



Improving Colorectal Cancer Screening Rates in the Uninsured Population



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BACKGROUND

Colorectal cancer (CRC) is the third most common cancer in the U.S. There are a number of acceptable screening tests that reduce CRC mortality. Despite this, screening rates remain low in the insured and uninsured populations. The national average in the United States for CRC screening was 68.8% in 2018. In Arizona that rate drops to 60.3% while the uninsured in Arizona are half as likely to have screening at 30.2%.

The two most commonly used United States Preventative Task Force recommended CRC screening tests are a yearly fecal occult test or colonoscopy. The average cost of stool testing vs colonoscopy is less than \$20 vs \$1,680 respectively. Multiple studies have demonstrated higher screening rates when using FIT testing vs colonoscopy, the highest rate achieved was almost 20% higher than the national average.

The Virginia G. Piper St. Vincent de Paul Medical Clinic (SVdP) is a free clinic that provides care to mostly Spanish speaking uninsured immigrants with low socioeconomic status. In 2015 the SVdP clinic started screening for colorectal cancer with the FIT test and has implemented the PDSA cycle of quality improvement to increase their completion rates.

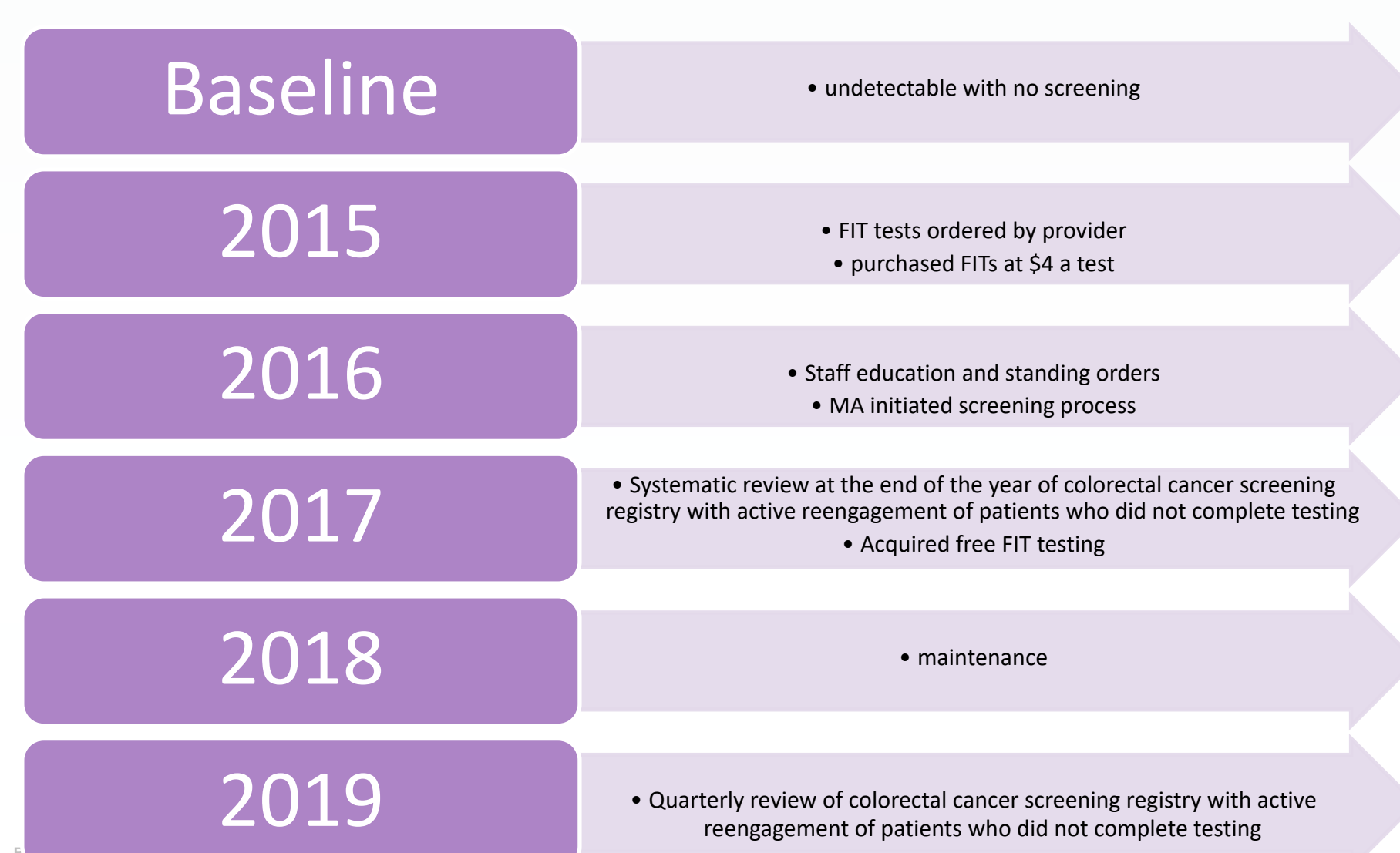


OBJECTIVE

Evaluate the efficacy of a colorectal screening QI intervention utilizing the FIT test in a free clinic.

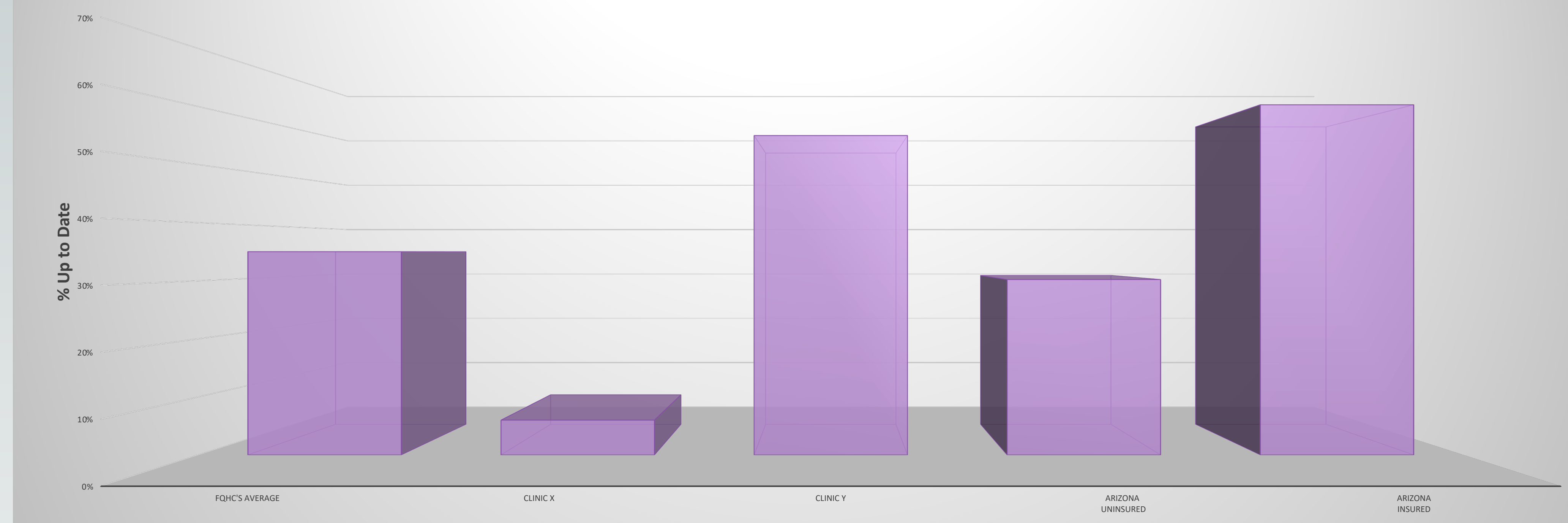


QI TIMELINE

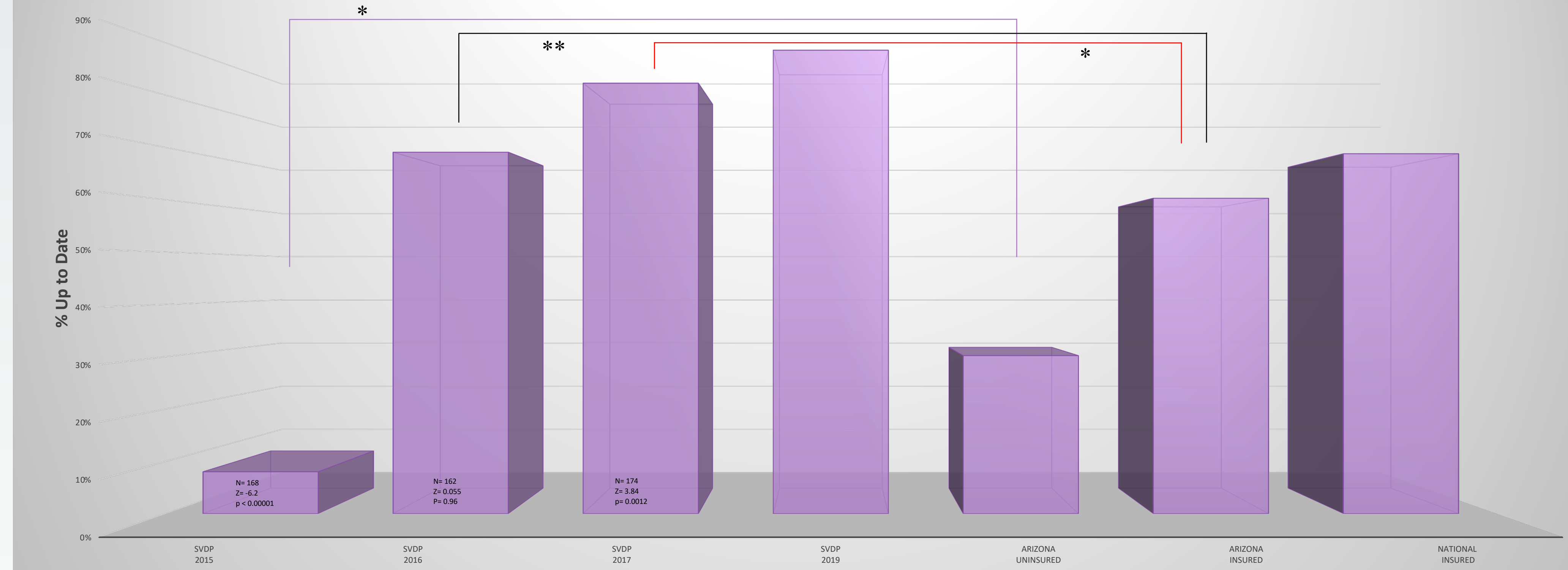


RESULTS

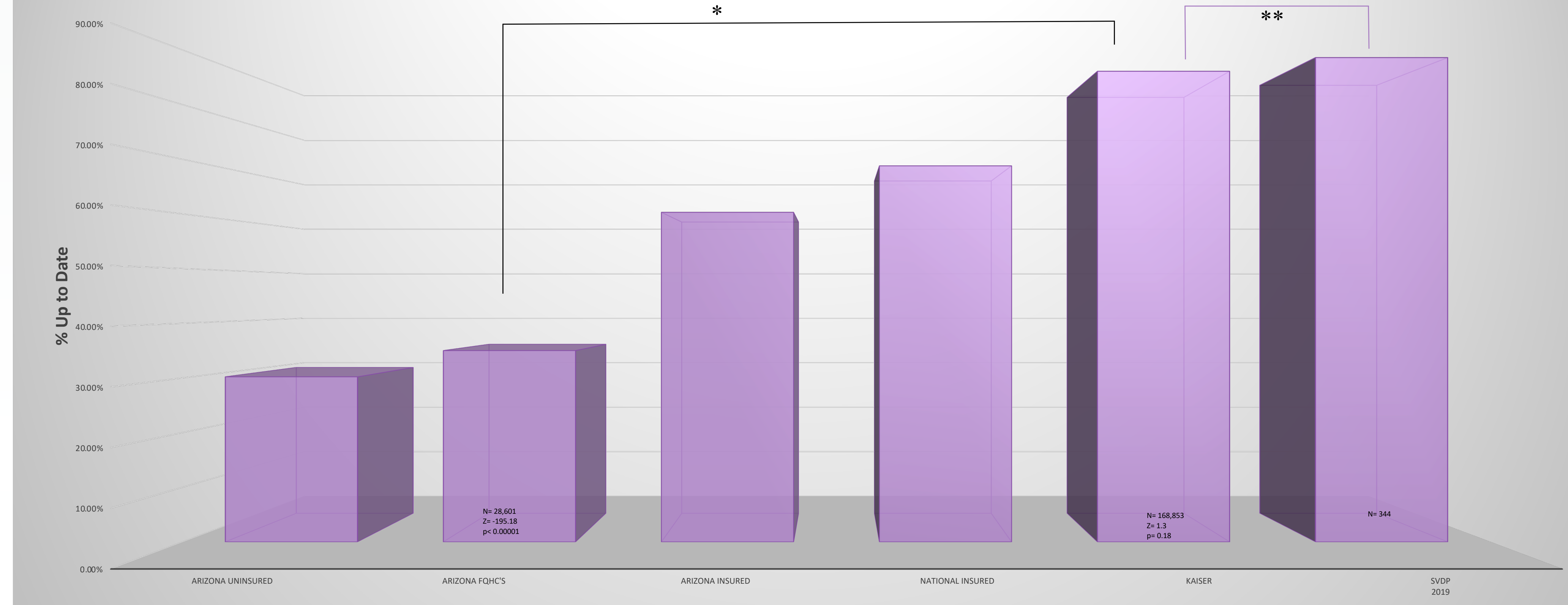
Arizona Colorectal Cancer Screening Rates



SVdP Colorectal Cancer Screening Rates by Year



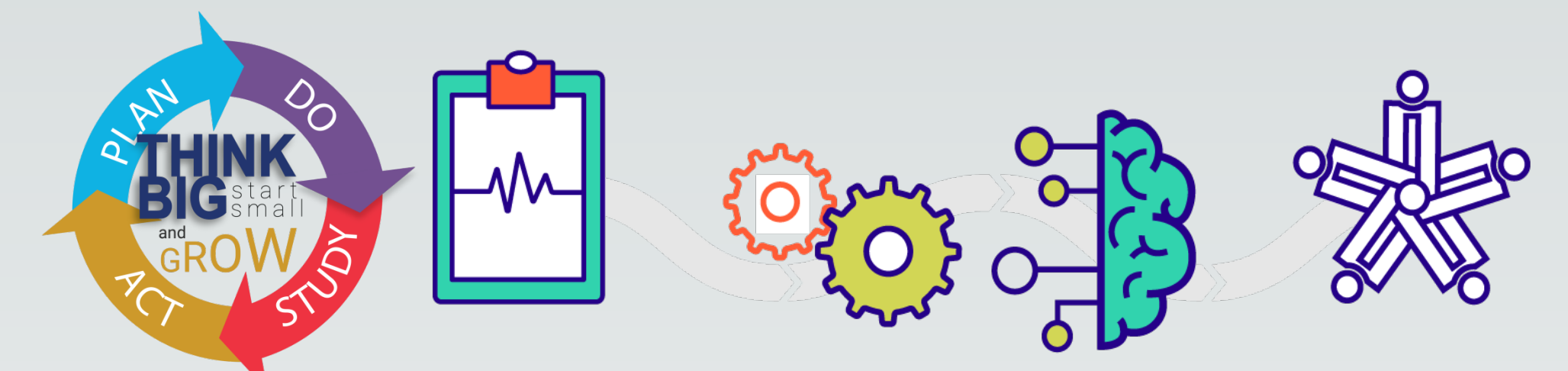
Colorectal Cancer Screening Rates by Population



CONCLUSION

A free clinic is capable of increasing colorectal screening rates to that of the national average and equaling rates of higher functioning health care systems.

The CRC screenings rates significantly increased from a baseline of 8% to a high of 88.6%. The baseline was significantly lower than the Arizona uninsured rate of 30.2% with a z-score and p-value of -6.2 and <0.0001 respectively. The following year the rates increased to be equal to the national average at 69.1 with a z-score and p-value of 0.55 and 0.96 respectively. The subsequent three years the rates were statistically higher than the national average and increasing each year from 82.3-88.6%. When comparing SVdP to Kaiser Permanente there was no difference with a z-score and p-value of 1.3 and 0.18 respectively.



DISCUSSION

With a standardized protocol utilizing a medical assistant driven screening FIT program for colorectal cancer screening SVdP achieved and maintained a rate of >80%. Abnormal (positive) FITs were followed up with a colonoscopy 93% and 100% for 2017 and 2019 respectively. This was achieved in a population with the top 3 risk factors for not completing screening: low socioeconomic status, immigration status, and being uninsured.

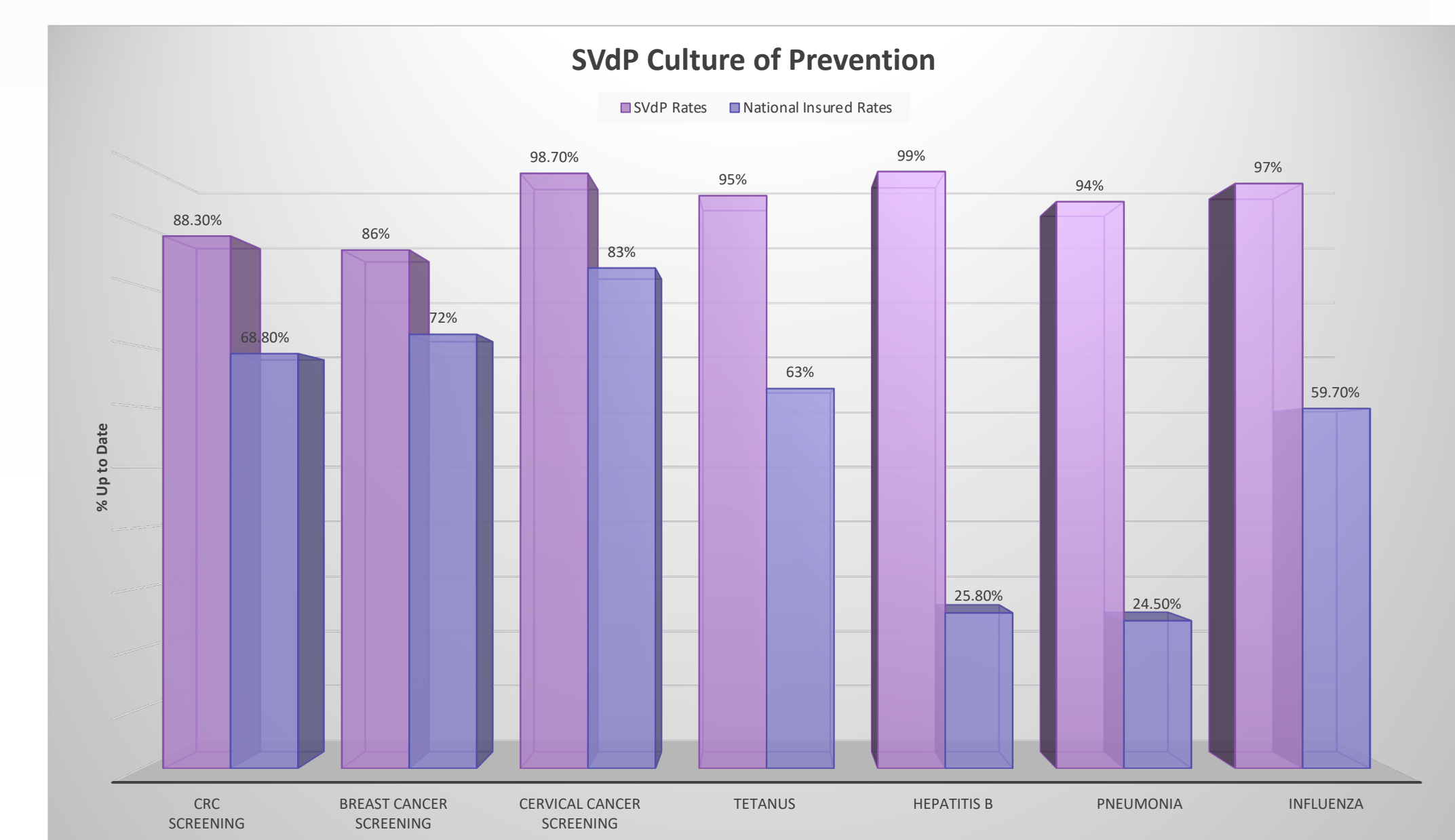
The best practices identified by our team were:

- Staff education
- Destigmatizing testing methods
- Staff empowerment
- Standing orders
- Standardized protocols
- Opt-out testing
- Weekly monitoring/follow up



SVdP is not alone its ability to increase CRC screening rates. Multiple studies have demonstrated that FIT testing can double screening rates compared to referring to gastroenterology for colonoscopy. A 2007 Kaiser Permanente intervention achieved similar results while implementing screening with mail in FIT kits, screening 86.1% of the patients with 78.4% having follow up colonoscopy after a positive result.

SVdP has created a culture of prevention which has resulted in colon, breast and cervical cancer screening rates of 88.6%, 86% and 98.7%. Vaccines are all above 90% as well. All populations can achieve similar results whether they are in low resource areas or typical clinics if they take on a similar culture of prevention with upstream approaches utilizing all staff members working at the top of their scope instead of relying on providers to address all the acute, chronic and preventative needs of the patient.



* P-value < 0.05 ** p-value > 0.05