

## Background

- Complication rates from 1st trimester manual vacuum aspiration (MVA) range from 0% - 5.6%<sup>1-3</sup>
- MVA for miscarriage management & abortion are mainly performed at freestanding family planning clinics, not family medicine centers<sup>4</sup>
- Family physicians at the Institute for Family Health (IFH) have been providing MVA in the primary care setting for seventeen years
- There is a lack of robust published data about safety & outcomes from MVAs done in the family medicine setting

## Objectives

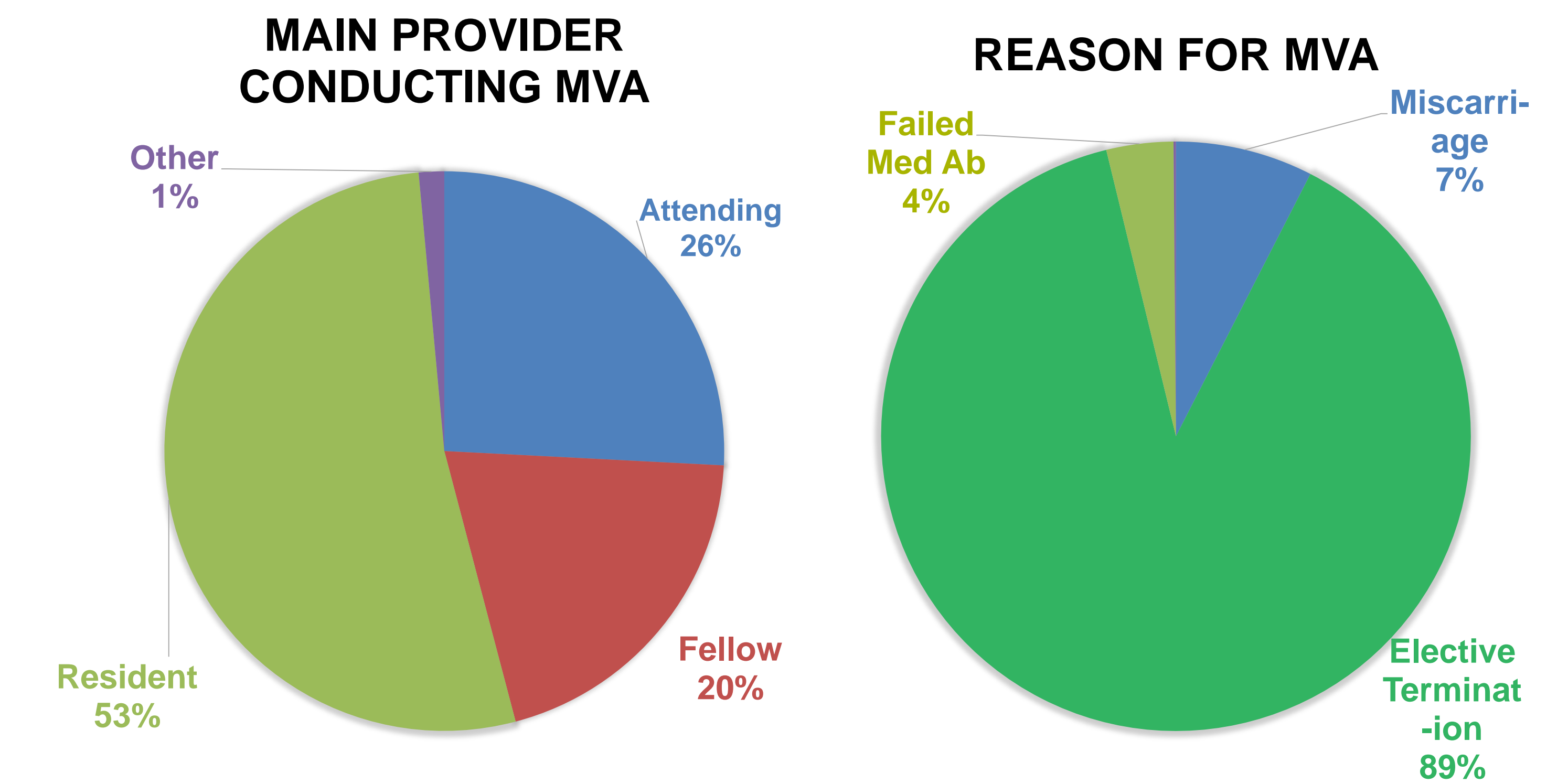
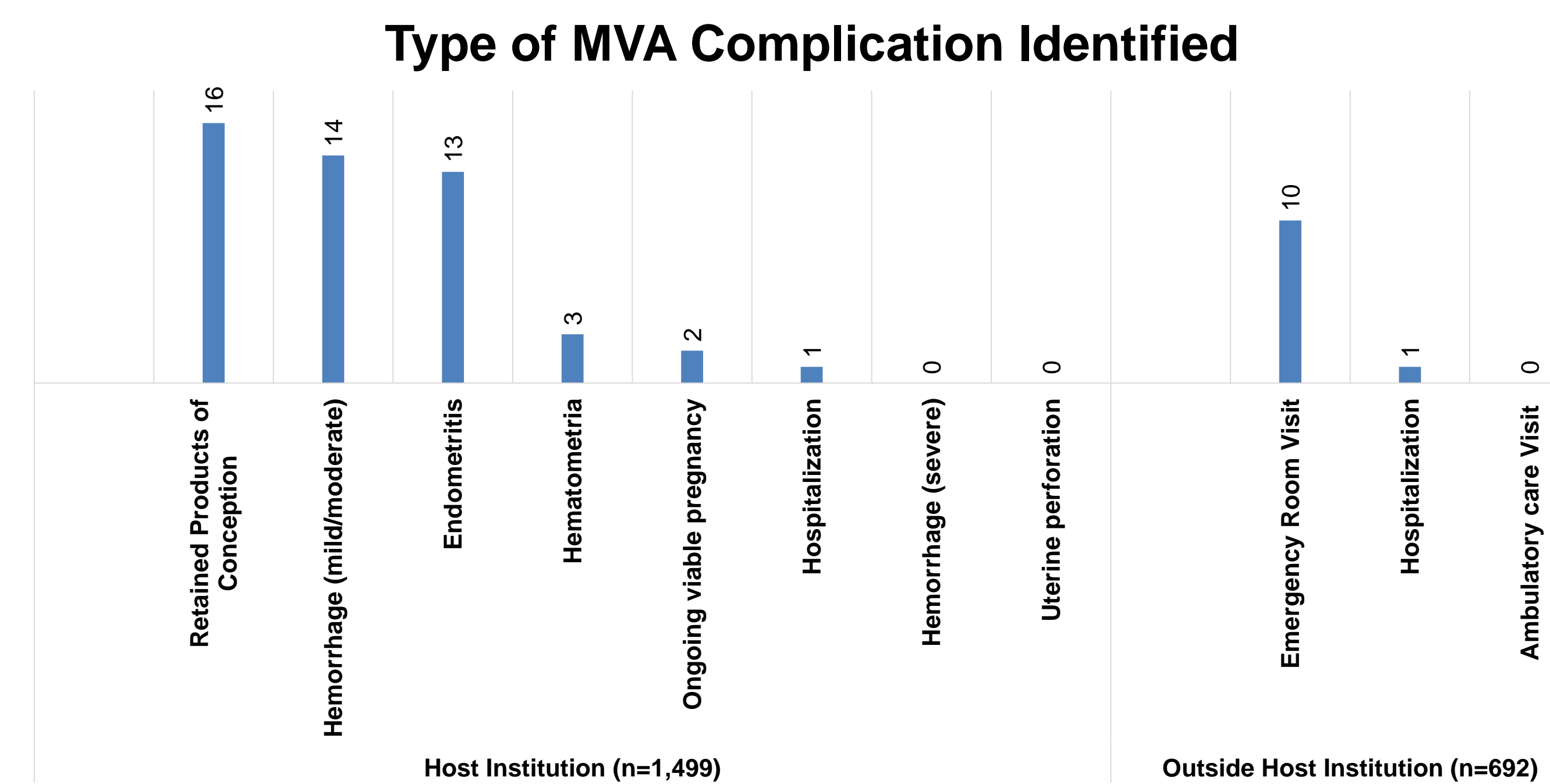
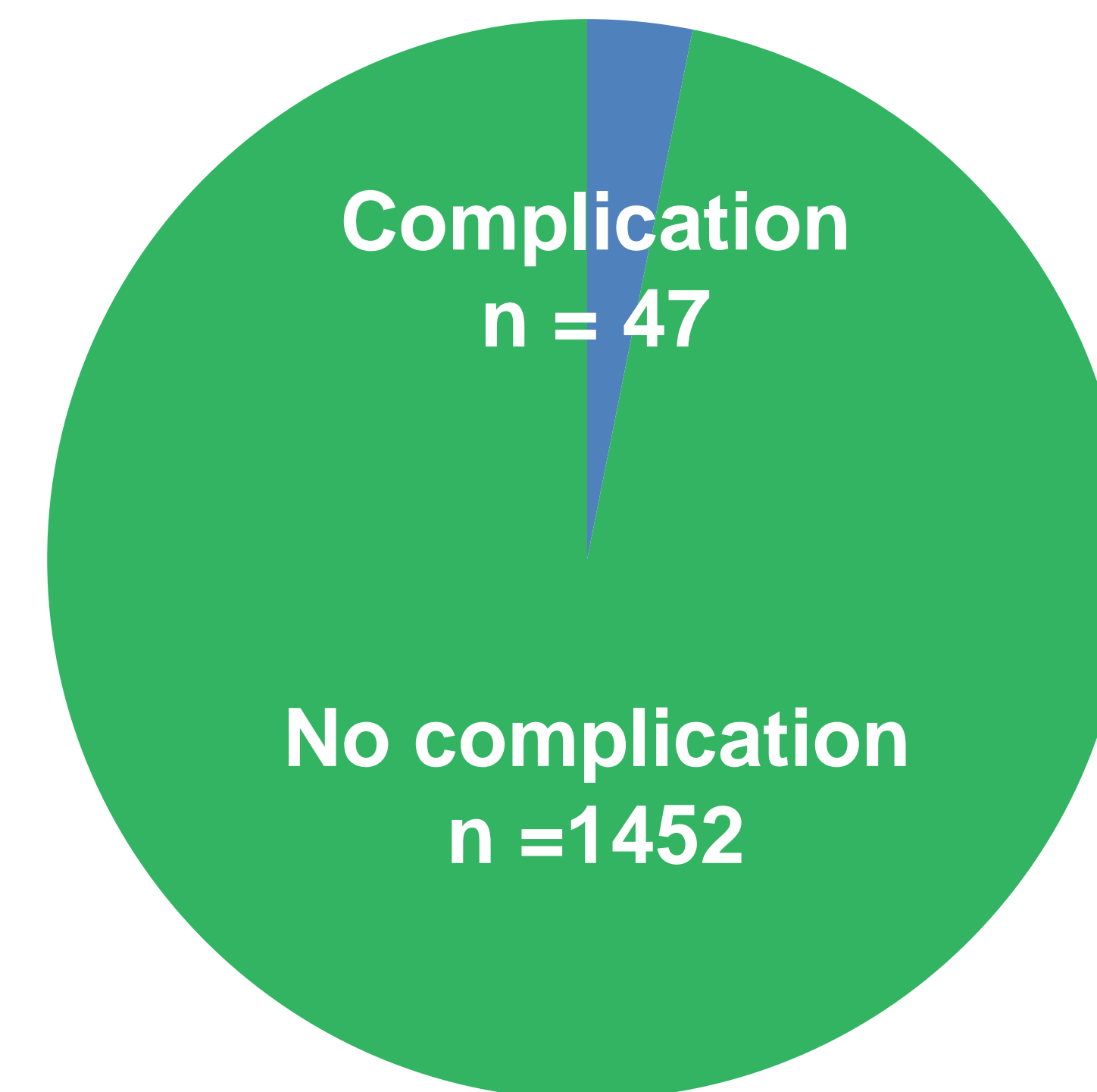
- For patients who had a MVA done at IFH from 2004-2016, to quantify and describe:
  - MVA complication rate and type
  - Percentage done by physicians-in-training
  - Reason for MVA
  - Contraception provision on day of MVA

## Methods

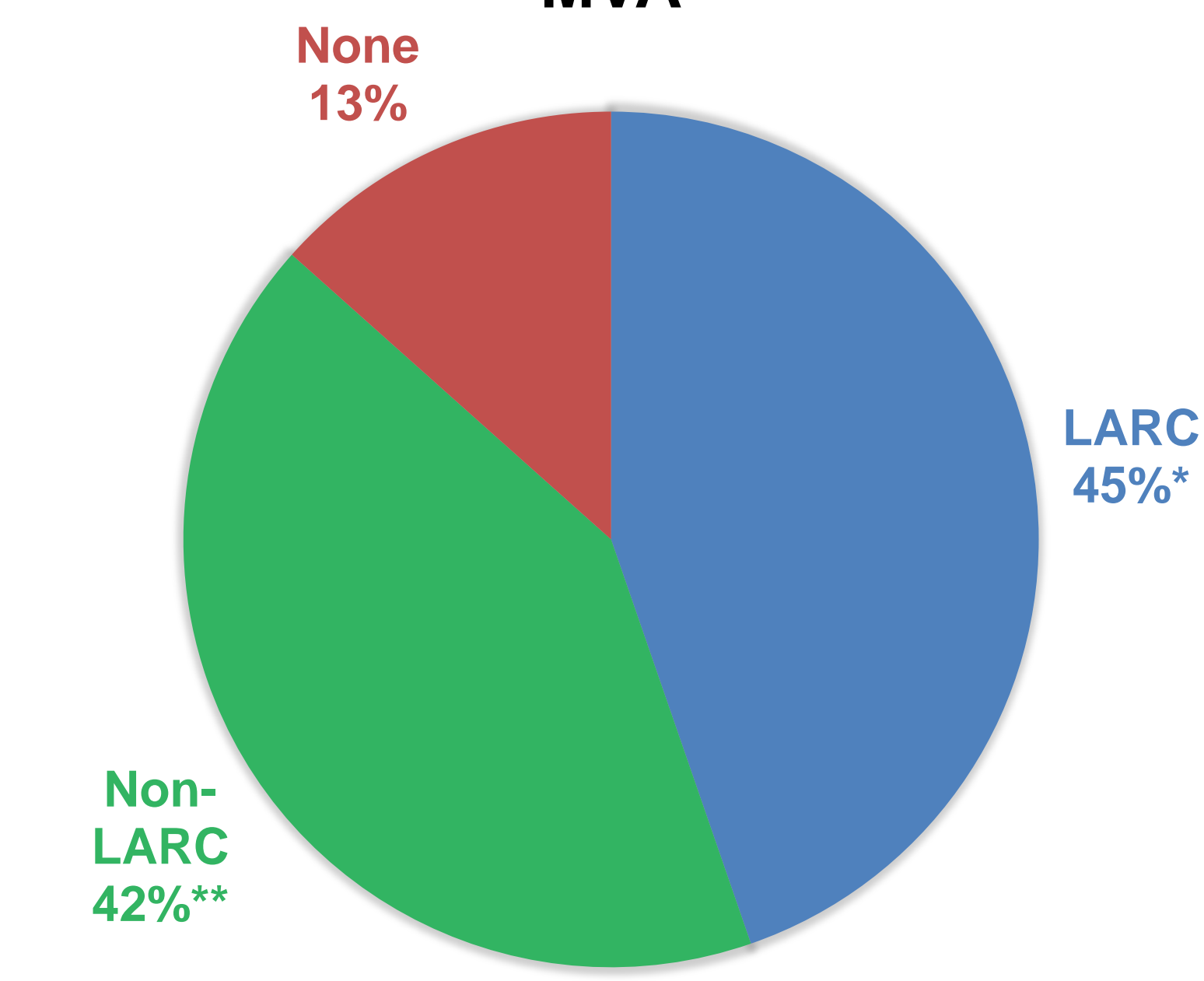
- Retrospective chart review with 2 datasets:
  - IFH Electronic Medical Record (EMR)
  - New York State Medicaid Database<sup>5</sup>
- Inclusion criteria: Patients having MVA from 2004-2016 at 5 IFH family med sites, including training sites
- Data extraction tools: developed by research team
- Data collection: 1499 MVA procedures manually reviewed by study authors
  - 1499 in IFH EMR, of these 692 MVAs also documented in Medicaid Database

## Results

### MVA Complication Rate: 3.1% (n=1,499)



### CONTRACEPTION ON DAY OF MVA



\*LARC = Intrauterine devices or hormonal implant  
\*\*Non-LARC = hormonal pills/patch/ring, progestin injection, emergency contraception, condoms

### MVA Complication Rates by Variables

Variable	MVA complication n (%)	p-value
Provider Type		0.44
Attending	14 (3.6)	
Fellow	6 (2.0)	
Resident	26 (3.3)	
Gestational Age		0.35
< 4 weeks	0 (0.0)	
4w0d - 4w6d	1 (2.4)	
5w0d - 5w6d	4 (1.6)	
6w0d - 6w6d	7 (1.9)	
7w0d - 7w6d	10 (3.1)	
8w0d - 8w6d	8 (4.3)	
9w0d - 9w6d	7 (5.1)	
MVA for miscarriage		0.76
No	44 (3.2)	
Yes	3 (2.7)	

## Conclusions

- Rates of MVA complications at IFH by family medicine providers are low, comparable to national averages
- Approximately 75% of MVAs at IFH were conducted by a provider-in-training
- There are high rates of contraception provision at IFH on day of MVA
- There is no significant association in MVA complication rates by provider type, gestational age, nor reason for MVA
- Providing MVAs in the family medicine setting is safe and allows for greater access to reproductive health within primary care

## References

1. White, K., Carroll, E., & Grossman, D. (2015). Complications from first-trimester aspiration abortion: a systematic review of the literature. *Contraception*, 92(5), 422-438.
  2. Niinimäki, M., Pouta, A., Bloigu, A., Gissler, M., Hemminki, E., Suhonen, S., & Heikinheimo, O. (2009). Immediate complications after medical compared with surgical termination of pregnancy. *Obstetrics and Gynecology*, 114(4), 795-804
  3. Upadhyay, U. D., Desai, S., Zlidar, V., Weitz, T. A., Grossman, D., Anderson, P., & Taylor, D. (2015). Incidence of emergency department visits and complications after abortion. *Obstetrics & Gynecology*, 125(1), 175-183.
  4. Jones RK, Jerman J. Abortion Incidence and Service Availability In the United States, 2014. *Perspect Sex Reprod Health*. 2017;49(1):17-27.
  5. Source: Salient NYS Medicaid Enterprise System: Includes Payment Cycles through 2016; Dates of Service 2004 - 2016. Access Date 5/2017 - 4/2018
- \*It shall be noted that the conclusions in the publication are not those of the NYSDOH unless NYSDOH agrees to the conclusions.