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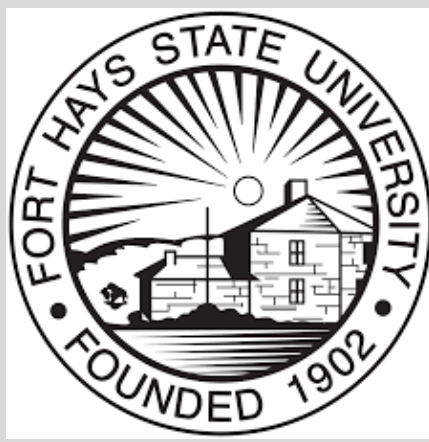
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Bridging the Gap: Improving Aortic Stenosis Referrals

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BACKGROUND

- 5 Million diagnosed with heart valve disease each year (John Muir Health, 2019).
- 50 % of those who do not have aortic valve replacement will not survive 2 years after the onset of symptoms (2019).
- Patients that have severe aortic stenosis (AS) when they encounter the cardiologist have an increased risk of all-cause and cardiovascular mortality even after they have an aortic valve replacement (Lancellotti et al, 2018).
- A new workflow will allow opportunity to efficiently identify and refer eligible patients to streamline the referral and proper treatment (Afrin et al., 2015)

MEASURABLE OUTCOMES

- Total number of patients at rural cardiology clinic pre- and post-intervention
- Total number of patients seen with AS pre- and post-intervention

Project Design

- Project Improvement
- Descriptive Statistics, z-test for proportion

Setting

- Rural cardiology clinic
- 5 Physicians, 6 Nurse Practitioners, 2 Locum physicians

Sample

- 4 Rural Primary Care Clinics in Northwest Kansas

Instruments

- Educational flier
- AS Checklist/algorithm

Plan

1. Development of flier, checklist and algorithm
2. Obtain collaboration agreement with rural primary care clinics
3. Perform retrospective study of total # of patients & patients with AS at the cardiology clinic
4. Provide voice over presentation, educational flier, AS checklist /algorithm to rural primary care clinics
5. Follow up with rural clinics for questions
6. A 90-day post-intervention retrospective study completed for total # of patients seen & total # of patients with AS at the cardiology clinic

PURPOSE

Create and implement an AS flier, checklist and algorithm for primary care clinics to utilize to increase early referrals to a cardiology clinic.

Educational Flier

AS Checklist

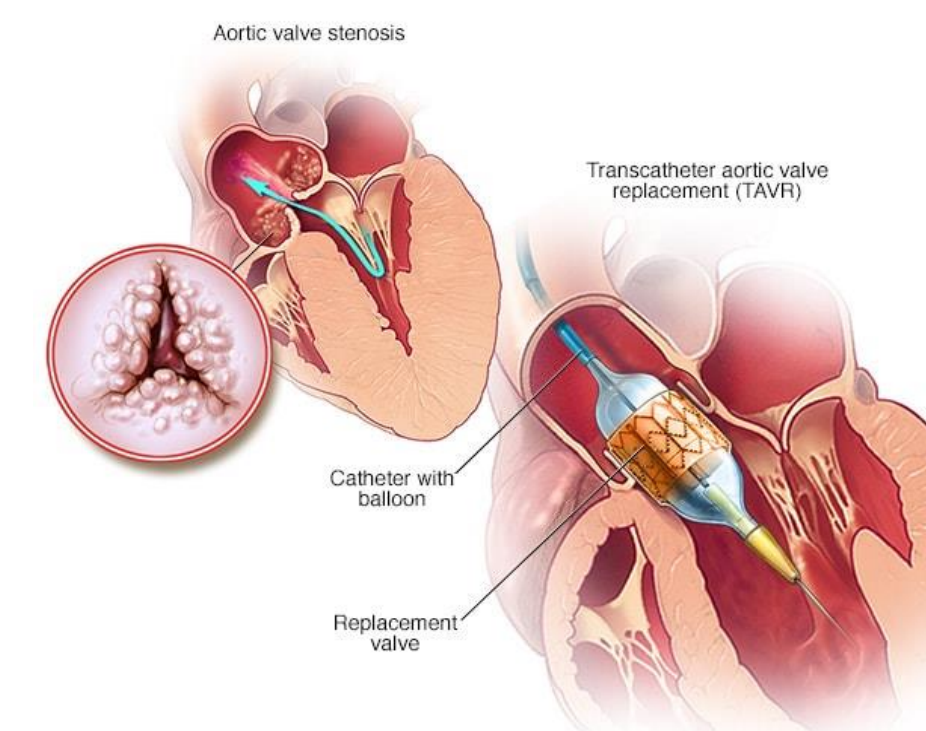
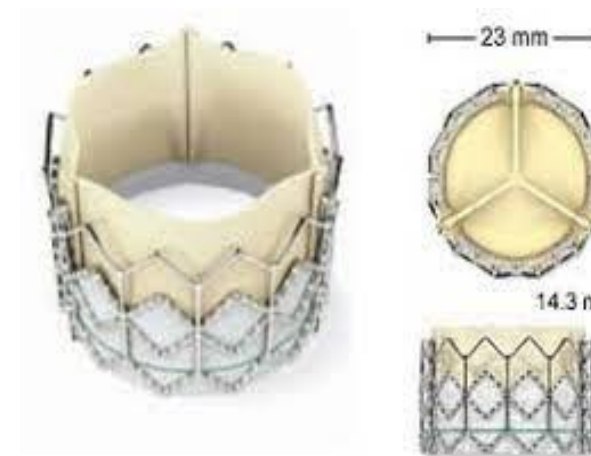
RESULTS

- Pre-intervention total # of patients = 9,018
- AS Patients pre-intervention: Sept – 47, Oct = 40, Nov = 33
- Post-intervention total # of patients = 9,269
- Post-intervention AS patients - Dec = 11, Jan = 33, Feb 23
- Z-test proportion, two tailed hypothesis
- P-value = < .00001
- Proportion test did not reach statistical significance
- Minimal change in pre- and post-intervention patient numbers

CONCLUSION

- Even with the project's results not obtained as the lead investigator's goal, the idea and presentation being public could be the start of future progress in this topic.
- Future investigation and feedback from primary care clinics regarding the tools provided could contribute to successful implementation.
- Further education to primary care clinics and encouragement of early referrals for AS patients would contribute to future research.

MATERIALS/METHODS



REFERENCES

Afrin, L. B., Oates, J. C., & Kamen, D. L. (2015). Improving clinical trial accrual by streamlining the referral process. *International journal of medical informatics*, 84(1), 15–23. <https://doi.org/10.1016/j.ijmedinf.2014.09.001>

John Muir Health (2019). Transcatheter aortic valve replacement. Retrieved from <https://www.johnmuirhealth.com/services/cardiovascular-services/intervention/transcatheter-aortic-valve-replacement/facts-and-figures.html>.

Lancellotti, P., Magne, J., Dulgheru, R., Clavel, M. A., Donal, E., Vannan, M. A., Chambers, J., Rosenhek, R., Habib, G., Lloyd, G., Nistri, S., Garbi, M., Marchetta, S., Fattouch, K., Coisne, A., Montaigne, D., Modine, T., Davin, L., Gach, O., Radermecker, M., ... Oury, C. (2018). Outcomes of Patients With Asymptomatic Aortic Stenosis Followed Up in Heart Valve Clinics. *JAMA cardiology*, 3(11), 1060–1068. <https://doi.org/10.1001/jamacardio.2018.3152>

Mayo Foundation for Medical Education and Research. (2021, October 13). *Transcatheter Aortic Valve Replacement (TAVR)*. Mayo Clinic. Retrieved March 21, 2022, from <https://www.mayoclinic.org/tests-procedures/transcatheter-aortic-valve-replacement/about/pac-20384698>

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