

# Laboratory services and the healthcare of Trans and Gender Diverse People

**Dr John Dean** MBBS, FRCGP, FECSM

Gender Identity Healthcare Physician:

Welsh Gender Service (Cardiff and Vale UHB)

West of England Gender Identity Clinic (Devon Partnership NHS Trust)

TransPlus (Chelsea and Westminster NHSFT)

Cmagic (Mersey Care NHSFT)

Gibraltar Gender Service (Gibraltar Health Authority)

Medical Co-lead for Practicum (clinical) modules, Royal College of Physicians Gender Identity Healthcare Postgraduate Clinical Programmes

Chair, Specialist Gender Services Clinical Reference Group, NHS England



The Embedded Gender Specialist

# Disclosures

- No conflicts of interest declared
- This presentation uses the term 'TGD person' as an umbrella term to include Transgender, Gender Diverse, Transsexual, Non-Binary, GenderQueer, Gender Neutral, Agender, and Gender Non-Conforming identities and experiences
- This umbrella is itself reductive and not without issue, but for our purposes, it serves as a shorthand and an alternative to a lengthy and cumbersome acronym (TG/TS/NB/GQ/GN/A/GNC, for example)

# Trans people's health is negatively impacted by stigma and marginalization

- It is estimated that there are 25 million TGD people worldwide
- They are at increased risk of experiencing homelessness, low self-esteem, suicide, HIV/AIDS, and job and housing insecurity which negatively impact their general health
- Many are unable to access health and other social services, or they may delay or avoid seeking services because of past experiences or fear of discrimination
- Mixed-race, indigenous, TGD people of colour, and TGD people with disabilities, among others, are more likely to experience negative health outcomes

# Not a mental health disorder



“The College recommends that the WHO International Classification of Diseases (ICD) and the American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders (DSM) should, at the earliest opportunity, de-classify any terms they use to describe transgender as a mental health disorder.”

# Presentation overview

1. The Importance of Language
2. Patient Registration
3. Asking Questions and Making Mistakes
4. Specialist Gender Identity Healthcare
5. Laboratory Service Issues

# 1. The Importance of Language

# Respectful communication

- For many TGD people, language is an important part of dealing with the world, and some trans people alter language to suit their needs and identities
- TGD people may use language to help make themselves understood or intelligible to others
- Altering language may help alleviate distress and dysphoria over body parts, among other things
- **Language used in consultations should be tailored to the individual**
- **Agree any alternative language that may be necessary to assure good clinical communication**



# Pronouns matter

Asking TGD people about pronouns and other gendered language, and respecting their wishes, is an important element of trans-inclusive care



# Helpful language

- DO use the word **cis-gender** as an umbrella term to refer to all people whose gender identity and the sex they were assigned at birth are congruent
- DO use **dysphoria** to refer to the profound state of uneasiness, discomfort, and dissatisfaction experienced by some trans people in their sexed bodies
- But DO recognize that **not all TGD people experience dysphoria**
- DO use **misgendering** to refer to the practice of using words (nouns, adjectives, and pronouns) that do not correctly reflect the gender with which someone identifies
- DO use **Intersex** as an umbrella term for the variety of conditions in which a person is born with atypical reproductive or sexual anatomy

# Unhelpful language

- AVOID using potentially derogatory terms and expressions (“he/she”, it, shemale, transvestite, tranny, “man in a dress”, hermaphrodite) without context or without acknowledging the bias of the term or expression
- AVOID using “men” and “women” without qualifying whether you are speaking about *cis* or TGD people, unless you are speaking about *all* men and women, including men and women of TGD experience
- AVOID talking about “transgenders” or “a transgender”
- AVOID using “transgendered” to refer to a person
- AVOID using “transsexual” as an umbrella term, as many TGD people do not identify with the term
- AVOID the word “transformation” to refer to the process that some TGD people undertake to change their bodies to align with their gender identity; if necessary, use “transition” with care, remembering that not *all* TGD people transition

# Take-home messages on language

- Take your cue from your patients, and mirror the language that they use to refer to themselves
- Provide your patients with opportunities to tell you what language they use to refer to themselves, their body parts, and their families, both on written forms and in person
- Ask questions if your patients use terms that you are unfamiliar with
- Be aware that there is a much higher prevalence of neurodiversity amongst TGD people than in the general population, which requires adjustments and accommodations in our approach to communication

## 2. Patient Registration

# Registration for TGD people

- **“What is your preferred name?”**
- **“What words do you use to describe your gender or identity?”**
  - Document patient’s preferred terminology; seek clarification of meaning with sensitivity, as necessary
- **“What sex were you assigned at birth?”**
- **“What is your legal name?”**
- **“If we contact you by mail or telephone, what name and gender would you like us to use in correspondence?”**
  - Leaving messages (voicemail; family; work)
  - Addressing letters and e-mails
  - Correspondence with other healthcare providers
  - Conform to the requirements of the Gender Recognition Act (2004)

# 3. Asking Questions and Making Mistakes

# We all have questions, and we all make mistakes

- DO say you are sorry as soon as possible - you can acknowledge and correct your error at any time
- DO ask again if you have forgotten something about the person
- ONLY apologize again and again if you keep making the same or different mistakes
- AVOID having to do this by being attentive and asking for support in how to remember how to correctly refer to the person or issue
- AVOID providing a reason or explanation for your mistake
- AVOID asking questions about sex and gender out of curiosity, that are not relevant to the matter in hand

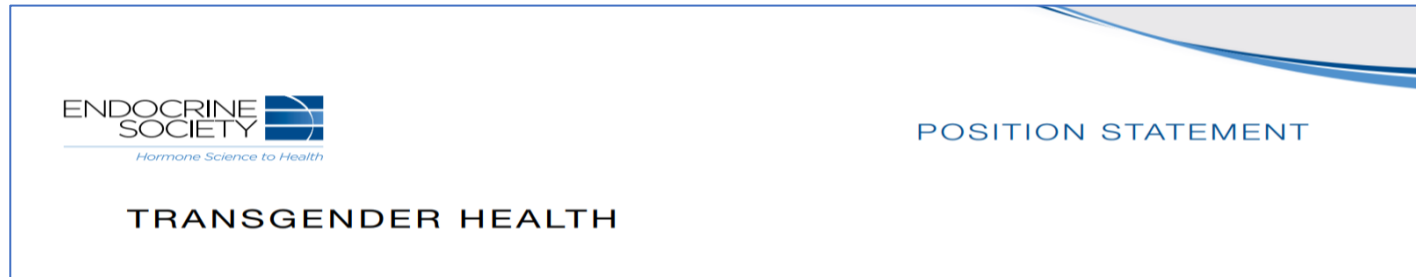


# Correcting mistakes made by others

- DO stand up for TGD people and be an ally
- DO privately and respectfully correct others, including colleagues; for example, “I’ve noticed that you are calling [correct name/pronouns] by [the incorrect name/pronouns]. I’m not sure if you know, but [correct name] uses [correct name/pronouns].”
- DO ask what you can do to support someone else in remembering to use the correct name, pronoun, or other term to refer to a person
- AVOID calling anyone out in public for using the incorrect name or pronouns
- AVOID judging or shaming someone for making a mistake
- AVOID gossiping with others about any of your patients, including your TGD patients, either within your facility or once you leave

# 4. Specialist Gender Identity Healthcare

# A Changing Landscape

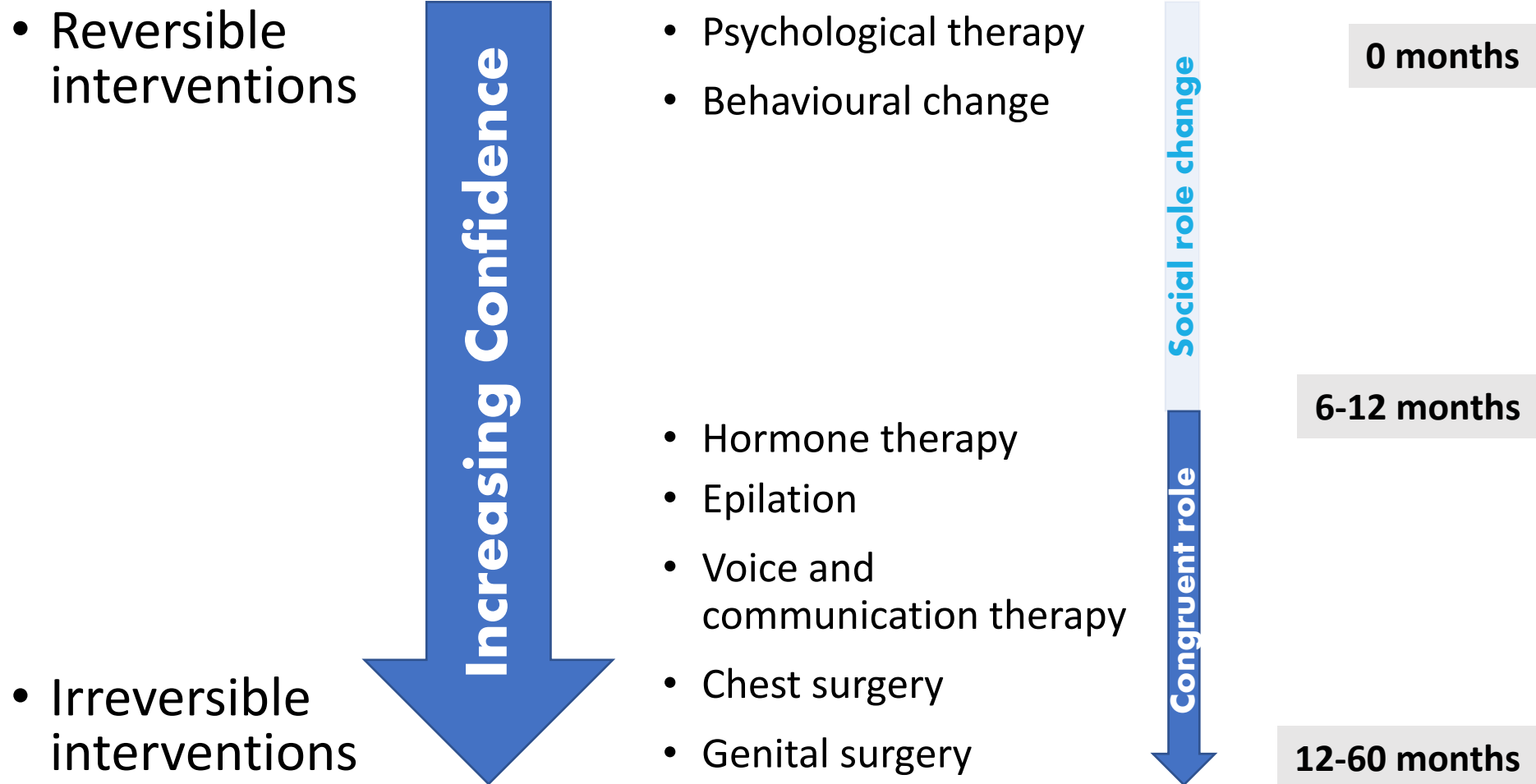


- “There is a durable biological underpinning to gender identity that should be considered in policy determinations”
- “Medical intervention for transgender individuals (including both hormone therapy and medically indicated surgery) is effective, relatively safe (when appropriately monitored), and has been established as the standard of care”

# NHS care for people with concerns regarding gender identity

- The NHS commissions...
  - An assessment service for people with concerns regarding gender identity
  - A fairly comprehensive biopsychosocial care pathway for those assigned a diagnosis of gender dysphoria
- These are accessed through NHS-commissioned specialist services
- Prospective patients are usually referred by their GPs and other health professionals, but may also self-refer
- It is discriminatory to require a formal mental health assessment as a condition of referral

# 'Traditional' triadic care pathway (pre-2011)



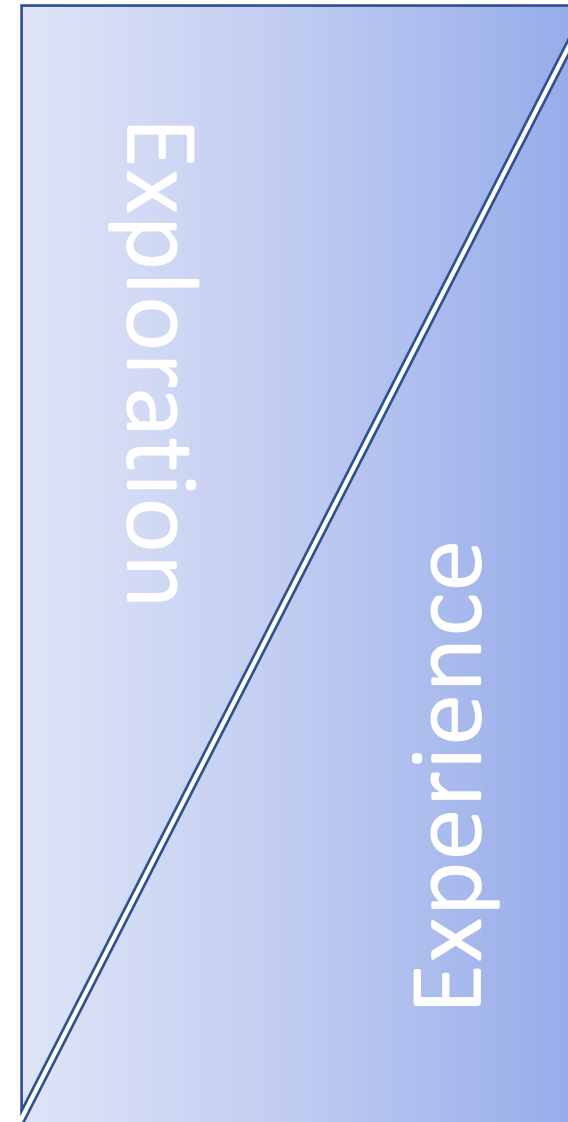
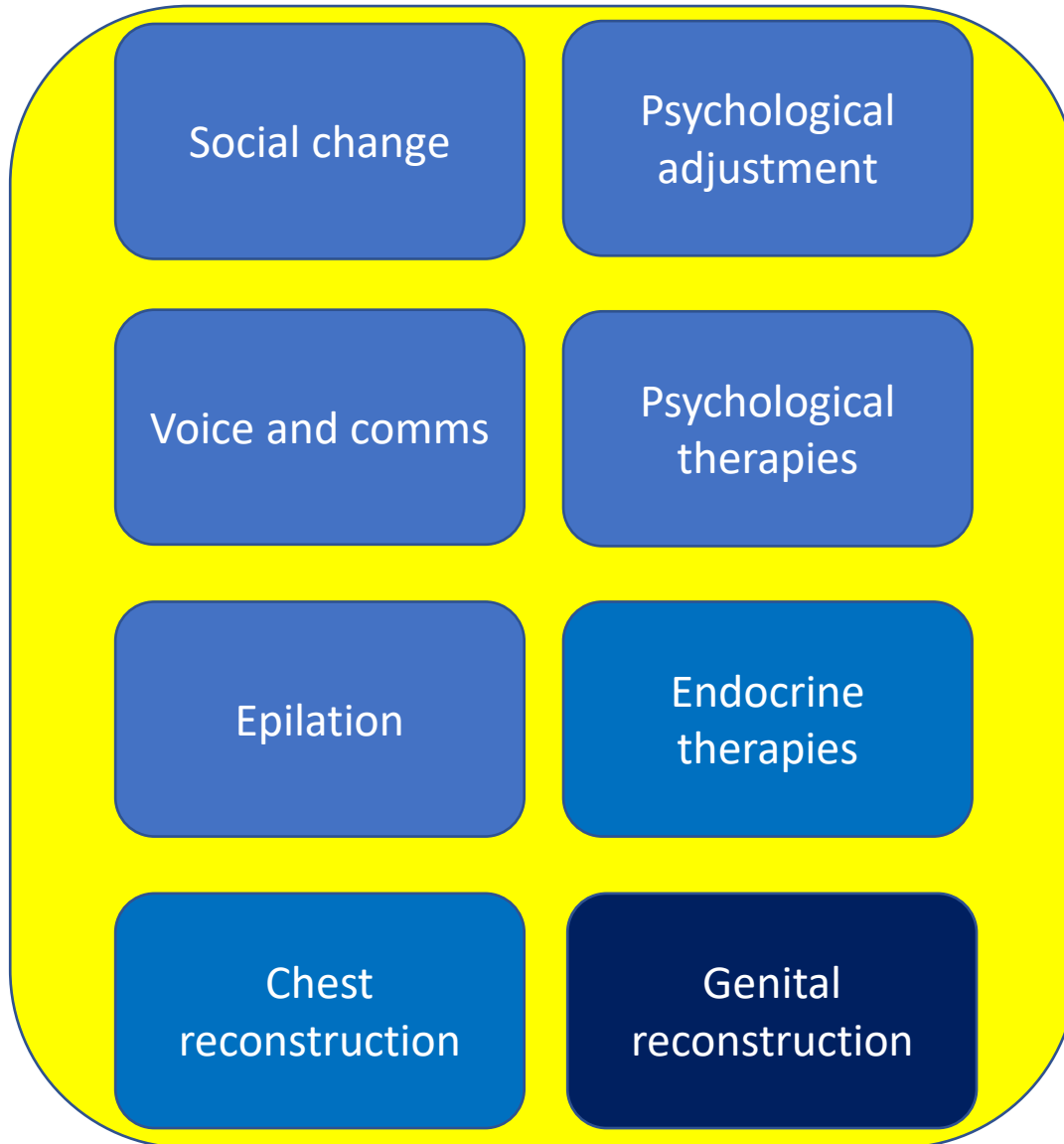


**VIRGINIA PRINCE**  
*Pioneer of Transgendering*

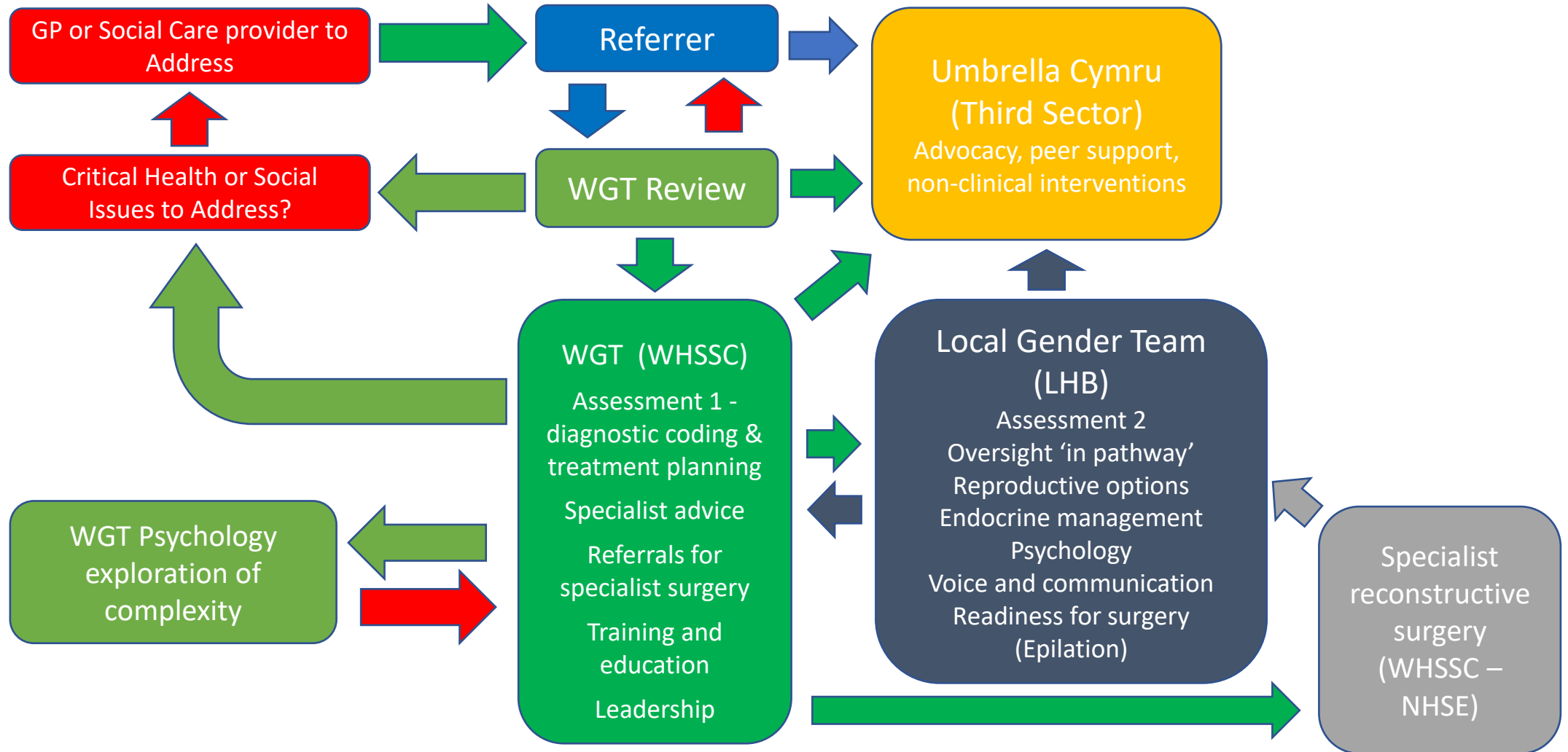
“If you get on a train in Los Angeles bound for New York, you don’t have to go all the way to New York. If you want, you can get off in Chicago.”

Virginia Prince (1912-2009)

Current (post-2019), non-linear, holistic care pathway



# Welsh Gender Service – pathway map





# 5. Laboratory Service Issues

# Laboratory results

- As the number of trans people, including those who are non-binary, seeking gender-affirming hormone therapy rises, the WGS is increasingly asked to assist with interpretation of laboratory results
- Many common laboratory tests, such as haematological parameters, iron studies, cardiac troponin, and creatinine/renal function tests, are affected by use of sex steroids and/or body size, and 'standard' reference ranges may not be valid for TGD people receiving endocrine treatment
- Confusion often arises from the approach taken to documentation of patient information by the clinician requesting an investigation

# Documenting sex and gender on laboratory investigation request and report forms

## **Always consider patient consent and the requirements of the GRA**

- Assigned sex at birth (AFAB or AMAB, or Intersex/DSD)?
- Experienced gender?
- Expressed gender?
- Trans?
  - No endocrine treatment, evolving or stable endocrine treatment?
- Gender Diverse (non-binary)?
  - Unique goals and bespoke regimens
  - Agender
  - Eunuch
- ‘Stealth’?
  - A “stealth” TGD person is one who has transitioned to live in a different gender and who is not informing those around them (sometimes includes their GP) of their gender history

# Risks associated with documentation of sex

- Physical health
  - Results may be interpreted using a reference range included in the report linked to the documented sex, that is not appropriate for the individual
- Mental health
  - Psychological impact of mis-gendering
- Social impact of being 'outed'
  - Exclusion
  - Isolation
  - Discrimination
  - Homelessness
  - Violence

# Evidence-based recommendations

- Once individuals have commenced gender-affirming hormone therapy, the laboratory reference range of the affirmed gender may be used, other than for PSA and cardiac troponin, which are dependent upon organ size

Cheung AS, et al (2021). *Approach to Interpreting Common Laboratory Pathology Tests in Transgender Individuals*. JCEM, 2021, Vol. 106, No. 3, 893–901

- The haematology parameters for transgender men and women receiving stable hormone therapy (at least three months duration) are evaluated against the cisgender male and cisgender female reference ranges, respectively

Greene DN, et al (2019). *Hematology reference intervals for transgender adults on stable hormone therapy*. Clin Chim Acta. 2019 May;492:84-90.

| Test                              | Recommended Reference Range for Interpretation |                       | Comments   |
|-----------------------------------|--|-----------------------|--|
|                                   | Affirmed Gender                                | Presumed Sex at Birth |  |
| Estradiol                         | ✓  |                       |  |
| Total Testosterone                | ✓  |                       |  |
| Creatinine                        | ✓  |                       |  |
| Estimated GFR                     | ✓  |                       | Alternatively, perform a 24-hour urine creatinine clearance.   |
| Hemoglobin                        | ✓  |                       |  |
| Hematocrit                        | ✓  |                       |  |
| Iron studies                      | ✓  |                       | Insufficient data. Premenopausal female reference range should be used for menstruating or pregnant individuals regardless of gender.  |
| Electrolytes                      | ✓  |                       | No sex-specific reference ranges. Minor changes in sodium observed in small retrospective uncontrolled studies; sodium reduced with feminizing hormone therapy and increased with masculinizing hormone therapy.   |
| Liver function                    | ✓  |                       | No sex-specific reference ranges. There is no clear evidence to suggest clinically significant changes occur with gender-affirming hormone therapy   |
| Lipid profile                     | ✓  |                       | No sex-specific reference ranges. Masculinizing hormone therapy associated with decreases in HDL-c. Feminizing hormone therapy associated with inconsistent lipid effects. If raised triglycerides observed, consider use of transdermal rather than oral estradiol formulations |
| Prostate-specific antigen (PSA)   |  | ✓                     | Valid only for people with a prostate. The prostate remains in situ even after orchiectomy, vaginoplasty, or labioplasty surgery. PSA is expected to be low in the setting of low testosterone concentrations.   |
| High-sensitivity cardiac troponin |  | ✓                     | Cardiac troponin is based upon organ size, which is not expected to change with gender-affirming hormone therapy.  |

Note that consideration should be made as to the duration and dose of feminizing or masculinizing hormone therapy used in interpretation of laboratory tests.

# Discontinuation of hormone therapy

- If a patient develops a medical condition that might be exacerbated by hormone therapy, or wants to stop treatment, the physical, social and psychological pros and cons of this should be discussed with them
  - They are likely to experience symptoms of hypogonadism
  - If they have testes, they are likely to experience, over a few months, a gradual resumption of testosterone release and androgen effects on hair growth, skin, voice and sexual responsiveness, and gradually progressive breast atrophy
  - If they have a uterus and ovaries, they are likely to experience resumption of menstruation
- Discontinuation may result in a recurrence of gender dysphoria, destabilisation of mental health, and increased risk of self-harm or suicide

# Shared decision-making about risk

Some patients may not be willing to discontinue hormone therapy, even though this may have been strongly advised by their doctor following a medical event, such as thrombosis, stroke, cardiovascular disease or a cancer diagnosis

- In these circumstances, we recommend engaging in shared decision-making about risk with the patient, in consultation with WGS
- Patients have a right to make decisions that clinicians might consider unwise; the provisions of the Mental Capacity Act (2005) must be observed



# Resources

- **World Professional Association for Transgender Health Standards of Care:** <https://wpath.org/publications/soc> (new version 8 to be published in 2022)
- **Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline:** [Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society\\* Clinical Practice Guideline | The Journal of Clinical Endocrinology & Metabolism | Oxford Academic \(oup.com\)](#)
- **UCSF Guidelines for the Primary and Gender-Affirming Care of Transgender and Gender Nonbinary People:** [Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society\\* Clinical Practice Guideline | The Journal of Clinical Endocrinology & Metabolism | Oxford Academic \(oup.com\)](#)
- **GMC Ethical Guidance on Trans Healthcare:** <https://www.gmc-uk.org/ethical-guidance/ethical-hub/trans-healthcare>

Dr John Dean

john.dean1@nhs.net