready to move forward with their affirmed puberty, through hormone treatment, there's a lot of work being done with the kid, family, etc to be sure that this is the right choice.

The only irreversible physical interventions are surgical, which are typically for those over the age of 18.

Firstly, thank you for your time.

At our clinic, we offer cross-gender hormone therapy, pubertal blockade, and...

I have two questions:

1. Is there a minimum age requirement for either of the above?
2. What are the ethical implications if the parent(s) appears to be guiding their children's decision making regarding gender determination?

[RebornShill](#)

Pubertal blockade starts at puberty; typically ages 9-13. Hormones start sometime thereafter; the standard of care is age 16, since that's the age of majority in the Netherlands, where the protocol was developed. However, *not* being pubertal at all until age 16 is a VERY late bloomer, and some centers are moving towards cross-gender hormones starting a few years after pubertal blockade, closer to age 13-14, so that kids don't suffer from having no puberty at all and looking very different from their peers. And any start of hormones under the age of 18 is with parental consent.

I understand why parents pressuring kids is a concern, but have to say that I see very little of that. All my patients under the age of 18 work with mental health providers for patient and family, to try and ensure that if we move forward with hormones it's the right decision for that individual.

Do any of these young people report feeling as though they have mental health problems?

I imagine it can be incredibly confusing for them.

EDIT: And how does one assure that they are of 'sound mind' when they make the decision to alter their bodies permanently? I mean, I wouldn't necessarily want my 16 year old to get a tattoo.

[Basketball-American](#)

Wow, people on here are really smart and aware of the literature. (see reply from [/u/baldutere](#))

Yes, high burden of anxiety/depression and suicidality. Helped by supportive parents, and families.  
(<http://familyproject.sfsu.edu/>)

I rely on a very well trained child and adolescent psychologist to help my patients in figuring stuff out - even when being trans\* is not confusing, there can be a whole host of other confusing emotions, family and school reactions, etc.

Do you also treat people with gender dysphoria who choose not to transition? What are the longtime implications of living with gender dysphoria? Do these people just learn to find happiness in other things? Asking for....a friend.

[4fsake](#)

Good question, but I'm not able to answer it very well!

I largely see patients who want medical transition - that's why they're coming to see me - and what studies there are are of those in treatment. The closest we have to answering that might be the National Transgender Discrimination Survey (<http://www.transequality.org/issues/resources/national-transgender-discrimination-survey-executive-summary>) which revealed way above average negative mental health outcomes for trans\* people as a whole, and I suspect most of that was due to lack of adequate transition-related medical and mental health care, although that's speculation on my part.

What are your views on the use of progesterone for trans women?

Seems like there is no real hard data on its effectiveness/usefulness.

[soontobekate](#)

Most of what we hear about progesterone is anecdotal, and it's not considered to be a standard part of care. I have yet to see studies documenting effect, and find myself agreeing with the idea that it likely has more harm than proven benefit. I await the day when we have a randomized controlled trial to try and answer this question!

As you may have experienced in your practice, many parents of transgender children refuse to believe that they are actually transgender or need medical treatment (puberty blockers or hormones) for their lack of brain-body alignment. Some of them even come from neglectful homes where none of their needs are taken care of. Is there anything you or other professionals are doing to be able to help these kids? Are there options available for minors to get treatment if their parents do not agree? I know it must be legally a tough position to be in, but since I fell into that category myself one time, and see this situation so often on transgender support forums, I would like to know how this situation is being handled (if it is taken into consideration at all). Thank you.

[sgzqhqr](#)

I'm sorry to hear that you went through this; in my practice, I can only see patients under the age of 18 *with* their parents for hormone prescribing, so I suspect that there are many, many kids out there whose parents aren't bringing them in to see me. It is a tough place to be, and I'm actively thinking about ways to be more helpful.

Hey, thanks for doing this!

As a trans guy my experience of going on testosterone really changed every part of my life. One of the unexpected ways this happened was losing the ability to cry. For years it was just totally impossible. Now, five years later, I can cry on occasion. I've been so curious why this might be, I know this is true for a lot of FTMs. Any thoughts?

[intra\\_venus](#)

I hear this very often, as I do the reverse for transwomen on estrogen "Where I would have gotten really mad before, now I find myself crying." No data to explain this, but I explain it to my patients as the wonderful world of hormones affecting your brain. Hoping that my neuroendocrinology colleague will have an answer to this some day.

To paraphrase Norm Spack, who's one of the US godfathers of trans\* pediatric medicine, "Studying transgender people teaches us about the basis of all gender."

How common is it for someone to "change their mind" about things? And at what stages of the transition?

What is the "success rate" for helping people cope with the sex they're born with and choose to stay that gender ?

Also, just wanted to say, im also an employee at the UofR Medical Center and it's awesome to see stuff like this. A platform where people from around the world talk and discuss and a colleague is heading a huge part of it :)

[RainbowTuba](#)

I've answered a few questions above about what we call "post-treatment regret" and will summarize by saying that the rates are fairly low.

"Helping people stay the sex they're born with" is referred to as conversion or reparative therapy, and is pretty universally regarded as more harmful than helpful, and is discredited by the APA and other therapy groups.

Glad to hear you're here at URMC, thank you for reaching out!

Hi, thanks for taking the time to do this AMA. It's a very touchy topic currently.

As a non-transgender **cisgender** individual, I often have trouble understanding the proper, respectful, terminology to use. I've heard a few different terms, but don't have a working understanding.

Is the general practice to use which ever pronouns someone is presenting as?

What exactly is the difference between someone's gender identity and their sex?

Edit: Updated with proper terminology.

[PapaNachos](#)

I answered this above in one of the top few posts, but will summarize by saying that respecting how people present and asking what terminology they prefer is a good place to start. Use the name and pronouns that they use for themselves, and you'll generally be OK.

Gender identity vs biological sex is a good question, and one that I find myself talking to patient families about a lot. A good breakdown is here:<http://www.transstudent.org/gender?gclid=CJjhwaO2->

[MwCFYsehkodeH8Bcg](#)

The idea is that gender comes from your brain or sense of self, what I sometimes refer to as the "soul" of a person and who they are. Biological sex is determined by your anatomy and chromosomes, and for most people (those of us who are cis-gendered) aligns with our sense of self. However, both are on a continuum (referred to as non-binary), so that people can have gender identities as well as biological sexes that are somewhere between the male and female, or XX and XY.

And thank you for asking a question that can be tricky or touchy. One of my mantras in education is to make people feel comfortable asking anything, as long as they're respectful and genuine. Alienating those who want to learn more and do better will get us nowhere!

How did you end up in this field? Are there specific schools which specialize in the treatment of transgender (does URMC have a program?) that someone could attend if they wanted to work in the field?

[nate](#)

Thanks for the question. I wound up here in my fellowship in adolescent medicine; one of our faculty members started seeing trans\* patients here and brought me on. I learned through a combination of mentorship from both adolescent medicine and endocrinology, as well as self-study from sources like the Fenway Institute, the UCSF Transgender Center of Excellence, and other, mostly online, resources.

I'm not aware of schools that "specialize" in trans treatment, but increasing numbers of major medical centers have programs where they also train health care providers. For anyone out there interested in adolescent medicine, we offer training in transgender medicine as a part of our fellowship training (for pediatricians, internal medicine, or family medicine trained doctors.)

The World Professional Association for Transgender Health (WPATH) offers a certification course as of, I believe, this year ([http://www.wpath.org/site\\_page.cfm?pk\\_association\\_webpage\\_menu=2577&pk\\_association\\_webpage=8540](http://www.wpath.org/site_page.cfm?pk_association_webpage_menu=2577&pk_association_webpage=8540)); the Mazzoni Center in Philadelphia has a Trans\* conference every June which has a professional track (<https://www.mazzonicenter.org/trans-health>)

Hi, thanks for setting the time aside for this. In your opinion, what will treatments and therapies look like in fifty years? How do you expect the landscape around transgenderism to change?

[elbanditofrito](#)

You're welcome!

I hope that we will have much, much better insurance coverage and much, much better medication delivery systems. I hope that an implant for puberal suppression will be the standard of care, and that we will have long-acting estrogen and testosterone treatments that don't require daily or weekly administration. That's just a start, and shouldn't take nearly 50 years to get there!

I'm from Canada, and top and bottom surgery is provincially funded here though wait lists are long. What insurance coverage can young Trans people access at the moment.

If I recall correctly, Trans folks are disproportionately affected by intersectionality, and young black Trans women in the US who live in poverty have few options for safe employment. My question is how

does your state reach out to those who are already poor, and lacking in services.

[starpot](#)

Yes, you remember correctly that trans\* women of color are particularly affected by intersecting stigma and at even more increased risk of a whole host of problematic psychosocial outcomes.

There are examples of outreach and help in many places, though not comprehensive by any means. Rochester is having an upcoming employment fair for trans\* individuals, and I hope that this will represent a shift in attempts to help with employment, which is a big issue. New York State also recently gained public insurance coverage for trans health care, including surgeries, although significant barriers remain. We have a long way to go.

Hi Dr. Greenburg, thank you so much for doing this AMA! I'm about to start my third year rotations and I feel like my med school didn't do an adequate job of educating me about the unique needs of caring for this patient population. Do you have any suggested resources or advice so I could do some extra prep?

[Bulldawglady](#)

I responded to another medical student above - thank you for your interest and please look at that response!

As a non-binary transgender person myself, I want to ask, what medical options should I consider or talk to my doctor about? I am AMAB, and currently take spironolactone and estradiol. I am happy with making my body more feminine, and gaining the effects of estrogen. However, I also dislike a few of the effects such as breasts, which are obviously..... very discomforting.

I have heard of a "SERM" before, but I didn't know if this was still too experimental to consider, or if I was misinformed. Is there any other medication that I should ask my doctor about?

Thanks :)

[LemonLimeSky](#)

Thanks for the question - I'm not aware of SERMs being used for transition, so can't comment on that.

I've had a few non-binary patients on androgen blockade alone, and/or a smidge of estrogen. I've had patients go on hormones for just a short period of time, to achieve what they were hoping to achieve and then be done. I don't know that any studies have been done, or that there are any protocols for non-binary treatments. So much more that we can and should know . . .

It's clear just from this thread - even though mods have been removing the worst comments - that there is still plenty of stigma towards transgender people, and of course studies have [shown](#) the extent of discrimination against trans people.

So, I'm curious whether or not you (or people you work with) advise your patients on how readily they should disclose their trans status - how open they should be about telling people - if they ask for your opinion. Do you leave it entirely to them to decide, or do you have any recommendations? I'm transgender and I'm finding it hard to weigh up not wanting to be treated differently with not wanting to feel ashamed of or have to hide a big part of my history.

I'm also curious how much this topic even comes up, or if in your experience the majority of trans youth

see it as a clear decision one way or another.

[Flower Fairy](#)

I talk a LOT about when/where/how my patients see themselves being "out," as do my mental health colleagues, and have folks who are all over the map with their preferences. Some find being seen as cis troubling, since that's not how they see themselves, and some want all mention of their biological sex expunged from their medical records. I think it varies from person to person, and also as people move into their identity as they go through transition and treatment. For some patients, embracing their identity as "female" comes first, and then with time they embrace their identity as "trans-female." So very many, deeply personal considerations.

Another thing I would say is that I encourage all my patients who are wrestling with decisions, trans, cis, or otherwise, to have a good therapist to help guide them through their decision making process. I say to patients that I think therapy is like flossing, just something that is incredibly healthy that most of us don't do enough of.

Thank you for helping to educate, and for all the medical care you and your team provide!

What recommendations do you have for medical students/other health professional students who wish to provide transgender health care as part of their practice? How can we get involved at the student level and the residency level?

[RoseHelene](#)

Advocate, advocate, advocate! Figure out if potential future training programs have trans\* research and health care, and if not, talk to people in power about how to begin providing care. Thank you for your interest!

Thank you for what you do, and thank you for the AMA. I'm a mom of a transgender kid.

[APett](#)

You're welcome!

As a transgender person, first of all thank you. My question is related to how people perceive your practice. My mom is fond of sending me articles from various organizations like the College of Pediatricians that equate trans child treatment as child abuse. How do you respond to parents of a similar mind?

[Macduffer](#)

Oy. Yes, I see that, and the ACP is a conservative group that does NOT represent the majority of pediatricians. I spend a lot of time talking to parents about many, many concerns, and quote the Family Acceptance Project as well as the American Academy of Pediatrics, which represents mainstream pediatricians and supports access for trans\* and gender non-conforming youth.

How did you end up in this field? Was it an emphasis you always wanted or did you decide along your career path that you wanted to help Transgender individuals?

Also how often do you work with middle sex individuals?

[emberkit](#)

I started out as an adolescent medicine fellow with an interest in sexual and reproductive health care, and when the opportunity for trans\* training presented itself I jumped at the chance. I'm incredibly happy it did since this is a very, very rewarding practice.

I don't currently work with many intersexed patients, but do have a few whose assigned sex at birth is in conflict with their gender identity as they get older. For many of these patients, they were going to have to have hormonal therapy at puberty regardless, but will need to have a social transition so that they can have a gender appropriate puberty. This is work that I'd like to get more into in the future!

Dr. Greenberg, my girlfriend is applying to medical schools, including Rochester, and is very passionate about helping the LGBTQ community. Are there any tips or advice you could give her on how you got to where you are today?

A private message would also be welcome as I'm sure she'd love to pick your brain about issues that I can't think of.

[sbeastley](#)

Thanks to her for her interest! I don't usually "reddit" so a PM might not help, but she can feel free to look me up on the internet and get in touch through regular, old-fashioned channels.

I happened into this serendipitously, but would recommend that she research the institutions where she may have training and ask while there what opportunities would be for a med student, resident, fellow, etc. If you're interested and ask the right questions, you can find the training!

How has funding been in this issue? Have you faced any major issues for getting it, seeing how this can present to be a controversial topic?

[havi121](#)

The traditional funding source for all major medical research has been the National Institutes of Health, who just funded their *first* study of transgender youth (<https://www.ucsf.edu/news/2015/08/131301/first-us-study-transgender-youth-funded-nih>)

So, yes, funding is an issue. My focus has largely been on clinical care, although I have an unfunded study underway currently.

What evidence have you found to support the claim that physical transitioning produces a net positive effect on mental health?

[Taevinrude](#)

<http://www.ncbi.nlm.nih.gov/pubmed/25201798>