

East Tennessee State University

Digital Commons @ East Tennessee State University

Appalachian Student Research Forum

2020 ASRF Presentations

Access to Long Acting Reversible Contraceptives in Northeast TN: A Study of Reproductive Care in Hawkins County, TN

Vidiya Sathananthan

Quillen College of medicine

Jacqueline R. Zimmerman

Quillen College of Medicine

Jacalyn P. Gilbert-Green

ETSU Department of Family Medicine

Ivy Click

ETSU Department of Family Medicine

Follow this and additional works at: <https://dc.etsu.edu/asrf>

Sathananthan, Vidiya; Zimmerman, Jacqueline R.; Gilbert-Green, Jacalyn P.; and Click, Ivy, "Access to Long Acting Reversible Contraceptives in Northeast TN: A Study of Reproductive Care in Hawkins County, TN" (2020). *Appalachian Student Research Forum*. 31.
<https://dc.etsu.edu/asrf/2020/presentations/31>

This Oral Presentation is brought to you for free and open access by the Events at Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Appalachian Student Research Forum by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact digilib@etsu.edu.

ACCESS TO LONG ACTING REVERSIBLE CONTRACEPTIVES IN NORTHEAST TN

A small study in Hawkins County, Tennessee



QUILLEN
COLLEGE *of* MEDICINE

EAST TENNESSEE STATE UNIVERSITY

CONTRIBUTORS

Jacquie Zimmerman, Medical Student (ETSU Quillen College of Medicine)

Vidiya Sathananthan, Medical Student (ETSU Quillen College of Medicine)

Dr. Ivy Click, Ed.D, Assistant Professor (ETSU Quillen Department of Family
Medicine)

Dr. Paige Gilbert-Green, D.O., Assistant Professor (ETSU Quillen Department of
Family Medicine)

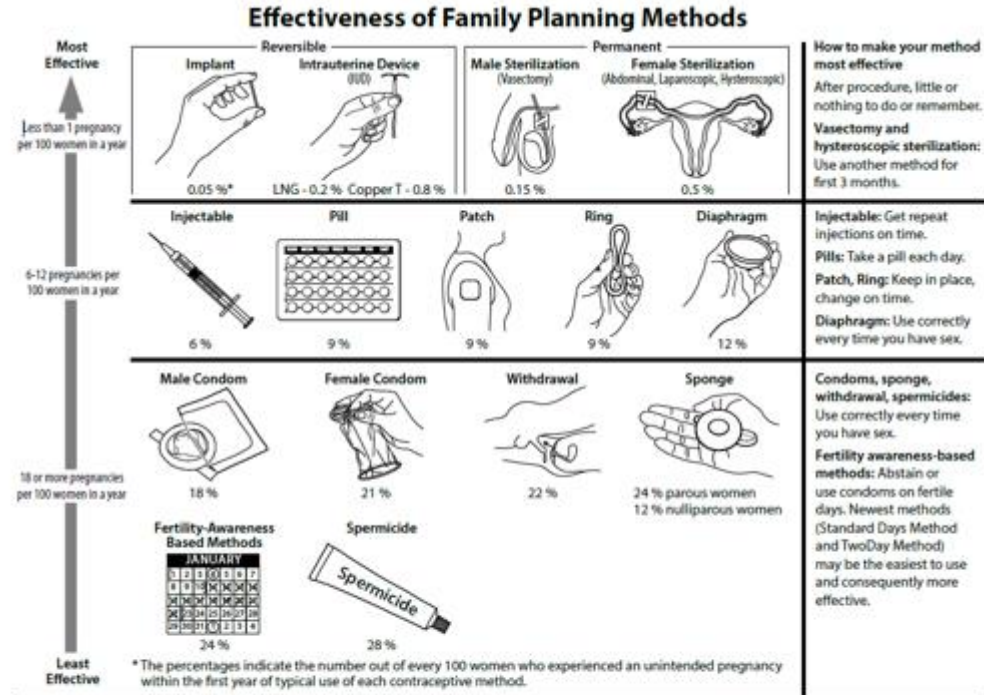
Family planning and LARCs

Most effective reversible contraceptive methods are implants (Nexplanon) and intrauterine devices (IUDs), collectively known as Long Acting Reversible Contraception = LARCs

Methods that require more effort by the user have higher typical failure rates.

Both the pill and condom (most common methods used by teens) are difficult to use correctly and consistently by most users.

A nationwide study of 2000 women showed that 45% of young women age 18-45 using pills missed one or more pills in the last 3 months and 62% of those using condoms were not using them every time they had sex.



CS 242797



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

CONDOMS SHOULD ALWAYS BE USED TO REDUCE THE RISK OF SEXUALLY TRANSMITTED INFECTIONS.

Other Methods of Contraception

Lactational Amenorrhea Method: LAM is a highly effective, temporary method of contraception.

Emergency Contraception: Emergency contraceptive pills or a copper IUD after unprotected intercourse substantially reduces risk of pregnancy.

Adapted from World Health Organization (WHO) Department of Reproductive Health and Research, Johns Hopkins Bloomberg School of Public Health/Centers for Communication Programs (CCP), Knowledge for health project. Family planning: a global handbook for providers (2011 update). Baltimore, MD: Geneva, Switzerland: CCP and WHO; 2011. and Trussell J. Contraceptive failure in the United States. Contraception 2011;83:397-404.

Benefits of LARCs

- Typical use failure rates <1%
- Cost-effective
- Reversible
- “Forgettable contraception”/not user-dependent
- Minimal maintenance for 3-10 years
- No impact on future fertility
- ACOG recommended for young women and nulliparous women

Barriers to LARC use

- Misconceptions, such as “IUDs cause pelvic inflammatory disease”
- Patient preference, which may be secondary to poor information and counseling about LARCs
- Lack of primary care provider training on inserting and removing LARCs
- Low supply of LARCs
- High upfront cost, if paying out of pocket

State of reproductive care in rural America

Rural health disparities and complex social determinants of health are significant.

Rural women experience higher rates of chronic medical conditions, must travel longer distances to access health services, and are more likely to be poor, lack health insurance, and rely on Medicare and Medicaid.

Rural women have less access to women's health services.

Only 6.4% of OB/GYNs practice in rural areas. Family physicians often provide 100% of OB/GYN care, but that number is decreasing too.

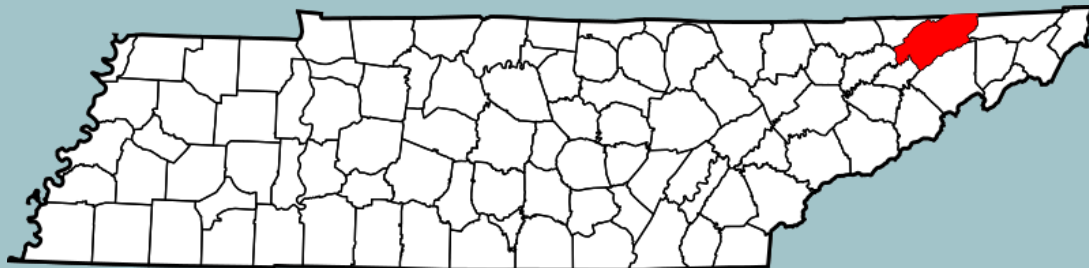
Reproductive health care is lacking in rural areas.

Receipt of reproductive health services by sexually active women was less likely for rural women. Rural women relied more on female sterilization than urban women.

Improvement strategies are in the works to better women's health in rural America.

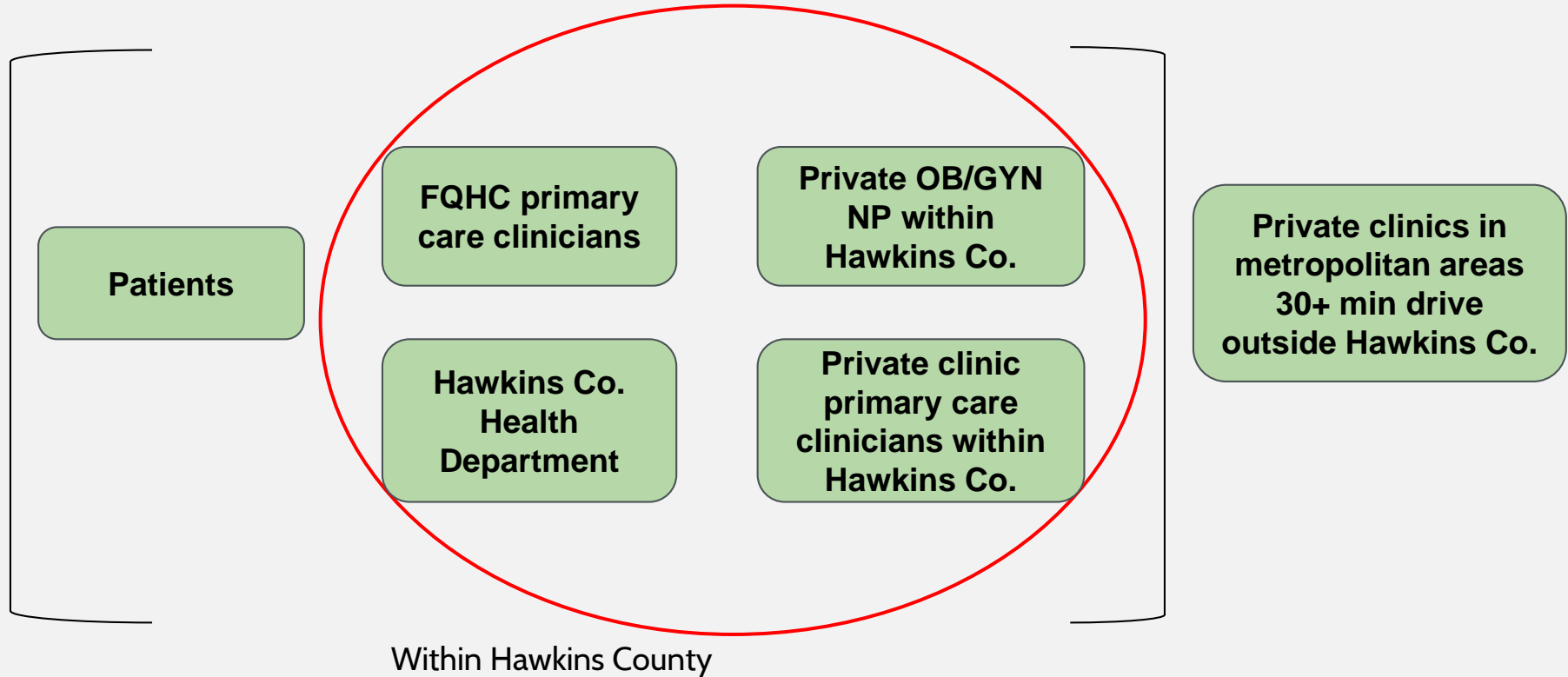
Family Med/OB/GYN residency programs are offering rural training track. Legislation to offer financial incentives to providers who would practice in rural areas

Snapshot of Hawkins County, TN



- Children in single-parent households: 40%
- Median household income: \$38,728
- Uninsured: 11%
- PCP ratio: 3,540:1
- Teen births: 39
- Low birthweight: 9%

Reproductive health care stakeholders



PROJECT GOALS

1. Measure knowledge and current practice of clinical providers regarding contraceptive counseling and use, specifically focused on long acting reversible contraceptives (LARCs), in Hawkins County, TN
2. Identify possible promoters or barriers to providing LARCs from the perspective of clinical providers in Hawkins County, TN
3. Use results of study to bridge gaps in care or access, as identified by providers

METHODS

1. Online survey with medical providers (NPs, PAs, and physicians) in Hawkins County to collect information on their practices related to contraception, including LARCs
2. Interview subset of participants to qualitatively explore providers' perspectives
3. Quantitative analysis of survey data & thematic analysis of interviews

PROPOSED STUDY POPULATION

1. Primary care providers (adult and pediatric) at Rural Health Services Consortium (FQHC) of Rogersville
1. Care providers at Hawkins County Health Department - both family planning specific providers and general primary care providers
1. Other private care providers within Hawkins County who see patients of reproductive potential (i.e. Ballad Health clinic, HMG, etc.)

**FQHC primary
care clinicians**

**Hawkins Co.
Health
Department**

**Private clinic
primary care
clinicians within
Hawkins Co.**

**Private OB/GYN
NP within
Hawkins Co.**

LIMITATIONS

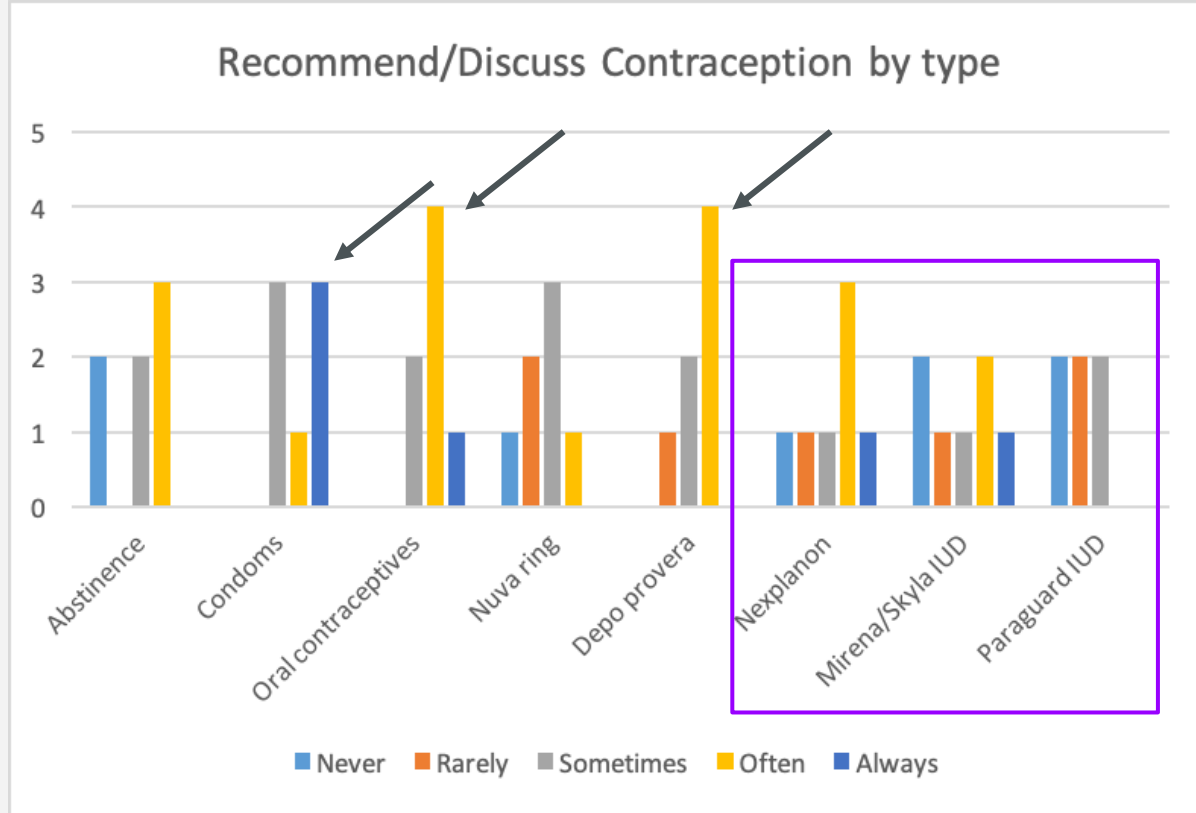
1. Limited time
1. **No permission to include Hawkins County Health Department and no access to health department providers' email addresses**
1. **Low response rate to online survey**
1. Limited number of providers willing to participate in interview
1. Difficulty scheduling interviews due to providers' schedules

RESULTS

Final study population

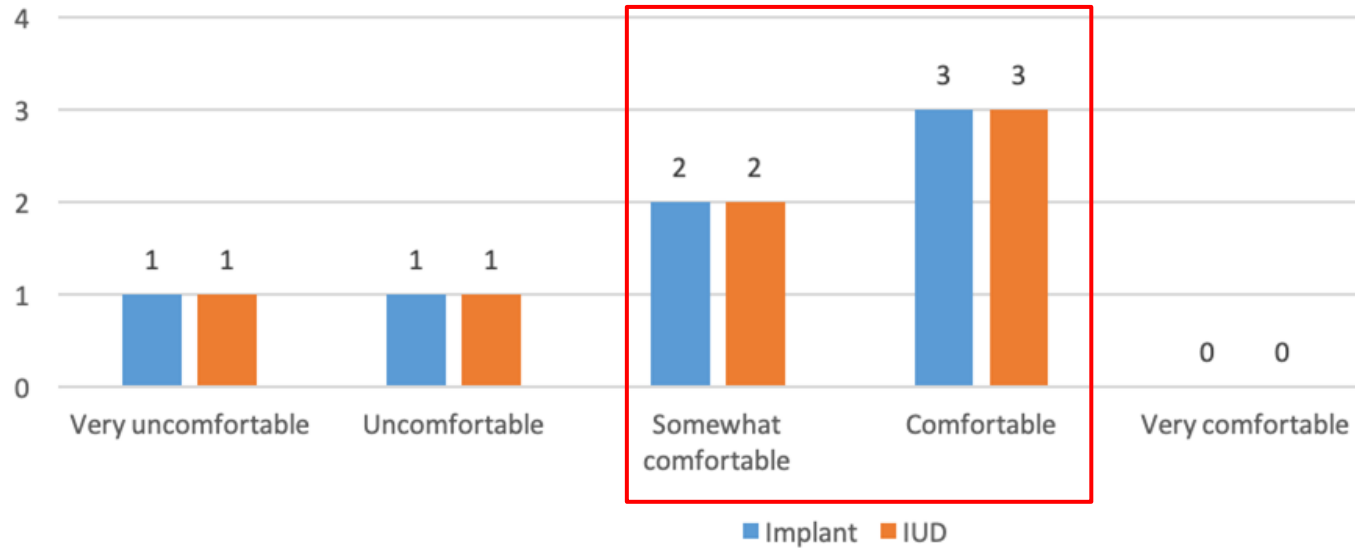
- N = 7
- 6 female, 1 male
- 5 NPs, 2 PAs
- 5 at Federally Qualified Health Center, 2 at private clinic
- Wide patient age range: 10 y/o to 50+ y/o
- Wide range of time as healthcare provider: 0-5 years to 21+ years
- All 7 discuss family planning with at least some patients in day to day practice

Counseling



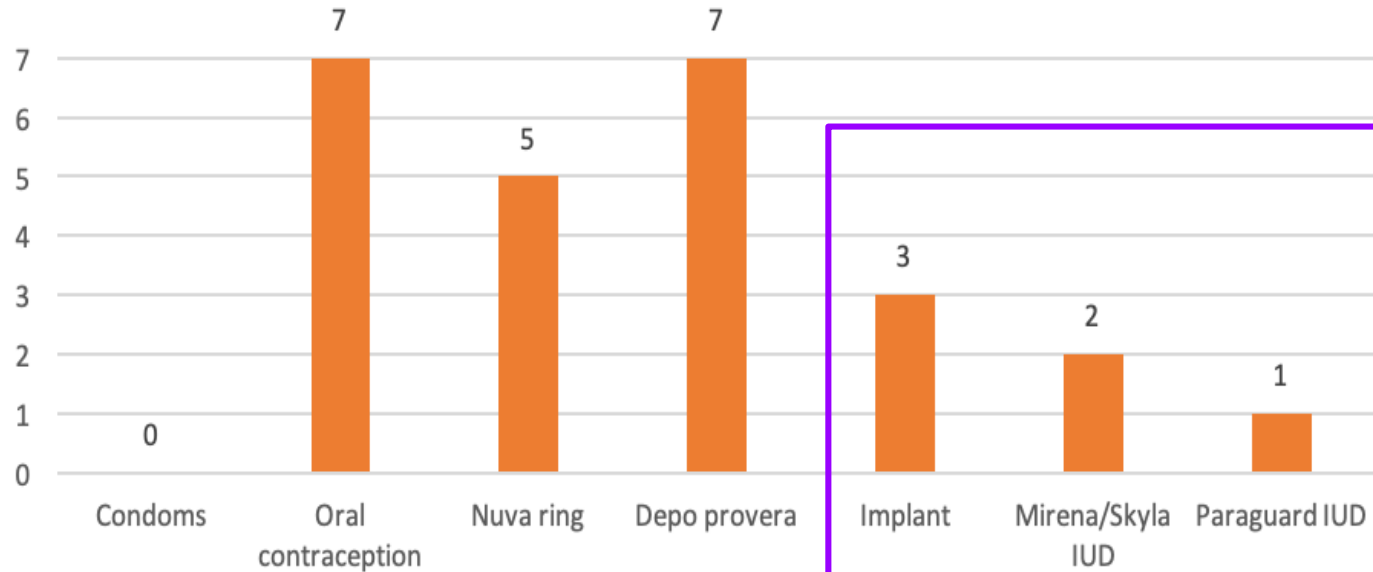
Counseling

Comfort discussing risks/benefits of LARCs



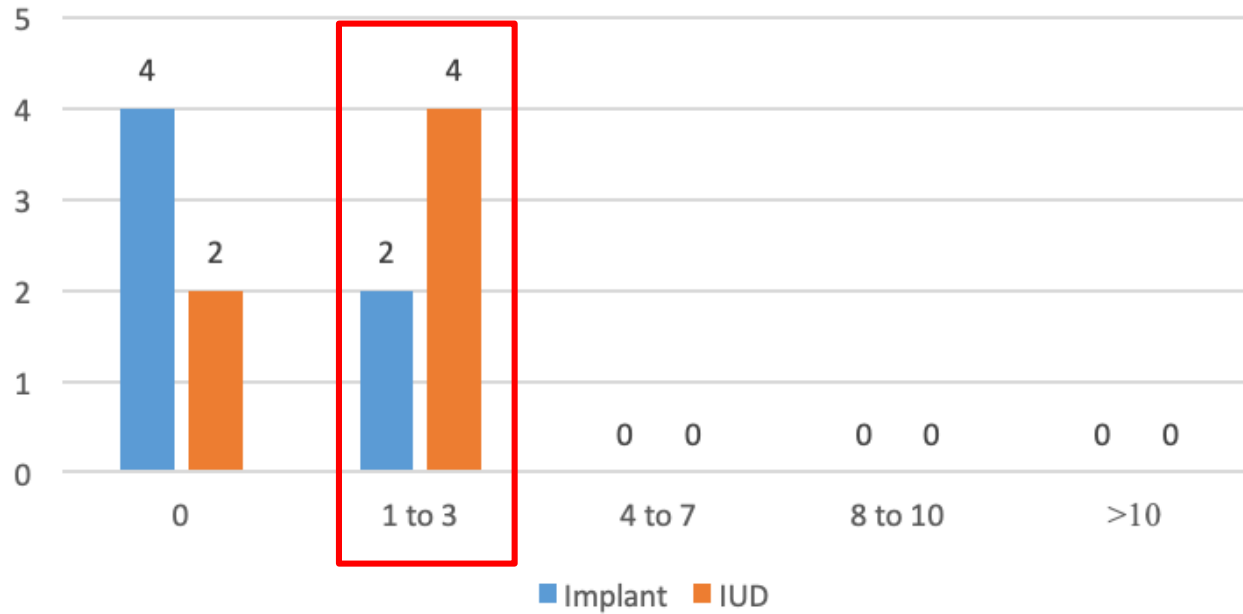
Direct provision

Provision of contraception by type



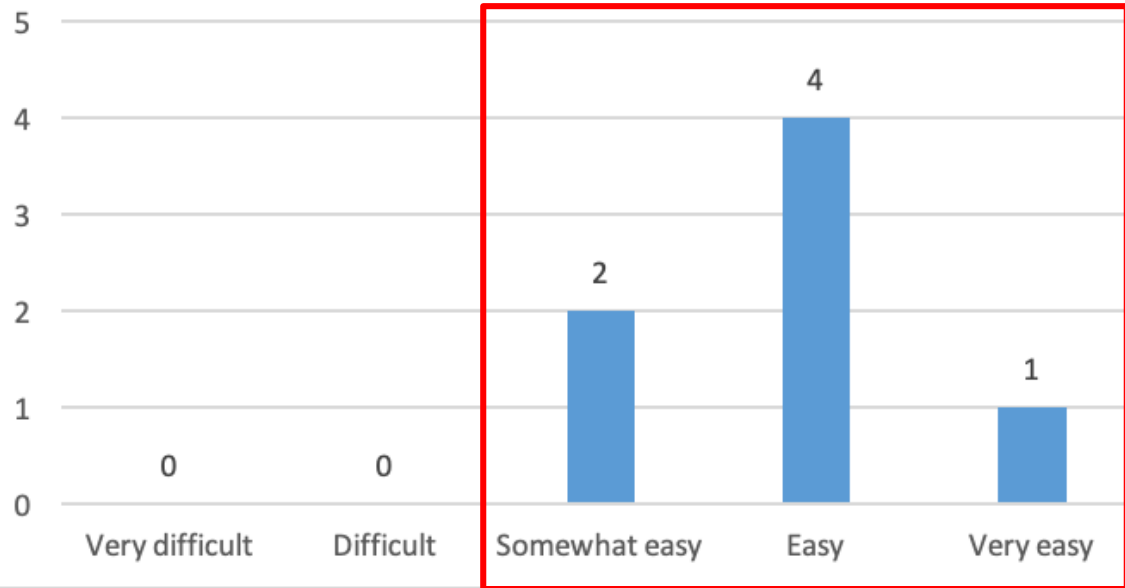
Referral

Referrals per month for LARCs



Perceived Barriers

Patient ease of obtaining LARCs, from provider's perspective



Themes from interviews

- Proper education is severely lacking/ root of most problems
 - Don't know options available to them (only know about OCPs/Depot)
 - What they do know comes from others' experiences
- Patients are not adequately counseled prior to appointment
- Agreement that LARCs are easy to obtain if that is what patient desires
- Good relationship with the Health Department
- Always refers out for high-risk substance abuse patients

CONCLUSIONS

- **Difficult to draw statistically sound conclusions with limited sample and unavailable baseline data**
- Possible discrepancy between providers' self-reported level of comfort with counseling on LARCs vs. OB/GYN providers' perception of other providers' counseling ability
- Access to LARCs available, either by PCP or close referral, but possible lack of desire by patients, which may be confounded by quality of counseling on LARCs
- Demand for LARCs may be low, influencing clinic's supply and providers' decision of which procedures to include in practice
- We recognize the valuable but missing perspective from patients as a result of study design.

Proposed interventions

Short-term

- Develop one page document with basic breakdown of benefits and risks of each birth control type
- Distribute one pager to medical offices for patients to read

- Brief training with care providers to utilize one pager when counseling patients on birth control options

Long-term

- Organize a refresher training led by the main referral OB/GYN providers (both private and public) that would help primary care providers better counsel patients on birth control options, including LARCs
- Conduct LARC knowledge assessment with non-OB/GYN primary care providers at periodic intervals and use as launching point for future refresher trainings

Takeaways for medical students & residents

- Medical students and residents are well positioned and equipped to conduct research in rural areas that translate into improving care and support rural health care advocacy efforts
- How you frame research to the community is important
- Stakeholder assessments are valuable
- Get stakeholders invested and involved early on
- Work with stakeholders to develop and implement interventions to improve delivery of care
- As much as possible, attempt long-term continuation of quality improvement, research, and service efforts

Questions?

Comments or concerns?

REFERENCES

Daniels K, Martinez GM, Nugent CN. Urban and rural variation in fertility-related behavior among U.S. women, 2011–2015. NCHS Data Brief, no 297. Hyattsville, MD: National Center for Health Statistics. 2018.

Daniels K, Abma JC. Current contraceptive status among women aged 15–49: United States, 2015–2017. NCHS Data Brief, no 327. Hyattsville, MD: National Center for Health Statistics. 2018.

Branum AM, Jones J. Trends in long-acting reversible contraception use among U.S. women aged 15–44. NCHS data brief, no 188. Hyattsville, MD: National Center for Health Statistics. 2015.

Access to contraception. Committee Opinion No. 615. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2015;125:250–5.

Austad K, Shah P, Rohloff P (2018) Correlates of long-acting reversible contraception uptake among rural women in Guatemala. *PLOS ONE* 13(6): e0199536.<https://doi.org/10.1371/journal.pone.0199536>

Parks C, Peipert JF. Eliminating health disparities in unintended pregnancy with long-acting reversible contraception (LARC). *Am J Obstet Gynecol*. 2016 Jun;214(6):681-8.

Black KI, Day CA. Improving Access to Long-Acting Contraceptive Methods and Reducing Unplanned Pregnancy Among Women with Substance Use Disorders. *Subst Abuse*. 2016 May 12;10(Suppl 1):27-33.

REFERENCES (cont.)

Raidoo S, Kaneshiro B. Providing Contraception to Adolescents. *Obstet Gynecol Clin North Am.* 2015 Dec;42(4):631-45.

Chiles DP, Roberts TA, Klein DA. Initiation and continuation of long-acting reversible contraception in the United States military healthcare system. *Am J Obstet Gynecol.* 2016 Sep;215(3):328.e1-9.

Beeson T, Wood S, Bruen B, Goldberg DG, Mead H, Rosenbaum S. Accessibility of long-acting reversible contraceptives (LARCs) in Federally Qualified Health Centers (FQHCs). *Contraception.* 2014 Feb;89(2):91-6.

Tschann M, Salcedo J, Soon R, Elia J, Kaneshiro B. Norms, Attitudes, and Preferences: Responses to a survey of teens about sexually transmitted infection and pregnancy prevention. *J Pediatr Adolesc Gynecol.* 2016 Sep 20.

Foster DG, Barar R, Gould H, Gomez I, Nguyen D, Biggs MA. Projections and opinions from 100 experts in long-acting reversible contraception. *Contraception.* 2015 Dec;92(6):543-52.

Brehm, Caryn, Rollston, Rebekah, Click, Ivy. Family Physicians' Knowledge and Comfort with Patients' Sexual Health Concerns. East Tennessee State University Poster Presentation. Appalachian Research Forum. 8 apr 2016.