Considerations in Hormone Therapy and the Primary Care Needs of the Aging Transgender Population

Andrew Hamp MD & Deborah Thorp MD
Gender Services at Park Nicollet

2019 Opportunity Conference, JustUs Health

Disclosures

- Professional relationships with JustUs Health
  - Dr Hamp is on the board of JustUs Health
  - Dr Thorp is on the advisory board for JustUs Health's Bush Foundation Innovation Grant
- Discussion of off-label use of medications

"LGBT elders experience stigma, discrimination and victimization across the life course."

- Institute of Medicine

LGBTQ Health Disparities

- Higher rates substance use & abuse
- Higher prevalence mental health issues
- LGBT youth - 2-3x more likely to attempt suicide, be homeless
- Transgender - high prevalence of suicide / attempts, victimization
- MSM - higher rates HIV, STIs, substance use
- Young MSM & transgender women - higher risk HIV (esp African American)
- WSW - more likely overweight / obese, less likely to obtain preventive services

★ LGBT Elders - isolated, lack of culturally appropriate services

Fenway, HHS (Healthy People), CDC, IOM

Key Issues

- **LGBTQ elders:**
  - Came of age in a very restrictive cultural context
  - LGBTQ elders have survived by being silent about their identities

★**Discrimination**:
  - Effects of long term discrimination
  - Long term lack of legal recognition
  - Economic disparities

★**Social Isolation**
  - More informal support networks, families of choice
  - Long term care, housing

★**Culturally competent healthcare**
  - Hormone considerations in aging transgender / GNC individuals

Demographics

- 2.7 million LGBTQ adults >50 years old
  - 1.1 million >65 years old
- 20% are people of color
- MN stats: 10,500 - 28,000 >65 in Twin Cities metro
- General lack of data

PFund, SAGE, Williams Institute

Cultural Context

- Culturally marginalized, frequently viewed as a sin, disease, crime
  - Homosexuality removed as a DSM diagnosis in 1973, gender identity disorder removed in 2013
- LGBTQ elders have survived by being silent about their sexual orientation and gender identities
- Slow progress starting in the late 1960s with Stonewall with many ups and downs
  - Baby boomers are more likely to be “out” with the social unrest that began with Stonewall
  - Older LGBTQ are much less likely to be out
  - MN: 59% out 48-54yo, 33% out >75

Fenway, MAP/SAGE, PFund

LGBTQ Generations

- Dr Karen Fredriksen-Goldsen
  - **Invisible Generation**
    - Born 1910s-1920s
  - **Silenced Generation**
    - Born 1930s-1940s
  - **Pride Generation**
    - Born 1950s-1960s
    - Stonewall

Fredriksen, MAP/SAGE

"Many of these older adults came of age during a time when they could be arrested or forced to undergo unwanted and harmful medical treatments to change their sexual orientation or gender identity."

–Aging & Health Report

Discrimination

- Cumulative effect of discrimination and fear can lead to adverse health outcomes
- Non-disclosure of sexual orientation associated with adverse outcomes
- Legacy of the medical community diagnosing LGBTQ identities as pathology
- 82% of LGBTQ elders report being victimized at least once
  - 64% at least three times
- 13% reported being denied health care

Fenway, Meyer, IOM, HHS, AHR

Legal Context

- LGBTQ elders have lived most of their lives without the recent legal protections that now exist
  - Yet there is still a lot of legal instability
- Access to insurance
- Unstable housing, economic distress
- Higher poverty levels compared to non-LGBTQ elders
- HHS and JCO guidelines / accreditation about healthcare facility visitation

Fenway, MAP/SAGE, Emlet

MN LGBTQ Elders

- **2002**: 90% of LGBTQ elders did not feel they would be treated "well" by aging services providers
  - Separate survey of aging services providers found lack of confidence in ability to work with LGBT elders
- **2012**: LGBTQ elders twice as likely to believe they would receive sensitive care
- 96% would access services that were designated as LGBT sensitive
- 94% felt there was a need for LGBT specific senior housing and social services

TTS, GLBT Generations, PFund

Social Isolation

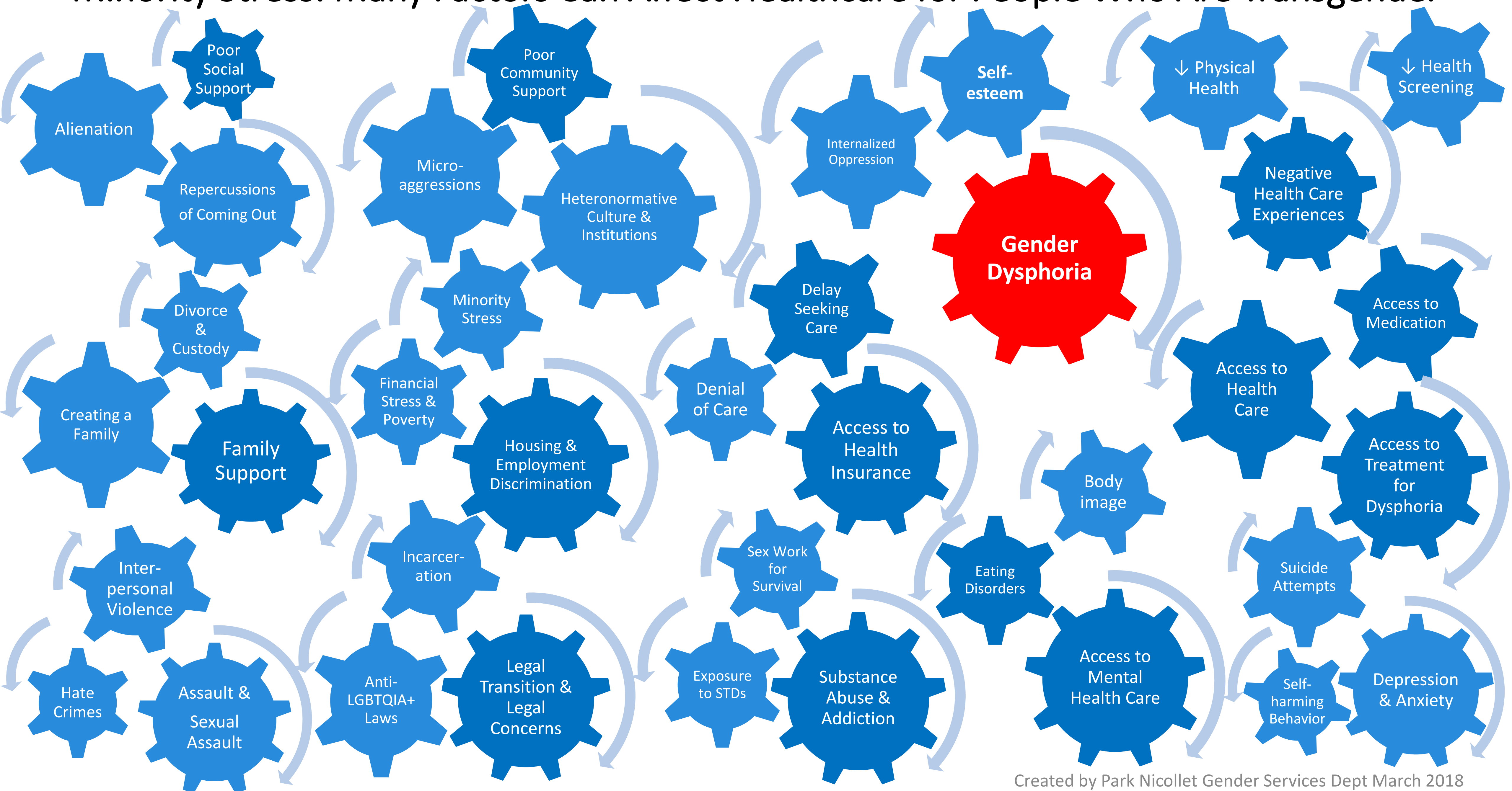
- Healthy People 2020: Elderly LGBT individuals face additional barriers to health because of isolation and a lack of social services and culturally competent providers
  - Legal recognition
  - Chosen families
  - Lack of funding

Social Isolation

- LGBT seniors are twice as likely to live alone
  - 2x as likely to be single, family estrangement
  - 3-4x less likely to have children
- Chosen families, informal care networks
  - Many LGBTQ elders care for each other
  - AIDS epidemic decimated many care networks
- Vulnerable to abuse (isolation, reliance on others)
- 1/3 LGBTQ elders don't have a will or healthcare directive

Healthy People, Sage, Aging & Health Report, Improving…

Minority Stress: Many Factors Can Affect Healthcare for People Who Are Transgender



Created by Park Nicollet Gender Services Dept March 2018

Long Term Care

- LGBTQ seniors living in LTC facilities are at high risk of overt discrimination, neglect and abuse
- LGBTQ elder top concerns:
  - 1. Discrimination from staff & residents
    - 89% worried about it, 43% experienced it
  - 2. Isolation
    - Restriction of visitors, refusal to accept medical POA
  - 3. Abuse and neglect
    - Denied medical treatment, refusal to use pronouns

Spirit on Lake

1 / MPR News / Jon Collins

2 / Ann Heisenfelt, AP

Park Nicollet
HealthPartners
make good happen

Culturally Competent Health Care

"LGBT people experience a lifetime of substandard medical care, during which barriers and disparities exacerbate medical outcomes that become insurmountable without family and community support."

No Golden Years…

Hormone Considerations

- Lack of culturally competent providers
- Older LGBT adults are less likely to be out and open than younger LGBT adults
- Less preventive screening, decreased access to transition related services and primary care

Cardiovascular Disease

- Higher rates of CV risk factors
- Hormones affect metabolic parameters
- Masculinizing hormones: no evidence of higher CV disease, but potential worsening of CV risk factors
  - No known increased morbidity / mortality
- Feminizing hormones: evidence isn't as clear
  - VTE risk and lipid derangements likely mitigated with transdermal formulations
- Attention to CV risk factors
- Shared decision making

UCSF, Streed et al

VTE

- Known thromboembolic risk, primarily estrogen
- Demonstrated increased risk with ethinyl estradiol
- Transdermal formulations and sublingual administration of oral estrogen have been shown to decrease VTE risk in trans women
- Personal / family history
  - Prothrombotic conditions
  - Smoking status
- Shared decision making

UCSF

Metabolic effects

- Diabetes
  - Effects of hormones unclear
- Lipid profile may be adversely affected
- Osteoporosis
  - Insufficient evidence to guide recommendations
  - Consider at age 65, earlier if risk factors, and if off hormones 5 years & s/p gonadectomy

UCSF

Transgender Hormone Therapy

- Testosterone carries risk of exacerbating risk factors (BP, insulin resistance, dyslipidemia)
- Estrogen carries VTE risk, which can be mitigated by transdermal formulations and/or lower doses
- Ongoing attention to risk factors (BP, lipids, tobacco, glucose metabolism)
- Shared decision making - risk / benefit ratio shifts with age
- When to stop hormones?

Streed

Cross-Gender Feminizing Hormones

Hormone Therapy: Goal is for testosterone to be in the normal female range or below, with estradiol levels in the normal female pre-menopausal range.

- **Anti-androgens**: spironolactone 50-200 mg daily with or without finasteride 5 mg daily
- **Estradiol**: Transdermal 0.2 to 0.3 mg; Oral 6-8 mg daily; Injectable Estradiol Valerate 4-8 mg or Estradiol Cypionate 2-4 mg weekly
- **Progesterone** is optional: Micronized Progesterone 200 mg daily for 3-4 years, onset 1-2 years after starting Estradiol

Body Changes: *Changes that are permanent

- Scalp hair growth varies
- ↓ muscle mass
- Softer skin, ↓ oil
- ↓libido/erections/ejaculate

Breast growth*

↓ testes, ↓ sperm*

↓ body hair

Redistribution of body fat

Park Nicollet | make good happen
HealthPartners

Medication Side Effects: Feminizing Medical Treatment

- Spironolactone- dry mouth, thirst, headache, dizziness, vomiting, diarrhea (usually in the first 1-3 months of use)
- Estrogen-
  - hot flashes, headaches, mood swings (usually in the first few weeks of use)
  - Mental health instability
  - Blood clots
  - Weight gain
  - Elevated blood pressure
  - Elevated triglycerides
  - Diabetes

Feminizing Gender Affirmation Procedures

- Top surgery
  - Breast augmentation / augmentation mammoplasty
- Bottom surgery
  - Orchiectomy, penectomy, vaginoplasty
  - Prostatectomy is not part of gender affirmation surgery

Park Nicollet® HealthPartners® | make good happen

Other Feminizing Procedures

- Laser hair removal, electrolysis
- Facial feminization procedures
  - Tracheal shave (Adam's apple reduction), brow bossing, etc
  - Vocal cord procedures

Masculinizing Treatments

Hormone Therapy

- Goal is for testosterone to be in the physiologic male range.
  - **Injectable Testosterone Cypionate or Enanthate** – typical dose of 60-80 mg IM weekly
  - **Topical Testosterone Gels** in 1%, 1.62% or 2%
  - **Testosterone Undecanoate (Aveed)** every 10 weeks (EXPENSIVE!)
  - **Testosterone Pellets (Testopel)** inserted every 4 months (EXPENSIVE!)

Body Changes: *Changes that are permanent

- ↑ **facial/body hair,** ↓ **scalp hair***
- Oily skin, acne
- Vaginal atrophy
- Cessation menses/amenorrhea
- **Deepening of voice***

↑ muscle mass

↑ libido

↓ breast size

Clitoral enlargement*

Medication Side Effects: Masculinizing Medical Treatment

- Decreased estrogen- hot flashes, headaches, mood swings (in the first few months), vaginal dryness (can last years).
- Testosterone-
  - Mood swings/mental health instability- especially with bipolar, schizophrenia, other mood disorders.
    - Worsen ADHD symptoms
  - Irregular vaginal bleeding
    - If testosterone levels get too high, the testosterone starts metabolizing to estrogen via aromatase.
  - Acne
  - Polycythemia (increased blood viscosity) and blood clots
  - Weight gain
  - Diabetes
  - Elevated blood pressure
  - Elevated cholesterol

Masculinizing Gender Affirmation Procedures

- Top surgery
  - Mastectomy / chest reconstruction
- Bottom surgery
  - Hysterectomy, vaginectomy, metoidioplasty, phalloplasty, scrotoplasty

When to stop hormones?

- No standard approach
- Shared decision making
- Patient perspectives
  - Ongoing dysphoria?
  - Do they feel they need the hormonal support?
- Medical co-morbidities, past medical history, family history
- Age
- History of complications
- Risk / benefit ratio
- Social considerations

Other Primary Care Considerations

- What are other issues to consider in aging transgender individuals?
- What do you think providers need to know about aging trans and NB folks? LGBTQ community? General population?

Other Primary Care Considerations: Sexual Health

- Patient knowledge re: STIs/HIV
  - Less condom use
- Provider assumptions
  - Less screening
  - Open ended questions about risk making no assumptions about anatomy
- Not being out to your provider impairs communication further
- Comprehensive screening regardless of sexual orientation and gender identity
  - Gender of partners, numbers of partners, type of sex
- Erectile dysfunction, atrophic vaginitis, etc.

Other Primary Care Considerations: HIV / AIDS

- Aging issues in general in HIV / AIDS community
- PrEP
- The only difference in treatment of HIV+ individuals on hormones is avoiding amprenavir & fosamprenavir in those on feminizing hormones
  - Caution with TMP-SMX treatment / prevention of OIs and spironolactone
    - Hyperkalemia risk - avoid in older individuals
- Often diagnosed at later stages in older adults

UCSF

Other Primary Care Considerations

- **Mental Health**
  - Closely linked to discrimination
    - Dramatically increased rates of suicide attempts
  - Co-morbidities may or may not be related to gender dysphoria
  - Coming out, transitioning
  - Legacy of medical pathologization
    - DSM
    - Traditional mental health model of accessing hormones vs informed consent
  - Trauma informed, gender affirming care
    - Referrals as needed
- **Substance use** - including tobacco, alcohol

UCSF

Cancer Screening is Anatomy Based

- Screen based on anatomic inventory per cisgender guidelines
- UCSF CoE Transgender Health:
  - "As a rule, if an individual has a particular body part or organ and otherwise meets criteria for screening based on risk factors or symptoms, screening should proceed regardless of hormone use."

Cancer Screening - Trans Men

- Colon cancer: same guidelines as for cisgender individuals
- Breast cancer:
  - Can consider chest wall / axillary exam annually if s/p mastectomy
  - Mammography per cisgender guidelines if no mastectomy, or if only a reduction was done
- Cervical cancer: same guidelines as for cisgender women, unless s/p total hysterectomy
  - "If you have it check it"
  - Cervical atrophy from testosterone can make pathology evaluation challenging

Cancer Screening - Trans Women

- Colon cancer: same guidelines as for cisgender individuals
- Breast cancer: mammography > 50 q2 years
- Prostate cancer: shared decision making
  - PSAs can be falsely low if on feminizing hormones- limit to high risk patients
- Pap tests not indicated in neovaginas

Summary

- LGBT elders have experienced a lifetime of discrimination and inequalities, which results in health disparities
- LGBT elders have survived by being silent about their identities
- Discrimination, social isolation and lack of culturally competent health care are major issues
  - Incorporate sociopolitical aspect into clinical care
- Transgender care is anatomy based, not "Gender" based
- Shared decision making is key in the management of hormones in context of aging

Medical Resources

- WPATH: World Professional Association for Transgender Health
- GLMA: Health Professionals Advancing LGBT Equality
- UCSF Center of Excellence for Transgender Health
  - Primary care protocols - http://www.transhealth.ucsf.edu
- National Center for Transgender Equality
- Fenway Health & National LGBT Health Education Center
  - Webinars, multiple resources
- Fenway Guide to LGBT Health, 2nd Ed. (ACP)
- SAGE: Services & Advocacy for GLBT Elders
- Transline (at Lyon / Martin Health Services): Web based medical consultations
- Journals: www.liebertpub.com
  - LGBT Health
  - Transgender Health
- **MedLine clearinghouse: https://medlineplus.gov/gaylesbianbisexualandtransgenderhealth.html**

Training Resources

- National Resource Center on LGBT Aging: www.lgbtagingcenter.org
- SAGE Services & Advocacy for Gay Lesbian Bisexual & Transgender Elders: www.sageusa.org
- LGBT Aging Project: www.lgbtagingproject.org
- Minnesota:
  - Training to Serve: www.trainingtoserve.org
  - Outfront MN: www.outfrontmn.org
  - JustUs Health: www.justushealth.org

Acknowledgements

- Movement Advancement Project & SAGE Report: Understanding Issues Facing LGBT Older Adults
- SAGE - Advocacy and Services for LGBT Elders
- Aging & Health Report - Disparities and Resilience Among Lesbian Gay Bisexual and Transgender Older Adults
- The Fenway Guide to Lesbian Gay Bisexual and Transgender Health. 2nd Ed. American College of Physicians. Makadon et al. 2015.
- UCSF Center of Excellence for Transgender Health, Primary Care Protocols, Deutsch et al
- Mark Simone MD, Henry Ng MD, Jennifer Potter MD

Thank you!

- Dr. Andrew Hamp hampaa@parknicollet.com
- Dr. Deb Thorp deborah.thorp@parknicollet.com

Works Cited

- American Medical Association. AMA policy regarding sexual orientation: H-65.973 health care disparities in same-sex partner households. 2009; Houston TX; 2009
- Center of Excellence for Transgender Health, Department of Family and Community medicine, University of California San Francisco. Guidelines for the Primary and Gender-Affirming Care of Transgender and Nonbinary People; 2nd edition, Deutsch MB, ed. June 2016. www.transhealth.ucsf.edu/guidelines
- Zians J. LGBT San Diego's Trailblazing generation: housing related needs of LGBT seniors. 2011. www.thecentersd.org/pdf/programs/senior-needs-report.pdf
- Emlet C. Social Economic and Health Disparities Among LGBT Older Adults. Generations: Journal of the American Society on Aging 40. No 2 (106)
- US Department of Health and Human Services, Office of Disease Prevention and Health Promotion> Healthy People 2020. Lesbian gay bisexual and transgender health. 2014.
- Meyer IH. Prejudice, social stress and mental health in lesbian gay and bisexual populations: conceptual issues and research evidence. Psychol Bull. 2003;129:674-97.

Work Cited, continued

- National Academies of Science. (2011). The health of lesbian, gay, bisexual and transgender people: Building a foundation for a better understanding. Washington DC: Institute of Medicine of the National Academies.
- The Aging and Health Report: Disparities and Resilience among Lesbian Gay Bisexual and Transgender Older Adults. Fredriksen-Golden et al. Seattle: Institute for Multigenerational Health. 2011.
- Movement Advancement Project and SAGE. "Understanding Issues Facing LGBT Older Adults". 2017.
- Improving the Lives of Transgender Older Adults. SAGE and NCTE National Center for Transgender Equality. June 2012.
  - Improving the Lives of LGBT Older Adults -http://www.lgbtmap.org/policy-and-issue-analysis/improving-the-lives-of-lgbt-older-adults
- GLBT Generations data: Croghan, C, et al. 2003, April. GLBT senior needs assessment survery. Poster at Joint Conference of American Society on Aging and the National Council on the Aging, Chicago IL.
- Croghan C, et al. 2012. Twin Cities LGBT Aging Needs Assessment Survey. Minneapolis: Greater Twin Cities United Way and PFund.
- Arnold JD, et al. Incidence of Venous thromboembolism in transgender women receiving oral estradiol. J Sex Med. 2016.
- Feldman JL, Goldberg JM. Transgender primary medical care. Int J Transgender. 2006; 9:3-34.
- Asscheman H, Giltay EJ, Megens, JA, et al. A long-term follow-up study of mortality in transsexuals receiving treatment with cross-sex hormones. Eur J Endocrinol. 2011; 164:635-42.

Work Cited, continued

- Grant, Jaime M., Lisa A. Mottet, Justin Tanis, Jack Harrison, Jody L. Herman, and Mara Keisling. Injustice at Every Turn: A Report of the National Transgender Discrimination Survey. Washington: National Center for Transgender Equality and National Gay and Lesbian Task Force, 2011.
- Makadon et al, Ed. Fenway Guide to Lesbian, Gay, Bisexual and Transgender Health, 2nd Ed. American College of Physicians.
  - Makadon et al, Ch 1: Providing Optimal Health Care for LGBT People: Changing the Clinical Environment and Educating Professionals.
  - Simone et al, Ch. 7: Caring for LGBT Older Adults.
  - Gelman et al, Ch 8: Principles for Taking an LGBTQ-Inclusive Health History and Conducting a Culturally Competent Physical Exam.
  - Keatley et al, Ch 17: Creating a Foundation for Improving Trans Health: Understanding Trans Identities and Health Care Needs.
  - Feldman et al, Ch 18: Medical and Surgical Management of the Transgender Patient: What the Primary Care Clinician Needs to Know.
- Streed CG, Harfouch O, Marvel F, Blumenthal RS, Martin SS, Mukherjee M. Cardiovascular Disease Among Transgender Adults Receiving Hormone Therapy: A Narrative Review. Ann Intern Med. 2017; 167(4):256-267.

Work Cited, continued

- Coleman E et al. Standards of Care for the Health of Transsexual, Transgender, and gender-nonconforming people, vesion 7. Int J Transgend. 2012; 13: 165-232. (aka WPATH Standards of Care version 7, www.wpath.org)
- White Hughto J, Reisner S. A Systematic Review of the effects of Hormone Therapy on Psychological Functioning and Quality of Life in Transgender Individuals. Transgender Health, Vol 1.1, 2016.
- Deutsch M, Ed. Guidelines for the Primary and Gender Affirming Care of Transgender and Gender Nonbinary People, 2nd Ed. University of California - San Francisco, Center of Excellence for Transgender Health. Dept of Family & Community Medicine. June 2016.
- Thorp D. Transgender Care. 2016. Park Nicollet Webinar.
- Ng H. Transgender Health Care. Presentation at National Meeting of American College of Physicians, 2016.
- Potter J, Makadon H, Mayer K. Addressing Clinical Care of Lesbian, Gay, Bisexual & Transgender People (LGBT). Presentation at National Meeting of American College of Physicians, 2016.
- Murad et al. Hormonal Therapy and Sex Reassignment: a Systematic Review and Meta-analysis of Quality of Life and Psychosocial Outcomes. Clinical Endocrinology, 2009.
- US Department of Health and Human Services, Office of Disease Prevention and Health Promotion. 2014. Healthy People 2020: https://www.healthypeople.gov/2020/topics-objective/topic/lesbian-gay-bisexual-and-transgender-health
- The Health of Lesbian, Gay, Bisexual and Transgender People: Building a Better Foundation for Better Understanding: A Report from the Insitute of Medicine. http://www.nationalacademies.org/hmd/Reports/2011/The-Health-Of-Lesbian-Gay-Bisexual-and-Transgender-People.aspx

Work Cited, continued

- Fitzgerald, E. No Golden Years at the End of the Rainbow: How a Lifetime of Discrimination Compounds Economic and Health Disparities for LGT Older Adults. The National Gay and Lesbian Task Force. August 30, 2013.
  - http://www.thetaskforce.org/reports_and_research/no_golden_years
  - http://www.thetaskforce.org/downloads/reports/no_golden_years.pdf
- "The Health of Lesbian, Gay, Bisexual and Transgender People: Building a Foundation for Better Understanding." Institute of Medicine, Committee on Lesbian, Gay, Bisexual and Transgender Health Issues and Research Gaps and Opportunities. Study Sponsor: National Institutes of Health. March 31, 2011.
  - http://www.iom.edu/Reports/2011/The-Health-of-Lesbian-Gay-Bisexual-and-Transgender-People.aspx
  - http://www.iom.edu/~media/Files/Report%20Files/2011/The-Health-of-Lesbian-Gay-Bisexual-and-Transgender-People/LGBT%20Health/%202011%20Report%20Brief.pdf

Photo Credits

1: https://www.mprnews.org/story/2013/09/24/spirit-on-lake-lgbt-seniors

2: http://www.startribune.com/minneapolis-gay-seniors-find-safe-haven-in-spirit-on-lake-housing/238401651/