

Evaluation of the St Vincent's Heart Health Website

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svhhearthealth.com.au

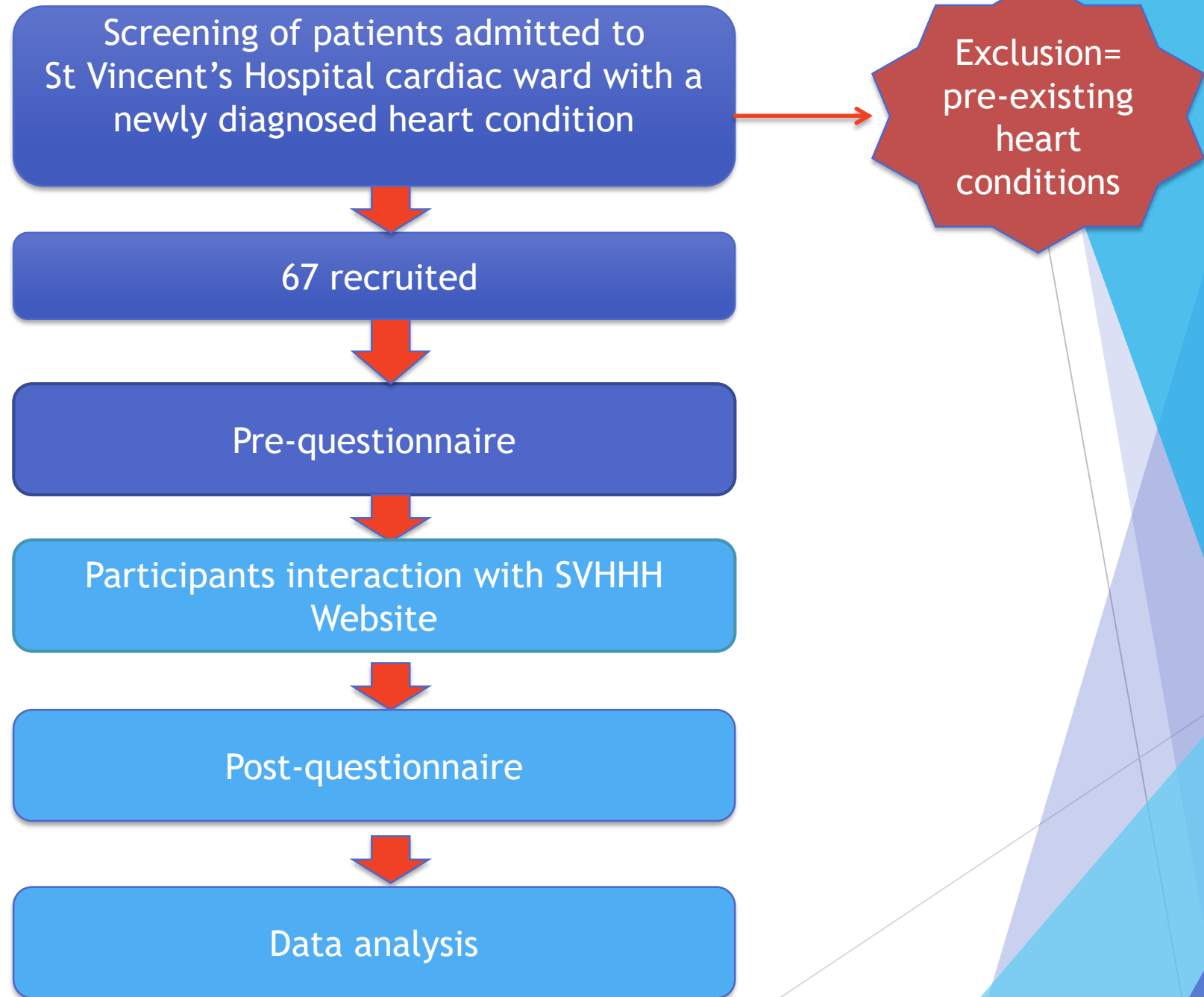
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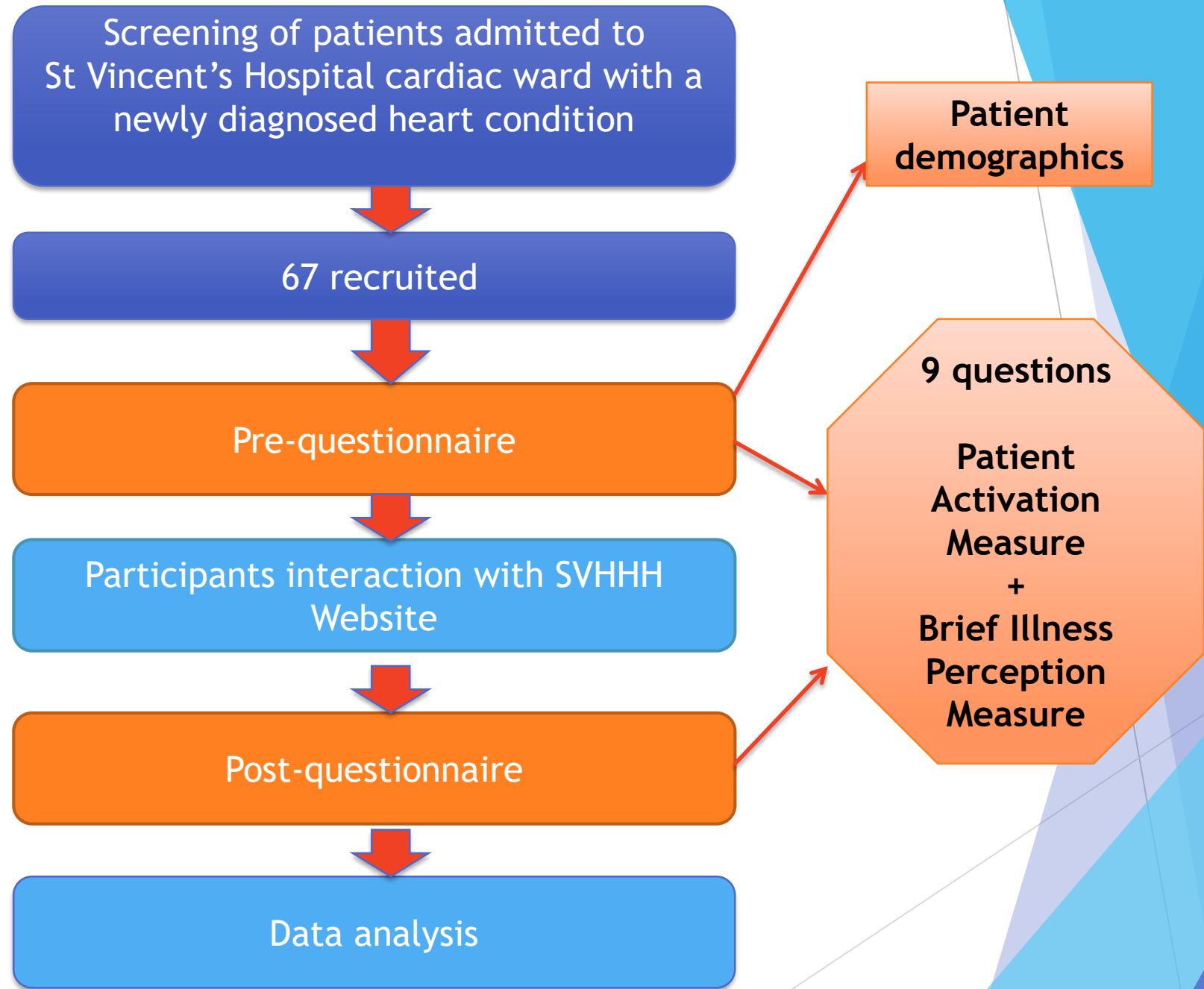
Outline

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Background

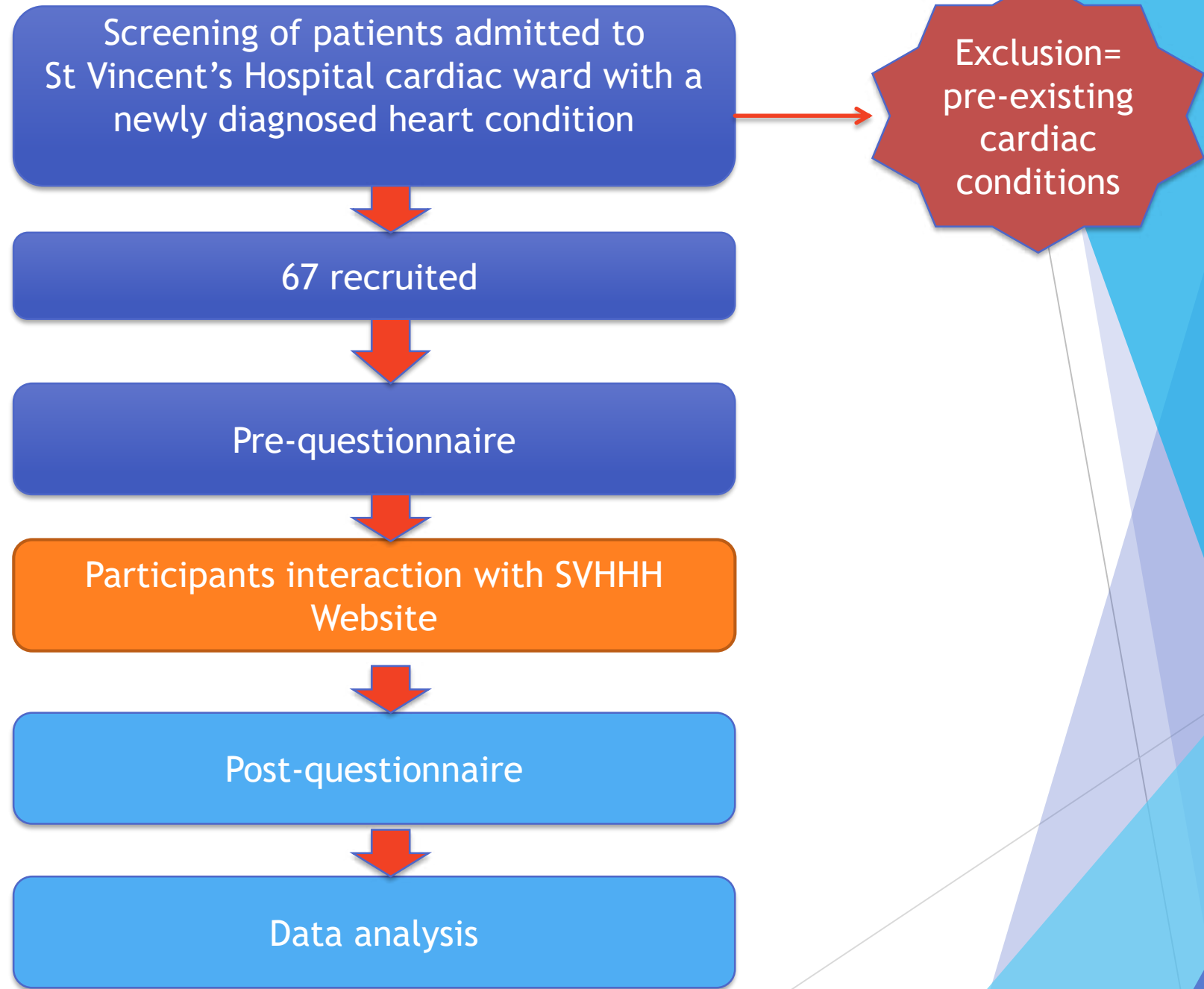
- ▶ Coronary Heart Disease is the leading cause of death globally¹.
- ▶ Within 5 years of an initial myocardial infarction, 1 in 3 people will have a recurrent event².
- ▶ Cardiac Rehabilitation (CR) has been shown to decrease mortality by 20% and yet it remains vastly underutilised especially by older patients and those living in rural areas³.
- ▶ As an adjunct to CR, the St Vincent's Heart Health Website (SVHHH) was created by the St Vincent's Hospital CR team.
- ▶ This project evaluated the effectiveness of the website in **educating patients** about their heart condition and improving **confidence levels** in **returning to activities of daily living** and making **healthier lifestyle decisions**.





SVHHH Questionnaire

- ▶ 1. How well do you feel you understand your heart condition?
- ▶ 2. How well do you feel you understand the tests required to assess your heart condition?
- ▶ 3. How well do you feel you understand the treatment for your heart condition?
- ▶ 4. How much control do you feel you have over your heart condition?
- ▶ 5. How concerned are you about your heart condition?
- ▶ 6. How well do you feel you understand the long-term management of your heart condition once you leave hospital?
- ▶ 7. How confident are you in knowing how to resume to regular activities once you leave hospital?
- ▶ 8. How confident are you that you know how to live a healthy life?
- ▶ 9. How well do you feel you understand your heart medications?

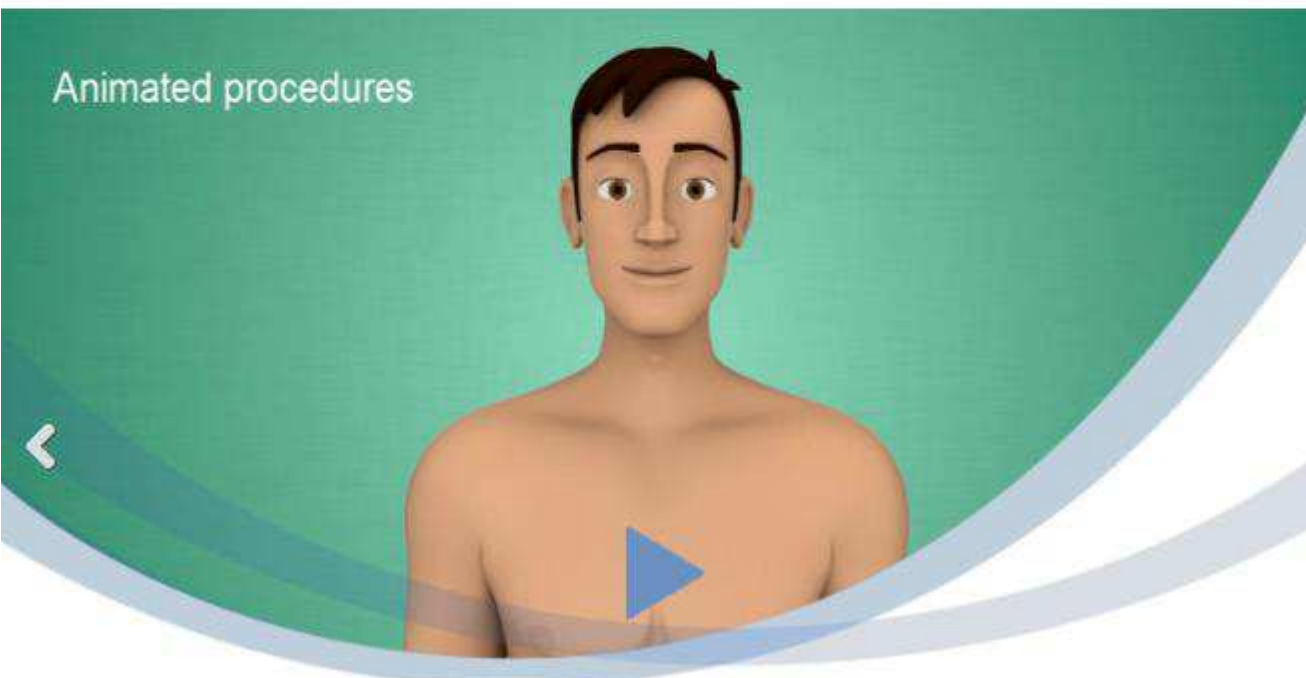




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- Overview - Heart Conditions
- Arrhythmias
- Cardiomyopathy
- Coronary Artery Disease - "Heart Disease"
- Heart Failure
- Heart Valve Disease - "Valve Disease"
- Pulmonary Hypertension
- Spontaneous Coronary Artery Dissection or "SCAD"



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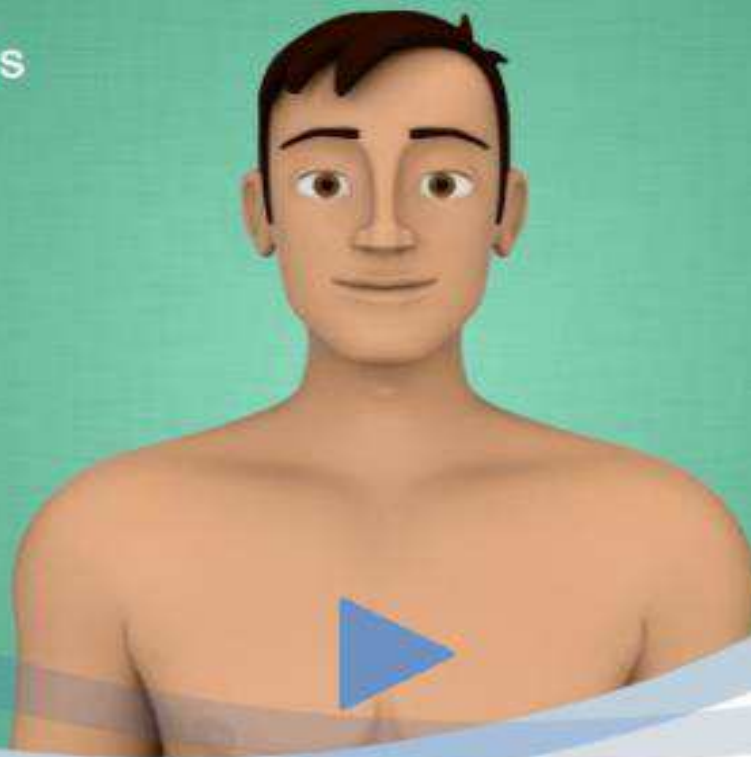
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Overview - Rehabilitation

Refer a Patient

After Coronary Angioplasty & Stenting

After Cardiac Bypass Surgery

After Heart Valve Surgery

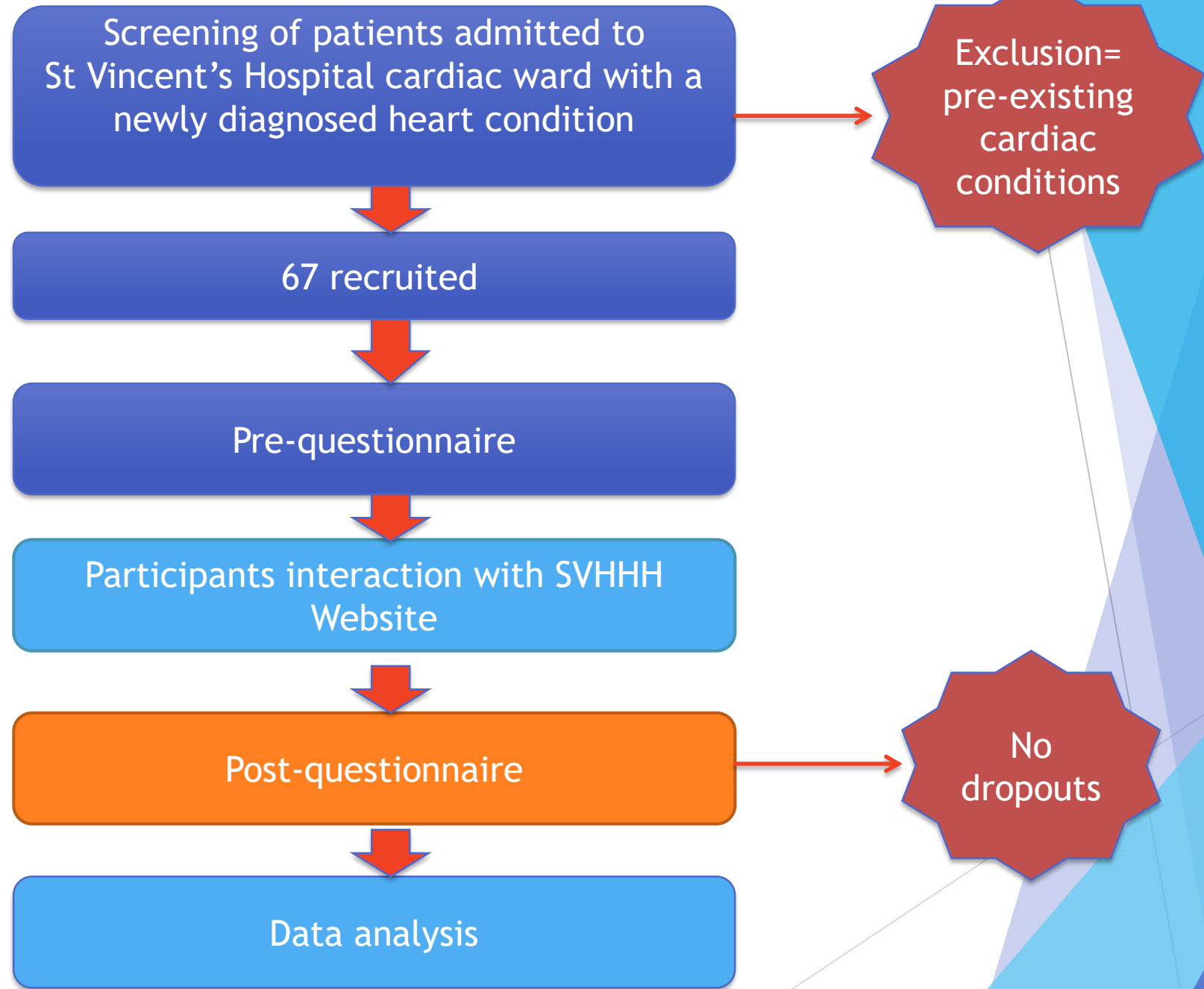
After an Implantable Defibrillator "ICD"

For Heart Failure

After Heart Transplant

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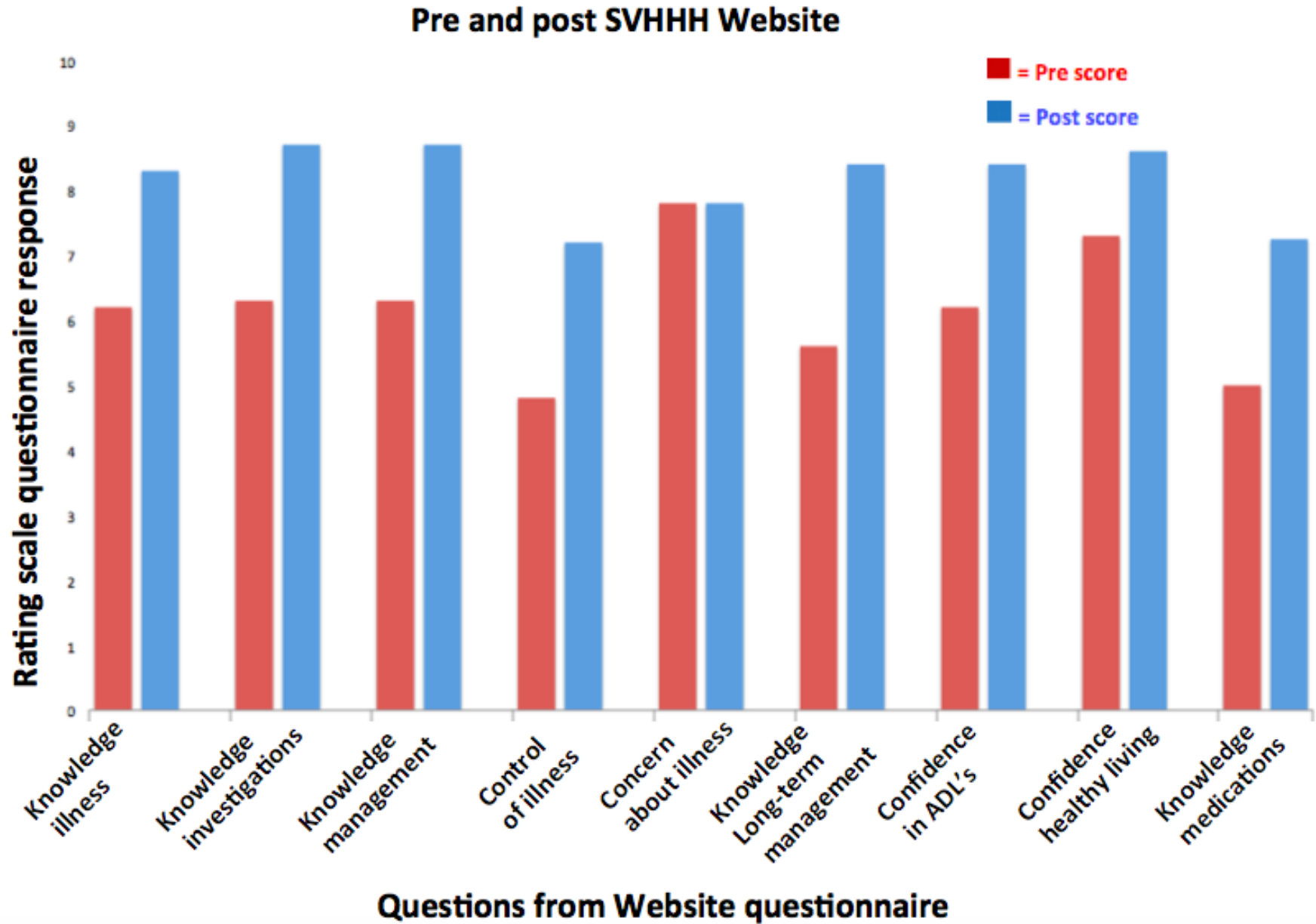
Statistical Analysis

- ▶ Wilcoxon signed-ranks test was used to analyse the differences in scores before and after viewing the SVHHH website.
- ▶ P value of < 0.05 was considered significant
- ▶ All analysis was completed using IBM SPSS version 24

Subject characteristics

- ▶ 67 subjects
- ▶ Age:
 - ▶ mean age 63
- ▶ Sex:
 - ▶ Male 80.6%
- ▶ Primary place of residency
 - ▶ Inner city 37.3%
 - ▶ Rural 31.3%
- ▶ Diagnosis
 - ▶ Coronary artery disease 79.8%
- ▶ Confidence with using the internet
 - ▶ 6.3/10

Results



Conclusion

- ▶ This online CR education tool improved patients' knowledge of their heart condition as well as confidence to return to activities of daily living and confidence with making healthier lifestyle choices.
- ▶ Beneficial to all patients
 - ▶ The improvements were seen irrespective of age, sex and primary place of residence.
- ▶ We predict this knowledge will lead to increased compliance with health care to reduce overall mortality and morbidity from heart disease.

Limitations

- ▶ Small sample size
- ▶ No blinding
- ▶ No control
- ▶ Self-reported questionnaire

Future direction

- ▶ Whilst this study demonstrated that the website was effective in improving patients' knowledge and confidence, further studies are warranted to investigate the impact of the website on clinical outcomes.
- ▶ We anticipate that online health resources will become an important adjunct to traditional teaching methods to improve patient outcomes, not just in cardiac rehabilitation programs.

References

- ▶ 1. World Health Organization. September 2016 [cited 2017 24 April]
- ▶ 2. Briffa, T.G., et al., *An integrated and coordinated approach to preventing recurrent coronary heart disease events in Australia*. Medical Journal of Australia, 2009. **190**(12): p. 683.
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- ▶ 7. Australian Institute of Health and Welfare. *Cardiovascular disease*. 2014 [cited 2017 24 April]; Available from: <http://www.aihw.gov.au/cardiovascular-disease/>.