

Gender Expansive Youth: Patient Centered Care, Puberty Blockers & Cross Hormones



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Calciano Symposium
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Disclosures



- No financial interests
- All medication uses described are off-label



- Gratitude to Katja Tetzlaff, graphic artist, colleagues and patients

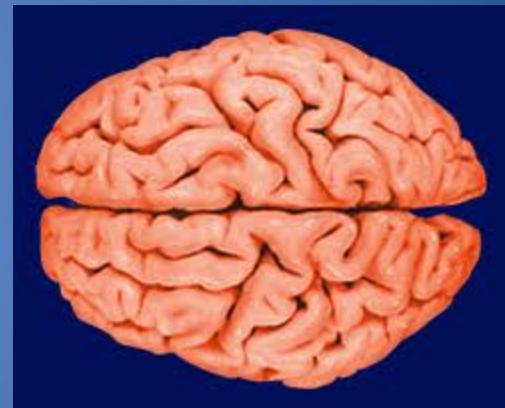
What we will cover today



1. Best practices for creating transgender friendly, gender affirmative, health settings.
2. Importance of an interdisciplinary team: mental health and medical providers working together.
3. Medical treatments for gender expansive youth, including puberty blockers & cross-sex hormones.
4. Basics of surgical options for transgender and gender expansive persons.

Review Concepts

- Sex →
 - Assigned male or female based on physical anatomy, chromosomes
- Gender Identity →
 - Internal, deeply felt sense of self as male to female or in between
- Gender Expression →
 - The external presentation as masculine or feminine or somewhere in between- how we wear our gender



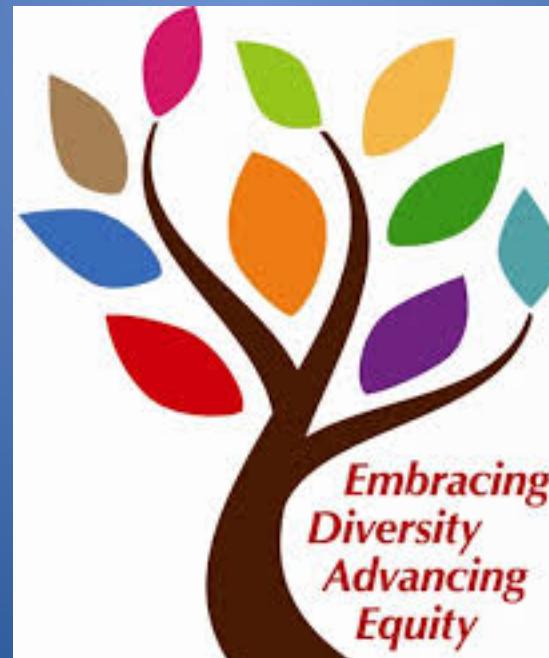
Gender is not binary



Gender Affirmative Care

Care that is respectful of a patient's gender identity

How can we do this?!



Cultural Humility

Exploring your own gender

... leads us to “Cultural ENGAGEMENT”

Rather than “Cultural Competency”

WHO IS THE PERSON IN FRONT OF YOU?

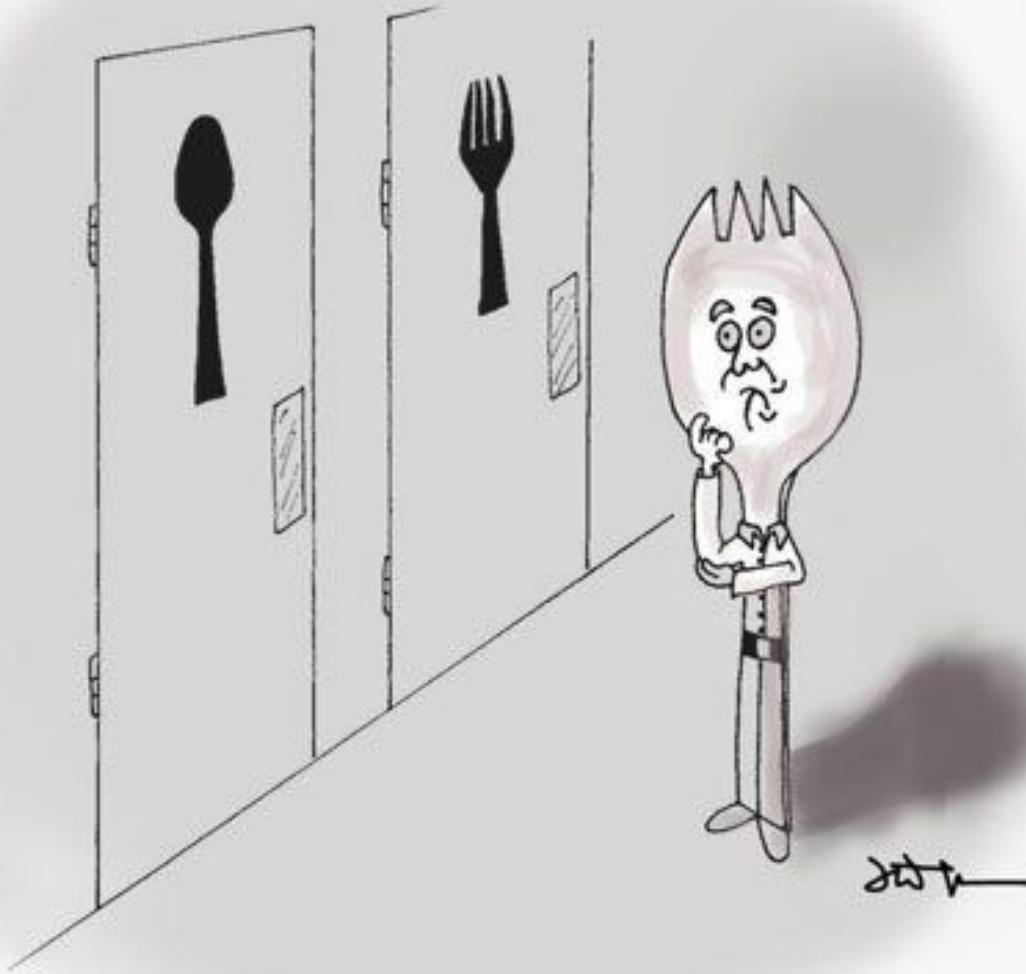


Trans Friendly Health Care

Gender Affirmative Care

- **Create safe and welcoming space**
 - Assume patient not trusting
 - Audio/visuals- involve your community groups
 - Gender neutral bathrooms
- **Inclusive forms**
 - Names (legal and current)
 - “What pronoun do you use (today)?”
 - Continuum based gender options
- **Train your entire staff on gender spectrum**
10 Tips for Serving Transgender Patients
Transgender Law Center





Creating Safe Places



Collaboration

Mental Health and Medical Providers work together

Support and interventions can include:

Before puberty: “social transition”

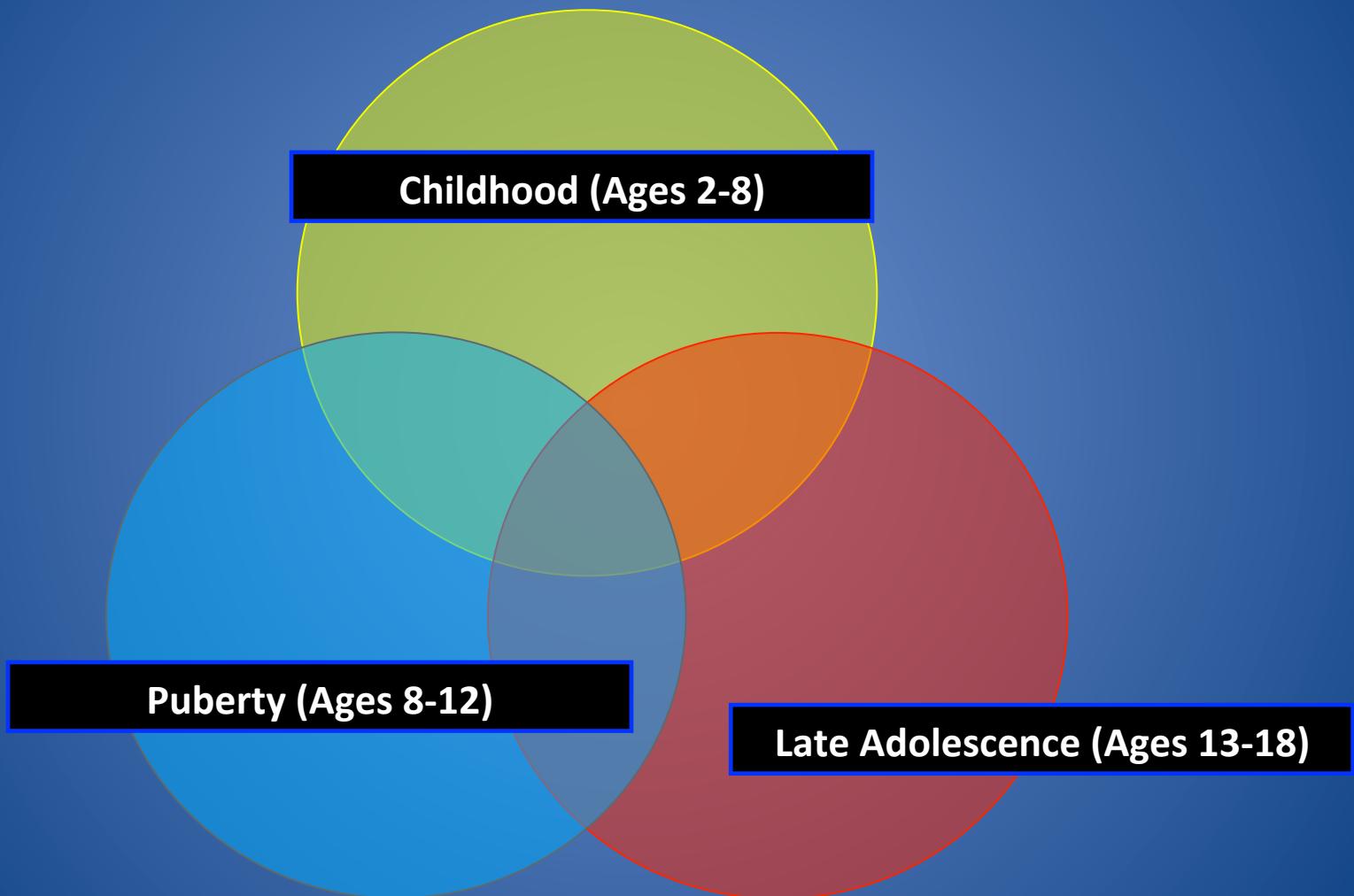
- » clothing, hair, name, pronouns

During and After Puberty: social and medical

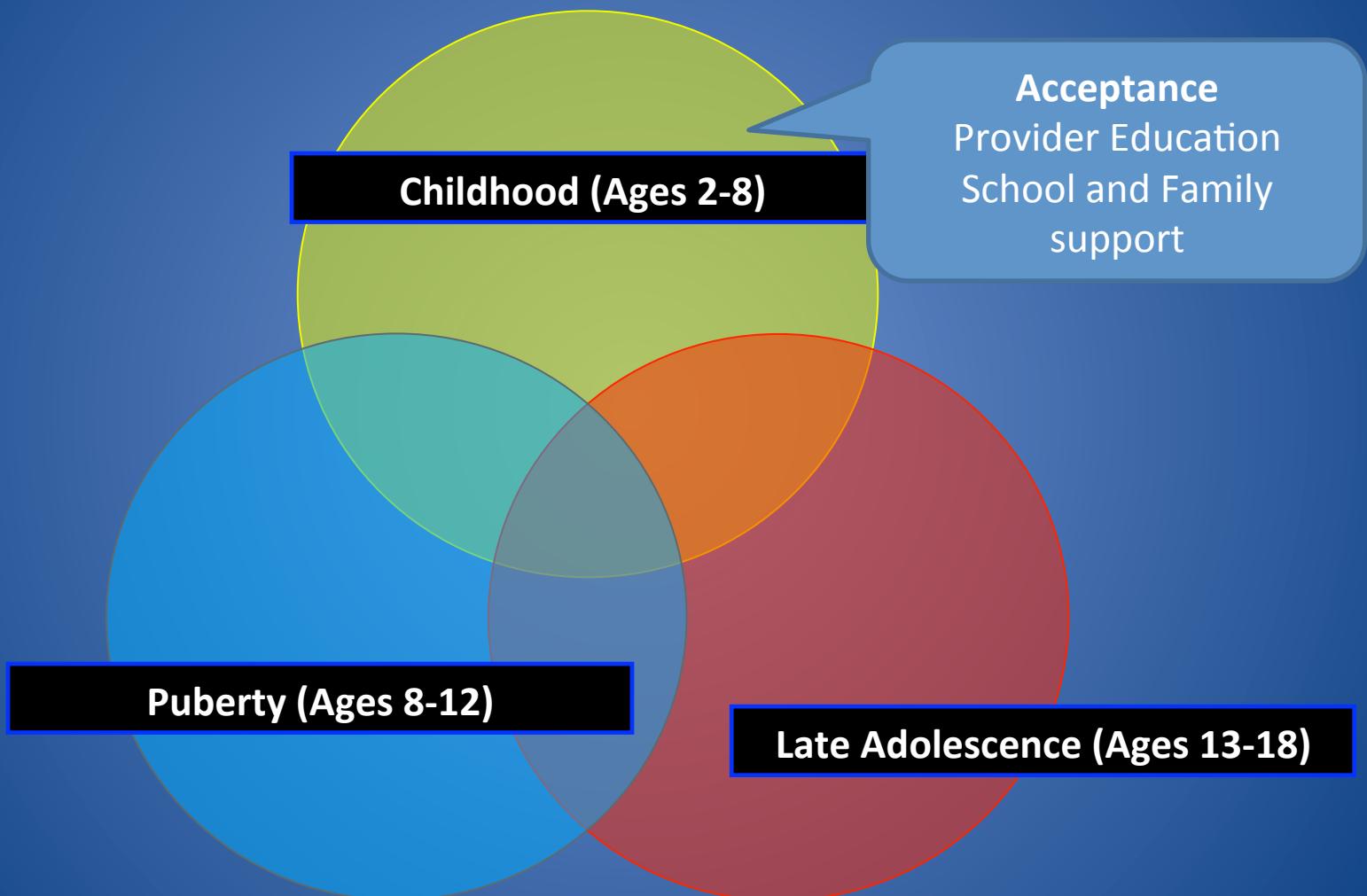
- » hormone blockers
- » cross hormones
- » surgery



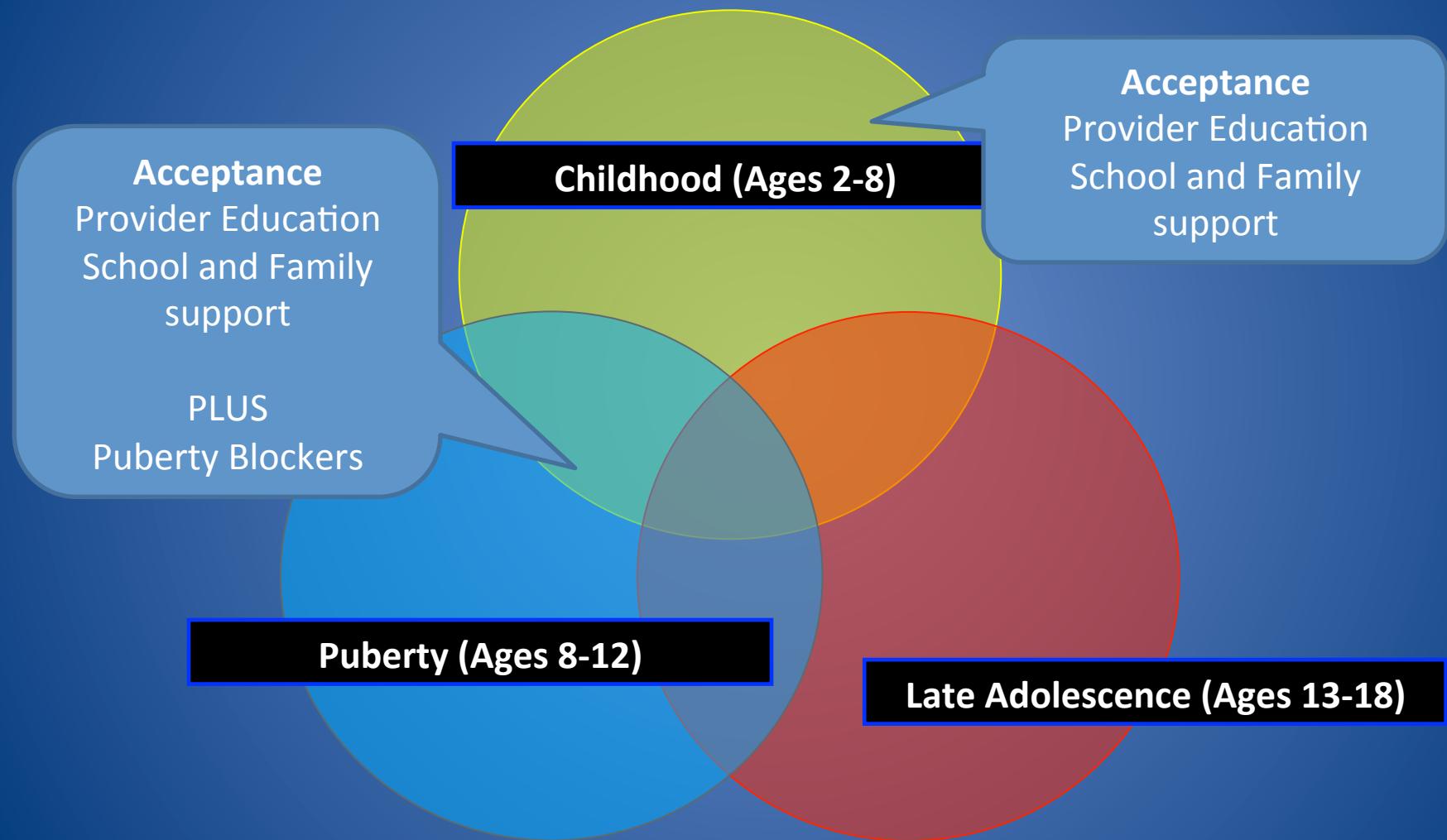
Needs Vary at Different Ages



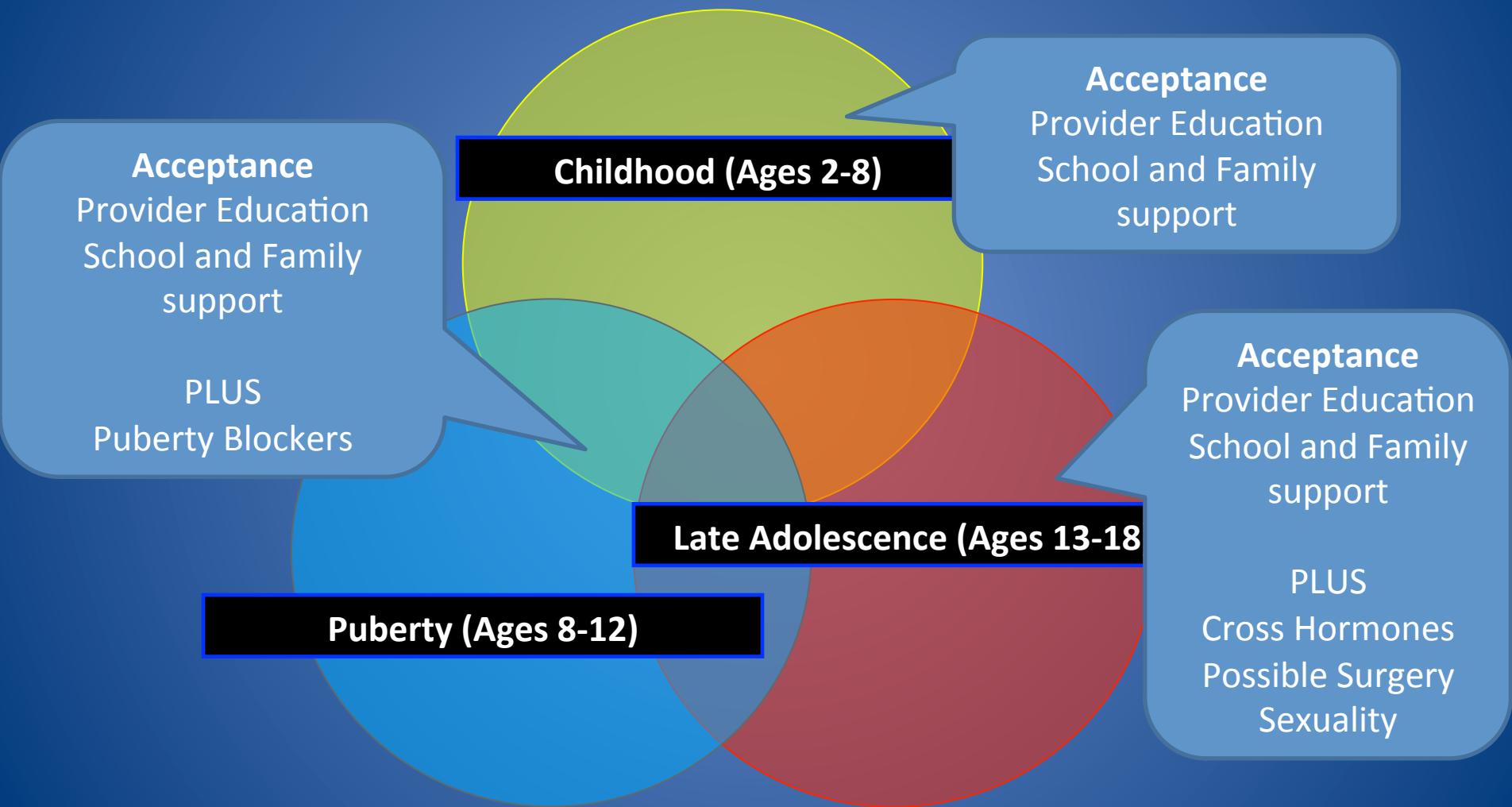
Needs Vary at Different Ages



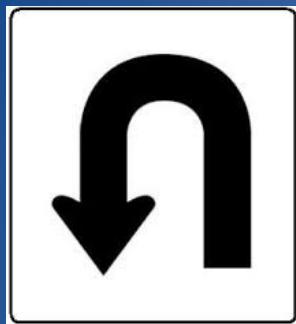
Needs Vary at Different Ages



Needs Vary at Different Ages



Medical Transition



- Reversible:**
 - social transition
 - puberty blockers/GnRH agonists



- Partially reversible:**
 - cross sex hormones
 - estrogen, progesterone, testosterone



- Irreversible:**
 - some hormone effects
 - surgery for gender affirmation

Process for Medical Treatment

Mental Health and Medical work together

- Mental Health Evaluation
- Medical Evaluation
- Informed Consent process



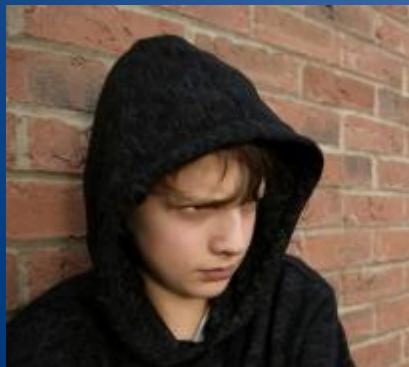
Puberty Blockers

- Puberty can be **CRISIS**
 - Physical changes are traumatizing
 - Self harm
 - High suicide risk



Use of hormone blockers for pubertal suppression can be very helpful for teen and family

Onset of puberty for trans* youth



- Depression
- Anxiety
- Suicidality
- Social isolation
- Self-harm
- High-risk sexual behavior
- Maladaptive coping

Puberty Blockers: Avoid Later Surgery



Wyatt, later Nicole, and identical twin brother, Jonas. Nicole received blockers

Outcomes with Puberty Blockers

- Three studies in trans* youth population
- Decrease in behavioral and emotional problems found
- General psychological functioning improved
- All went on to start cross-sex hormone treatment
- 4 Center NIH study underway! Boston, Chicago, SF, LA



Benefits of early support

- Improves family functioning, school performance
- Prevents suffering and risk taking
- Improves quality of life
- Spares surgical interventions
- Affords a gender concordant puberty
- Allows for selective disclosure

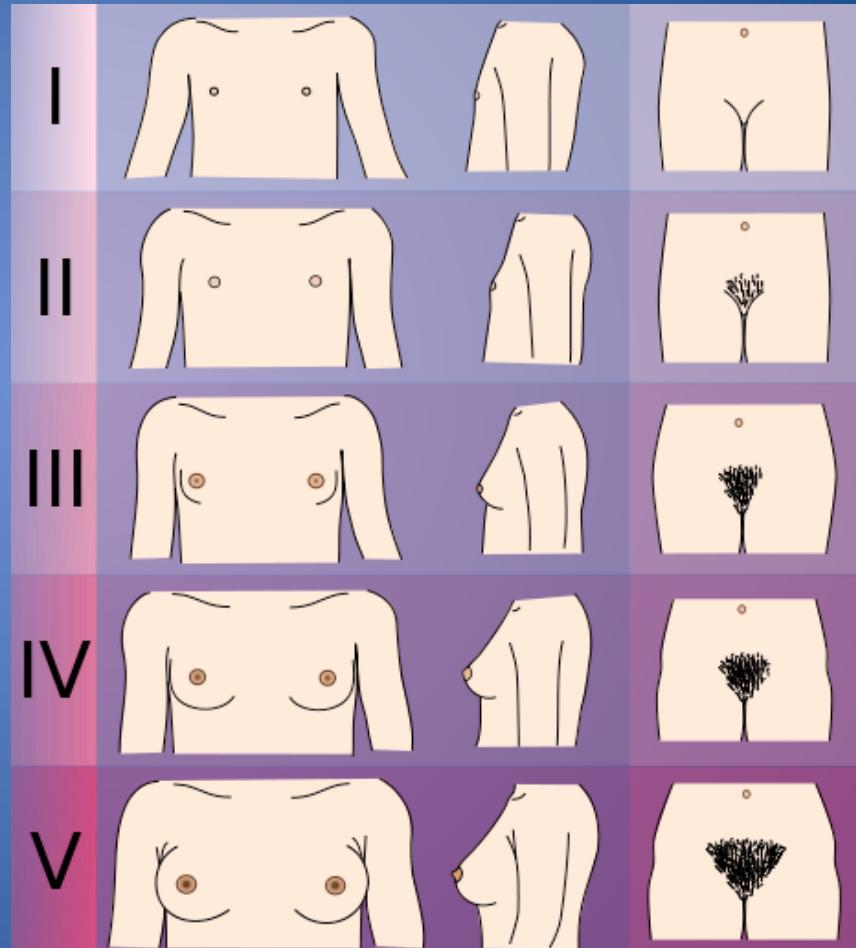
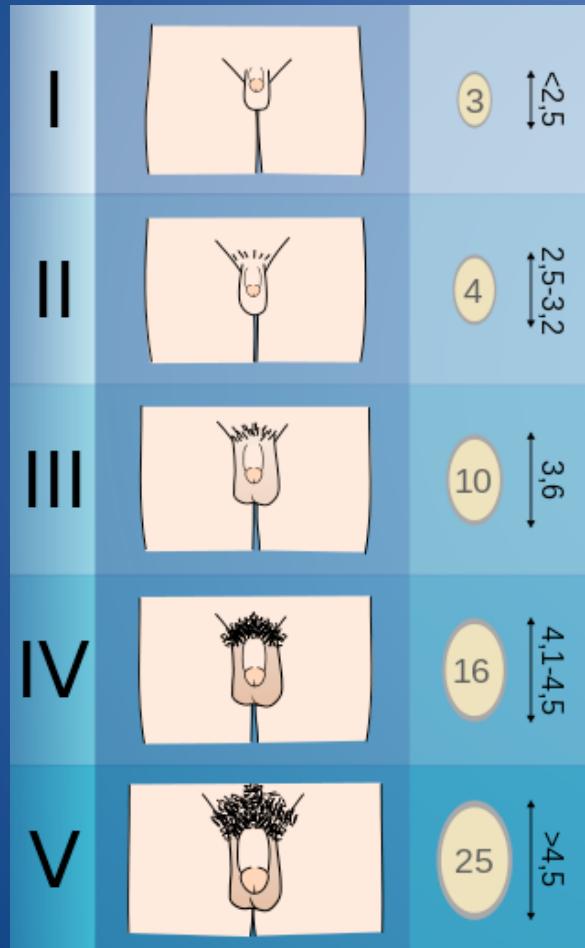


Blocking Puberty

- Puberty Blockers
 - Are a pause button on puberty
 - Injection every several months or yearly implant
 - Safe- used for precocious puberty since 1970s
 - If stopped, puberty resumes in 3-6 months
 - Started at early puberty: Tanner II



Medical Evaluation: Tanner Staging



TANNER STAGING PERSON WITH TESTES

Typical
age range

Physical
development

Testicular
volume (mL)

I

<9



(3)

II

9-11



(4)

III

11-12.5



(10)

IV

12.5-14



(16)

V

14+



(25)

TANNER STAGING PERSON WITH OVARIES

Typical
age range

Physical
development

Breast
growth

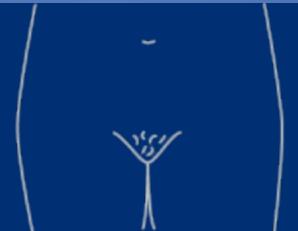
I

<10



II

10-11.5



III

11.5-13



IV

13-15



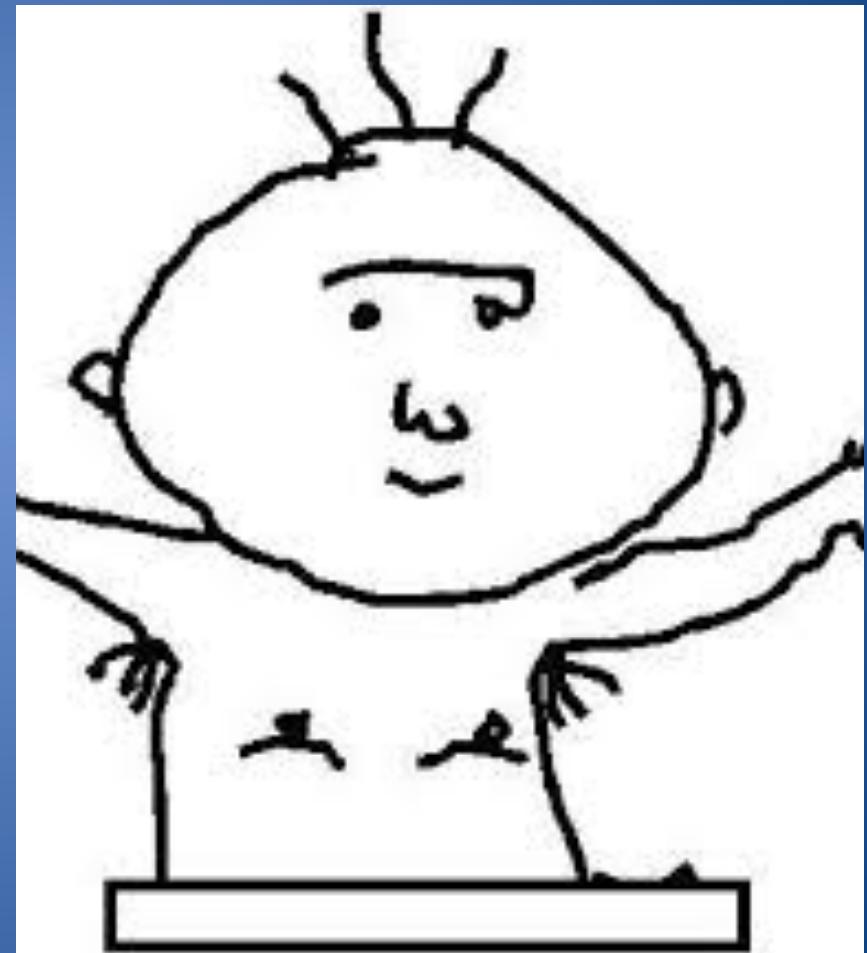
V

15+

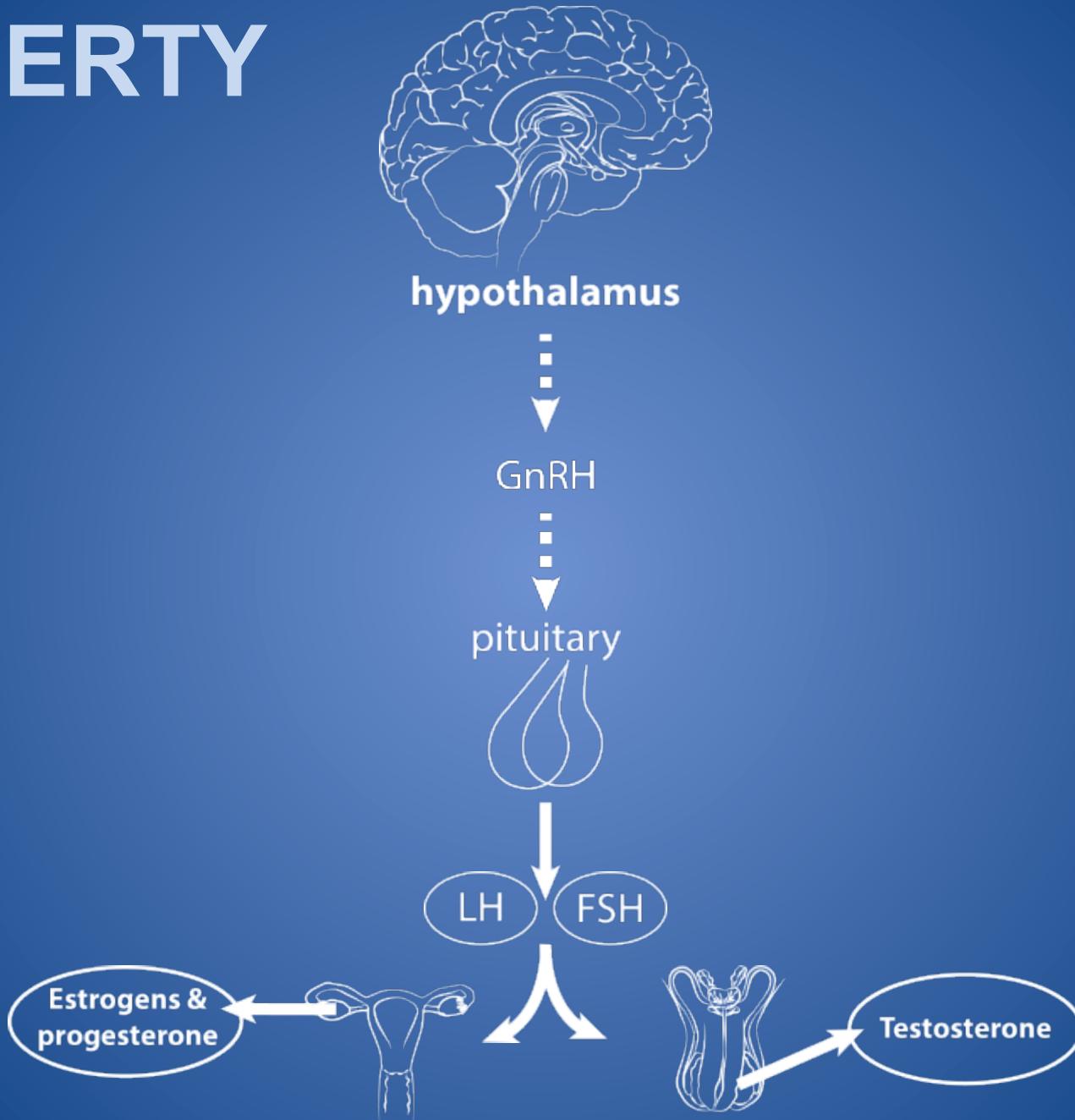


Puberty vs Adrenarche

- Adrenarche:
 - 6-8 years of age
 - Hair and odor
 - NOT puberty



PUBERTY



HOW DO BLOCKERS WORK ?



hypothalamus



pituitary



LH FSH

No production of
estrogen &
progesterone



No production of
testosterone



GnRH Agonists/Analogues are...



Lupron depot or Eligard

- Monthly Injection
- 3-4 Month Injection



Histrelin (Vantas or Suprelin)

- Implant in upper arm
- Yearly or every other year



... EXPEN\$IVE

About Insurance...

Coverage has been variable

- Improved with ACA

Some states have protections

- California- but still have denials
- Oregon, a few others

Appeals- get support

- National Center for Lesbian Rights
- Transgender Law Center

The ACA non-discrimination clause applies to gender identity

Pros and Cons of Puberty Blockers for Trans Youth: Individualize Decision

Pros:

Buys time to explore gender identity

Prevents undesired irreversible pubertal changes

Prevents need for costly and invasive surgery as adult

Improved mental health, functioning, and self esteem

Reduced doses needed for cross sex hormones

Cons:

Unknown effects on brain development (but looking good)

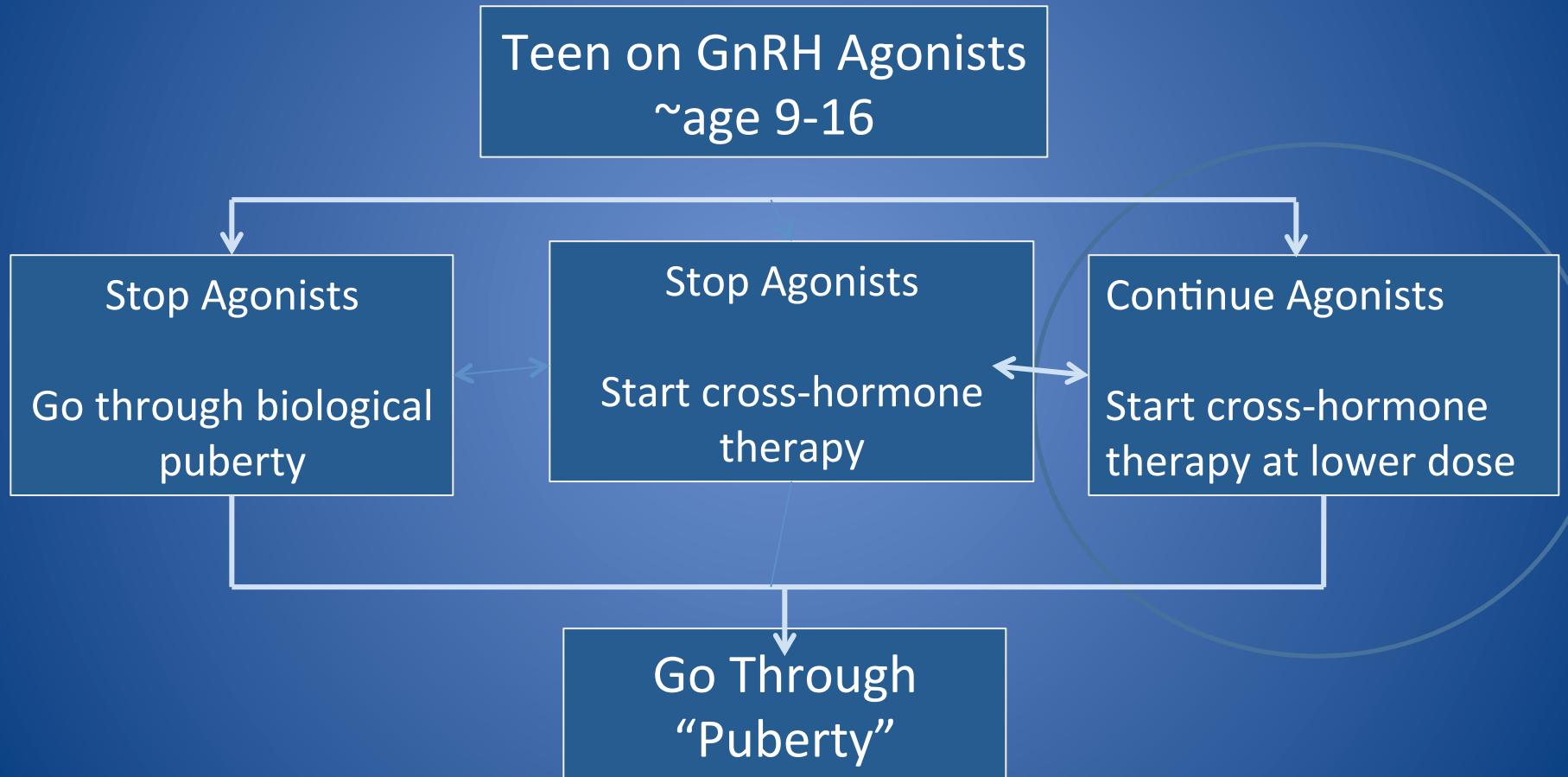
Decrease in height velocity (temporary)

Potential adverse effect on bone density (although this appears to be reversible when start cross hormone)

Expense

Fertility (when blocked early-Tanner 2-3)

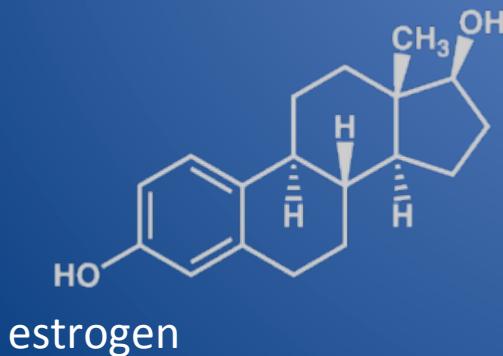
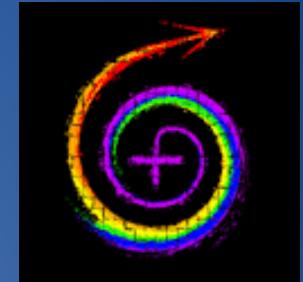
Options for Older Adolescents



Some older teens have not been on blockers, so just start hormones, or hormones and blockers

Cross sex hormones

- Goals
 - Masculinize or feminize the body
 - Improve body image, self-esteem
 - Decrease gender dysphoria
 - Diminish anxiety, depression
 - Decrease high risk behaviors



Gender Fluid/Non-Binary



NON-BINARY TRANSITION

FOR MEDICAL AND SERVICE PROVIDERS



Overview of Hormones

Trans* female spectrum:

Rx to feminize, overcome testosterone

ESTROGEN: IM, patch, cream, or oral formulation taken as sublingual; 17β estradiol NOT ethinyl estradiol

ANTI-ANDROGEN: spironolactone, finasteride

PROGESTERONE: not always used

Trans* male spectrum:

Rx to masculinize

TESTOSTERONE: IM most common vs gel, patch, subcutaneous, pellet; never oral (although used in Europe)

AIM FOR PHYSIOLOGIC LEVELS: desired physical response

Starting Hormone Therapy

World Professional Association of Transgender Health WPATH Guidelines

- Persistent gender dysphoria (some youth do not have dysphoria)
- Able to provide informed consent
 - Age of majority or parental/guardian consent
- Concurrent medical and/or mental health issues are addressed (some mental health conditions improve considerably with hormones; gender as “cure”)
- WPATH Version 7- GUIDELINES not rules
 - “Real Life Experience” not required
 - Time frame of mental health involvement individualized
 - Intent to pursue surgical intervention not relevant



Trans* female



HORMONAL THERAPY

Estrogen and anti-androgen, progesterone

Feminization, a slow process...

What are the patient's goals?

And what about genetics?

Feminization therapy

- Estrogens: NON ORAL FORMS

- Pill under tongue
 - Transdermal Patch or cream
 - Inject in Muscle



- Anti-androgens: lower testosterone

- Spironolactone
 - Finasteride, dutasteride, other
 - Can cause depressive symptoms, GI



- Progesterone

- Mood, libido, weight changes



Feminizing Effects

take TIME - YEARS



- ✓ Skin softens
- ✓ Decreased hair growth
- ✓ Muscle mass diminishes, fat redistributes to hips
- ✓ Breast development: nipples and breasts tender
unpredictable/genetics are not predictors
maximum effect usually after 2-3 years
- ✓ Sexuality: (typical but not universal)
decrease in libido, ejaculate, spontaneous erections
- ✓ Testicular Atrophy
- ✓ Emotional changes noted by many (multi-tasking,
accessing feelings, crying)

Informed Consent Process

Reversible and Irreversible

Estrogen:

Irreversible- breast development

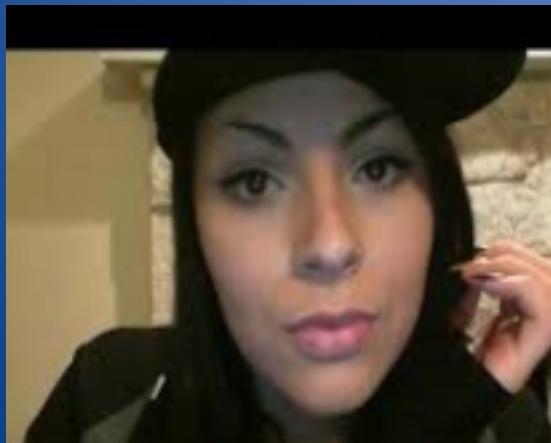
Somewhat reversible- testicular atrophy usually reverses, unknown effect on sperm viability, fertility

Reversible- decreased libido, fat/muscle changes and redistribution

Discuss sexuality and fertility, ability to cause pregnancy

Risks of Feminizing Hormones

- Complete risks are unknown
 - Most studies performed in cis-women
 - Limited research regarding risks
 - Long term studies encouraging
 - Morbidity from Dutch studies using higher risk form of estrogen
 - Greatest concern increase risk blood clot
- FDA: all administration off-label
 - More research in the pipeline





Trans* male

HORMONAL THERAPY

Testosterone

What are patient's goals?



Masculinizing

Testosterone is only medication needed



- Usually start with injection (subcutaneous or muscle) weekly or every 2 weeks
- Can also use gel, cream or patch
- If still on blocker, lower dose

Masculinizing over time: 1 mo- 5 years

- Voice deepening
- Amenorrhea (no period)
- Male pattern facial and body hair
- Acne
- Increased muscle mass
- Change of fat distribution
- Enlargement of the clitoris
- Emotional changes/ increased libido

Informed Consent

Irreversible- thickening of vocal chords = deeper voice, facial and body hair, adam's apple, male pattern balding

Reverse somewhat- clitoral enlargement

Reversible- menses, libido, fat/muscle changes

Fertility needs to be discussed before starting hormones:
testosterone is not contraception

Ovulation can occur on Testosterone





From The Mind of a MAN
Empowering today to change tomorrow

A photograph of a man with short dark hair and a tattooed arm, sitting on a brick wall. He is holding his head in his hand and looking down with a distressed expression. Below the image is a black banner with white text.

**PAPS MATTER
FOR TRANS
MEN**

*Check it Out
Guys*

If you're ever been sexually active for any reason, there's a chance you might have. Check our website for more information and tips on how to make getting checked easier.

• checkitoutguys.ca

A photograph of a woman with long, dark, braided hair and a man wearing a green hoodie. They are both looking towards the camera. Above them is bold text. At the bottom, there is a graphic with the text "Check it Out Guys" and some smaller text at the very bottom.

SURGERY

Masculinizing Surgeries

Every person decides which (if any) procedures to have

- Chest Reconstruction (removal of breast tissue, creation of masculine chest)
- Hysterectomy (removal of uterus)
- Oophorectomy (can keep an ovary)
- Metoidioplasty (can keep uterus, ovaries, vagina)
- Phalloplasty (typically remove uterus, but not required)

Feminizing Surgeries

Every person decides which (if any) procedures to have

- Vaginoplasty
- Orchectomy
- Penectomy
- Breast Augmentation
- Tracheal Shave (remove Adam's apple)
- Facial Reconstruction

BUILD YOUR OWN TRANSITION PATH

CAREFULLY CUT OUT EACH BLOCK



ARRANGE BLOCKS IN DESIRED ORDER

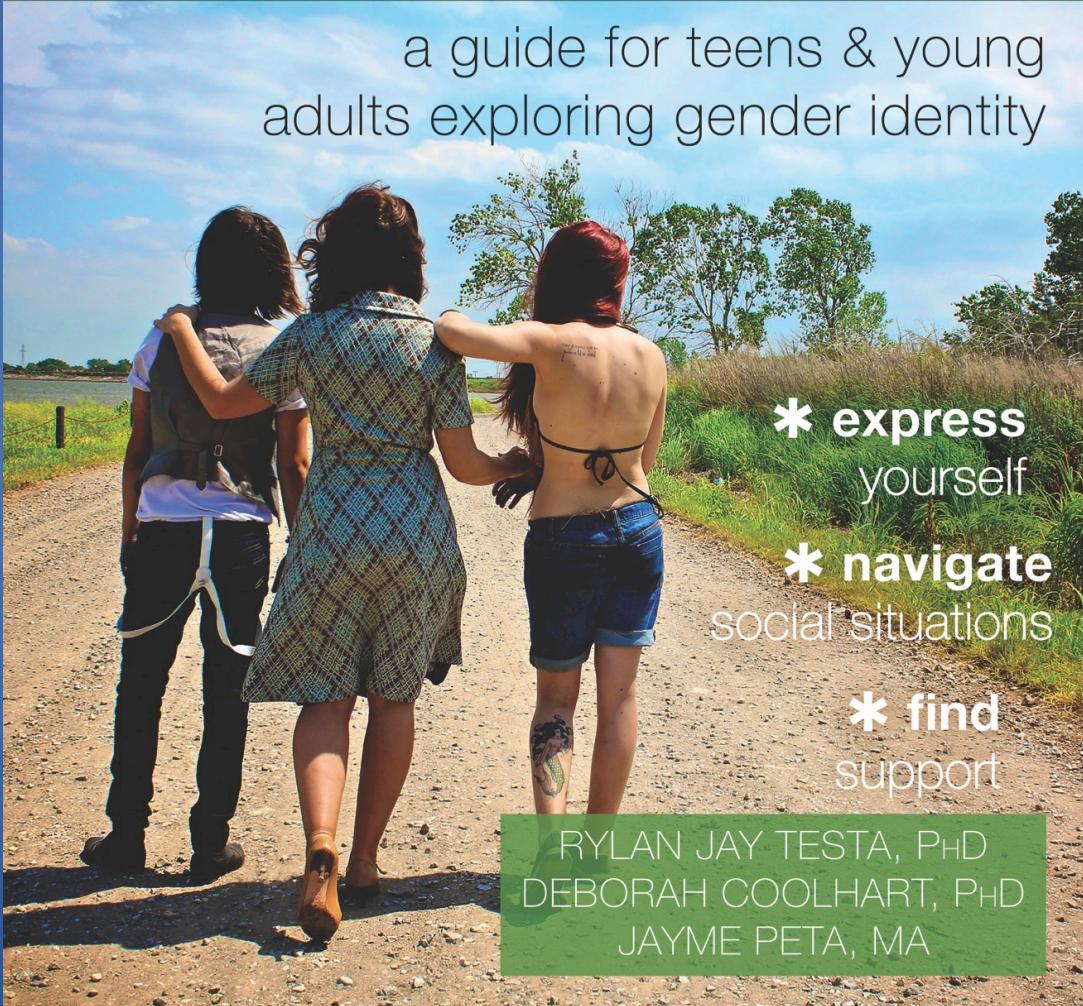
(ADD OR REMOVE BLOCKS AS DESIRED)



a n i n s t a n t h e l p b o o k f o r t e e n s

the
gender quest
workbook

a guide for teens & young
adults exploring gender identity



*** express
yourself**

*** navigate
social situations**

*** find
support**

RYLAN JAY TESTA, PhD
DEBORAH COOLHART, PhD
JAYME PETA, MA



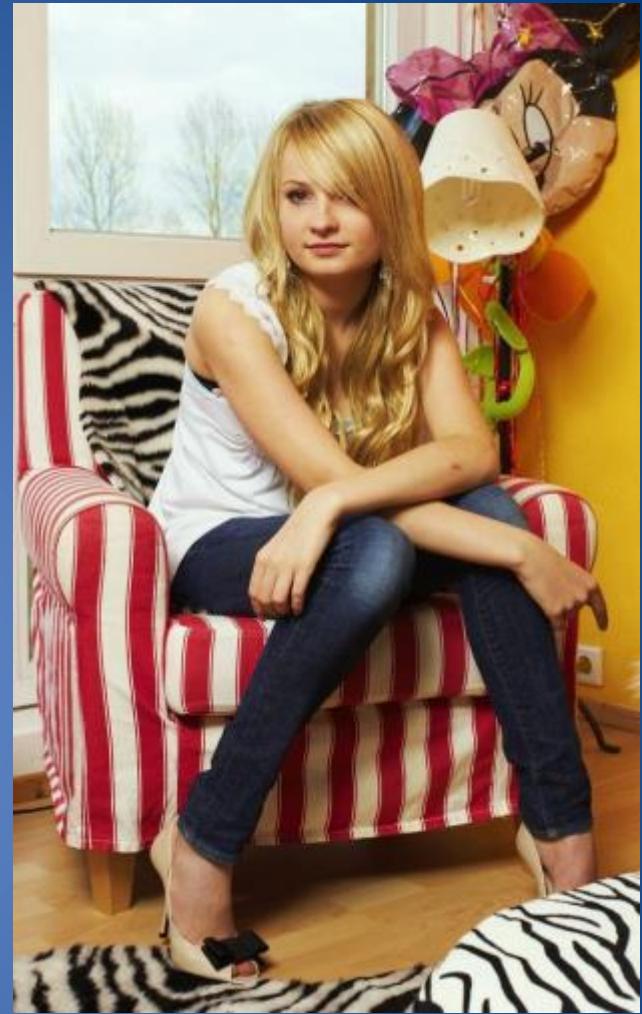
Shiloh Jolie Pitt



Jazz Jennings, "I am Jazz"



Physicians for Reproductive Health
Adolescent Reproductive and Sexual Health Education Program
<http://prh.org/new-updated-educational-modules-available/>



Kim Petras, Germany
Teen pop star
Blockers age 11
Hormones ~ age 14
Gender Surgery age 16

Trans* fertility

- Counseling about future fertility
 - Options are limited, especially if pre-pubertal
 - Parent and child may present different priorities
 - Post-pubertal youth have option of fertility
 - If have uterus, ovaries can carry or contribute to pregnancy
 - If testicles, can contribute sperm
- Pediatric oncology harvesting pre-pubertal gonadal tissue, developing eggs, sperm in-vitro
- Many ways to make a family

“Keep the focus on
the child.”

—Diane Ehrensaft, Ph.D

Gender Spectrum Director of Mental Health and founding
member of the Child and Adolescent Gender Center

Key concepts

- Gender ≠ choice
- Gender is a spectrum
- Acceptance is key to health
- There are medical interventions that support gender identity



Resources

- UCSF Center of Excellence for Transgender Health Primary Care Protocol - transhealth.ucsf.edu
- WPATH Standards of Care, 7th Version - wpath.org
- Lyon-Martin Health Center Consult Line
project-health.org/transline
- Fenway Health Care protocols and webinars
lgbthealtheducation.org



References - Youth

- Brill S, Pepper R, (2009) **The Transgender Child.**
- Byne W, Brandley SJ, Coleman E, et al. **Report of the American Psychiatric Association Task Force on treatment of gender identity disorder.** *Arch Sex Behav*, 2012;41(4):759-796
- Ehrensaft, D. (2011). **Gender Born, Gender Made: Raising Healthy Gender-Nonconforming Children.**
- Hidalgo M, Ehrensaft D, Tishelman A, Clark L, Garofalo R, Rosenthal S, Spack N, Olson J. **The Gender Affirmative Model: What We Know and What We Aim to Learn.** *Human Development*, 2013; 56: 285-290
- Olson J, Forbes C, Belzer M. (2011) **Management of the transgender adolescent.** *Arch Ped Adol Med*;165(2):171-6.
- Rosenthal S. **Approach to the Patient: Transgender Youth: Endocrine Considerations.** *JClinEndocrinolMetab* 2014, 99(12):4379-4389.

Resources – General and Youth

- National Center for Transgender Equality: Injustice at Every Turn: National Transgender Discrimination Study; 2011
www.transequality.org
- Physicians for Reproductive Health (PRH), part of the Adolescent Reproductive and Sexual Health Education Program (ARSHEP): <http://prh.org/new-updated-educational-modules-available/>
- Title X brochures on Trans Fertility and Self Care



Building Cultural Fluency

immerse yourself.... many more excellent books, blogs, films

BOOKS and BLOGS:

The Transgender Child, Stephanie Brill, Rachel Pepper

Trans Bodies, Trans Selves, Ed. Erickson-Schroth

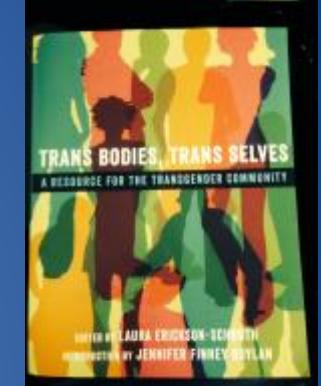
Gender Born, Gender Made Diane Ehrensaft

Transgender 101, Nicholas Teich

She's Not There, A Life in Two Genders, Jennifer Boylan

Neutrois.me/Non Binary Transition Micah

Second Son, Ryan Sallans



FILMS DOCUMENTARIES TV SHOWS:

Straightlaced- How Gender's Got Us All Tied Up

Trans, The Movie

From Three to Infinity

I'm Just Anneke

No Dumb Questions

I am Jazz

TransParent, HerStory



Building Knowledge

CONFERENCES



- Philadelphia Trans-Health Conference
Philadelphia, annually June
- Gender Spectrum- focus on youth
Bay Area, annually July
- Gender Odyssey
Seattle, WA, annually August
- National Transgender Health Summit, UCSF
April, every other year in Oakland



Local Resources



The Diversity Center www.diversitycenter.org

The hub of the LGBTQ Community in Santa Cruz County

- Drop in Information and Resource Center 831-425-5422
- Transgender support groups, Trans* AA group
- LGBTQ youth program

Boys and Girls Club www.santacruzmentor.org

New trans and gender diverse mentoring program

Trans Teen Project www.transteenproject.org

Specific resources for gender expansive youth

Safe Schools Project: Queer Youth Task Force

www.qytf.org raising awareness in schools

Out in our Faith: promoting full inclusion of LGBTQ families, couples and individuals in all faiths

Local Resources



Trans resources in Santa Cruz and beyond www.sc-transonline.org

Transparent Group www.santacruztrans.blogspot.com

Heidi Koronkowski meets monthly, first Saturday

PFLAG meets monthly, second Tuesday, evening www.plflagscc.org

Planned Parenthood Transgender Healthcare Program 831-460-3100

CRLA California Rural Legal Assistance www.crla.org

Gender Specialist Clinical Team of the Central Coast

Dan Blumrosen, Ben Geilhufe, Finn Gratton, Marin Martin, leads former director, **Shane Hill, PhD 10 things we can do to support our children who are questioning their gender**



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Assistant Clinical Professor, UCSF Family and
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Medical Programming, Gender Spectrum

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