

Achieving consistency of inpatient education:
“Assessing the six steps to a cardiac recovery”
at discharge.

Are we assuming patients fully understand?

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The Background

- Six steps to a cardiac recovery” is a National Heart Foundation initiative to guide practitioners so they can provide consistent evidence-based information
- A resource for nurses to facilitate conversation with all cardiac patients throughout their admission
- To ensure patients gain a better understanding of:
 - Diagnosis and clinical features
 - Current and future management
 - Risk factor awareness and modification
 - Self management and symptom recognition
 - Preventative strategies

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Six Steps to a Cardiac Recovery

**Includes direct reference
to the nationally utilised
NHF resource:
“My Heart My Life”**



Six steps to cardiac recovery:

Information all cardiac patients should know prior to leaving hospital -

Managing my heart health (MMHH), a resource for nurses to facilitate the conversation

1. Explain diagnosis / procedure

All patients should understand their diagnosis and procedure.

- Explain the diagnosis and provide care instructions – do not assume the patient understands what has just happened to them.
- Ask the patient if they have any questions about their diagnosis or procedure.
- Ensure the patient understands that a heart procedure is a treatment and not a cure for heart disease. Often patients do not understand they have a key role to play in managing their heart condition (see steps 2 to 6 below).

2. Highlight risk factors relevant to the patient

All patients should be familiar with their most relevant risk factors and the ongoing importance of managing these to reduce their risk of another heart event.

- Review the patient's history and discuss the risk factors that are relevant to them.
- Patients are generally not aware that they are at greater risk of another heart event. Discuss the clinical risk (BP, cholesterol) and lifestyle risk (diet, smoking) factors and the importance of managing these to prevent a future attack.
- Explain the value of attending a cardiac rehabilitation program to support management of risk factors.

3. Emphasise importance of cardiac rehabilitation

All patients should be encouraged to attend a cardiac rehabilitation program.

- Explain the benefits of attending a cardiac rehabilitation program as a key part of recovery.
- Refer the patient to a cardiac rehabilitation program and provide program information.
- Advise they call the Heart Foundation Health Information Service for heart health information – 1300 36 27 87 (see overleaf).

4. Promote medication adherence

All patients should understand why it is important to take their medication.

- Check the patient understands the medications they need to take for their heart.
- Emphasise that they must not stop taking their medication without speaking to their doctor.
- Encourage them to discuss any concerns with their doctor.

5. Educate on warning signs of heart attack

All patients should know the symptoms of heart attack and chest pain management.

- Discuss how to manage their chest pain and instructions for GTN medication.
- Advise that not all heart attacks are the same and that symptoms can vary.
- Encourage patients to learn the warning signs and refer them to the Heart Foundation's warning signs resources (warning signs fridge magnet included in MMHH resource) view warning signs DVD / TV Channel if available, the HeartFoundation YouTube channel or www.heartattackfacts.org.au

6. Encourage follow-up with doctor

All patients should understand the importance of GP and cardiologist follow up.

- Advise that regular visits with their doctor are essential to help monitor their heart health and medications.
- Encourage patients to discuss any questions relating to their medication, psychological health or recovery with their doctor or practice nurse.
- Inform the patient about resources available to help them with their recovery. Refer the patient to the Heart Foundation Health Information Service - 1300 36 27 87 and My heart, my life resource and app (see overleaf).

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Inpatient Education

- Currently there is limited national or state level implementation of standardised inpatient education processes

- At Hollywood Private Hospital (HPH), inpatient education is influenced by:
 - Staff knowledge and/or clinical experience
 - Confidence to:
 - Accurately recite guidelines / targets
 - Engage verbally with patients
 - No formalised inpatient education process or procedure
 - No established content as minimum requirement prior to discharge

- Dominated by the provision of written resources
 - Less frequent verbal discussion or reinforcement of key information

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Inpatient Education

- Implementing consistent inpatient education processes will ensure:
 - Key messages are delivered to ALL cardiac patients
 - A minimum level of education is provided in:
 - Verbal and,
 - Written formats
- It will assist to overcome gaps in patient knowledge
- Promote optimal cardiac patient recovery

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Cardiac Rehabilitation Services

- Cardiovascular Care WA has provided inpatient and outpatients services for HPH since 1999
 - Multidisciplinary team: Weekly group education; Individualised consultation; 6 x Community based exercise clinics
 - Supporting services for ALL cardiac diagnoses
 - Referral to external service as appropriate

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Purpose

- To assess cardiology patients level of satisfaction with written and oral information during their admission
- To assess patient perceived knowledge at discharge in each of the 6 key areas:
 - Diagnosis/procedure
 - Risk factors
 - Cardiac rehabilitation
 - Medication
 - Warning signs of heart attack
 - Medical follow-up

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Method

- A questionnaire was designed to evaluate perceived levels of satisfaction, understanding and knowledge in the six key areas
- Administered to patients from the Coronary Care Unit (CCU) or Cardiology Ward(CW) at HPH
- Aim was to evaluate 50 consecutive patients from both CCU and CW over a defined timeframe
 - Consistency of consecutive patients was not always achieved due to clinical demands

- 1 – **Strongly Disagree**
- 2
- 3 – **Neutral**
- 4
- 5 – **Strongly Agree**

Or

Yes / No
questions

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Method

- The questionnaire was delivered by the nurse discharging the patient on completion of all usual care
- The patients had varied diagnosis including:
 - Acute coronary syndrome
 - Unstable angina
 - NSTEMI
 - STEMI
 - Arrhythmia
 - Atrial Fibrillation / Flutter
 - Heart blocks

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Results

- A total of **84** completed questionnaires were returned to staff:
- **50** - Coronary Care Unit patients - Male = 38 (76%), Female = 12 (24%)
- **34** - Cardiology Ward patients - Male = 16 (47%), Female = 18 (53%)
- **Aetiology:** ACS = 59 (70%) Arrhythmia = 25 (30%)

Total Cohort

- **Males:** N = 54 (64%)
- ACS = 44/54 (81%), Arrhythmia = 10/54 (19%)

- **Females:** N = 30 (36%)
- ACS = 15/30 (50%), Arrhythmia = 15/30 (50%)

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Results

- **96%** (48/50) of patients in CCU were admitted with acute coronary syndrome (ACS) and **4%** (2/50) arrhythmia
- **32%** (11/34) admitted to the cardiology ward with ACS and **68%** (23/34) arrhythmia

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Key Outcomes

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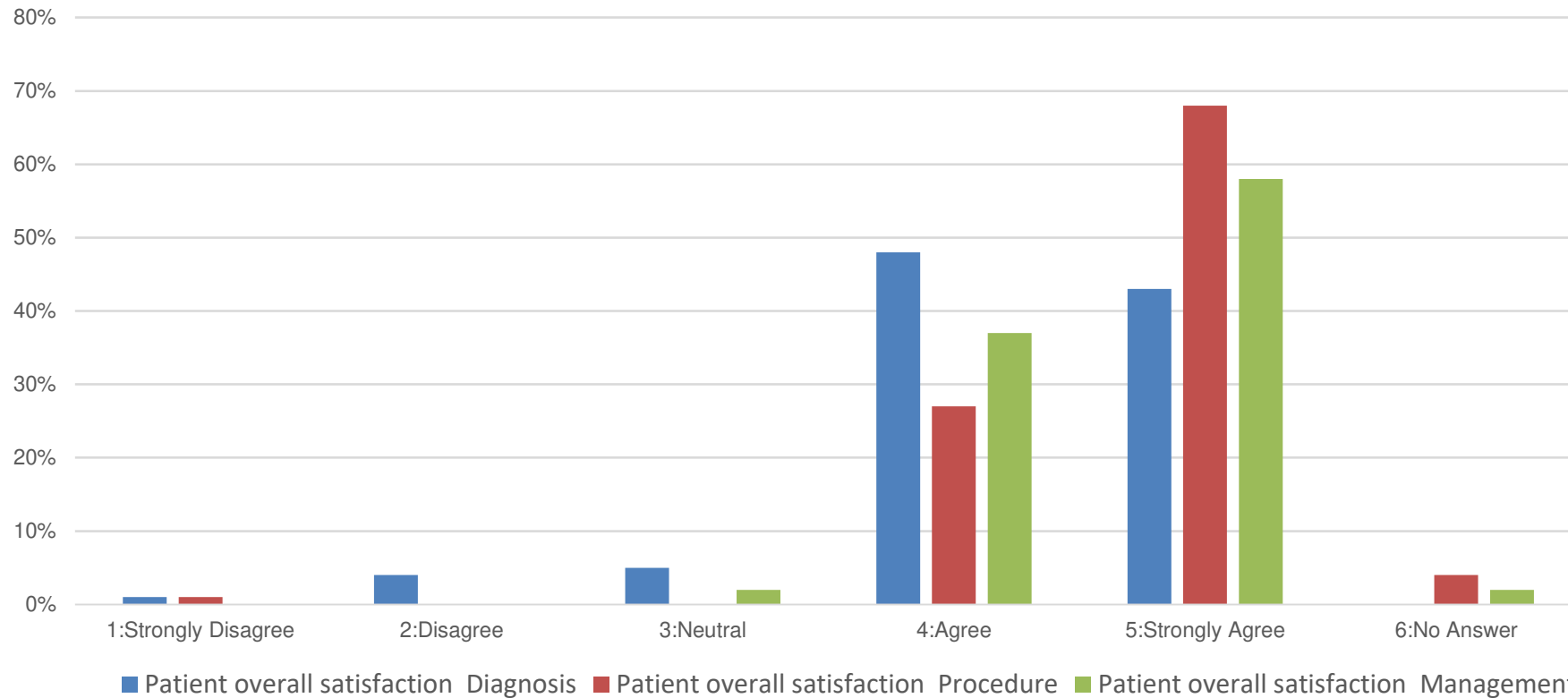
Diagnosis and Procedure

- There was a high level of perceived satisfaction (score = 4 or 5) with verbal and written information in **96.5%** of patients. They felt well informed about their:
 - Diagnosis
 - Procedure
 - Management.

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Patient Overall Satisfaction with verbal and written information Diagnosis - Procedure - Management

(Total patients 84)



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Diagnosis and Procedure

- 80% (47/59) ACS patients had insertion of a stent
 - 100% of those patient received a DES

Patients were asked the question:

If you required insertion of a stent do you know what type - DES vs bare metal ?

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Diagnosis and Procedure

- **32%** (15/47) of patients stated they are **aware** of the type of stent
 - Of those **73%** (11/15) gave the **incorrect** answer
- **30%** (14/47) stated they were **aware** of the medication advice card
 - A WA Health initiative for state level dissemination
- **21%** (10/47) could recall that they must **remain** on dual anti-platelet medication for 12 months
 - **17%** (8/47) stated compliance until cardiologists advised

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Risk Factors

- 83% of **all** patients stated they are familiar with their cardiovascular risk factors
- 89% of **all** patients believe they are aware of the importance of managing their cardiovascular risk factors
- To note:
 - NO patient listed gender as a risk factor
 - 30% believe they are over weight
 - 18% believe they are inactive

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Risk Factors

Patients were asked the question:

Are you aware of your recommended cholesterol targets?

- **34%** (17/50) CCU patients believe they are aware of the recommended cholesterol targets.
 - **96%** of those patients gave the incorrect answer or no answer
- **41%** (14/34) CW patients believe they are aware of the recommended cholesterol targets.
 - **100%** of those patients gave the incorrect answer or no answer

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Heart Attack Warning Signs

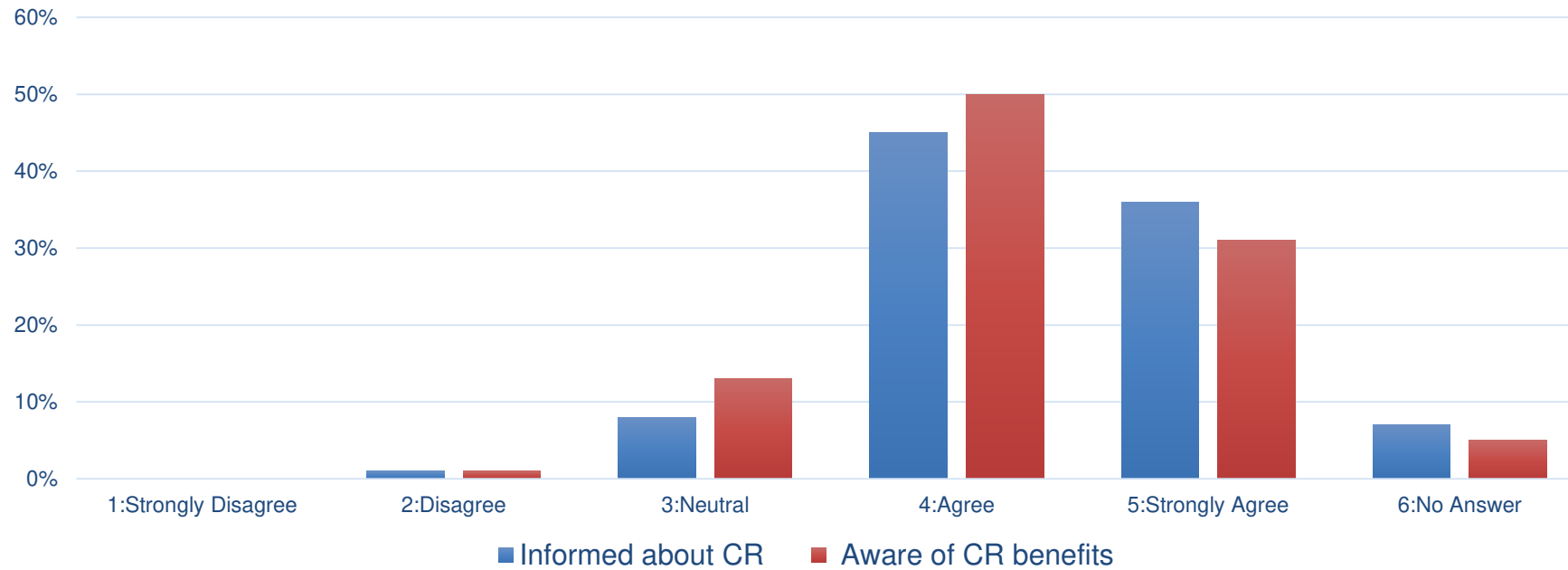
- In the ACS patients (N = 59/84)
 - 86% of patients feel well **informed** about the heart attack warning signs
 - 80% feel **confident** about the correct use of **GTN**
 - 76% are confident they will **recognise signs and symptoms** of angina
- In the Arrhythmia patients (N = 25/84)
 - 65% of patients feel well **informed** about the heart attack warning signs
 - 28% feel **confident** about the correct use of **GTN** despite never being prescribed
 - 35% are confident they will **recognise signs and symptoms** of angina

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Cardiac Rehabilitation Services

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Knowledge of Cardiac Rehabilitation at discharge



81% of all patients agree they were ***BOTH*** well informed ***AND*** aware of the **benefits** of cardiac rehabilitation

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Cardiac Rehabilitation

- **40%** of all patients **received** CR service details
- **33%** of all patients were **referred** to CR
 - 39% ACS
 - 24% Arrhythmia
- **30%** of all patients **plan** to attend
 - 34% ACS
 - 20% Arrhythmia
- **10%** of all patients **refused** involvement in CR
 - 8% ACS
 - 4% Arrhythmia
- **35%** of all patients are **unsure** if they will attend CR
 - 39% ACS
 - 24% Arrhythmia

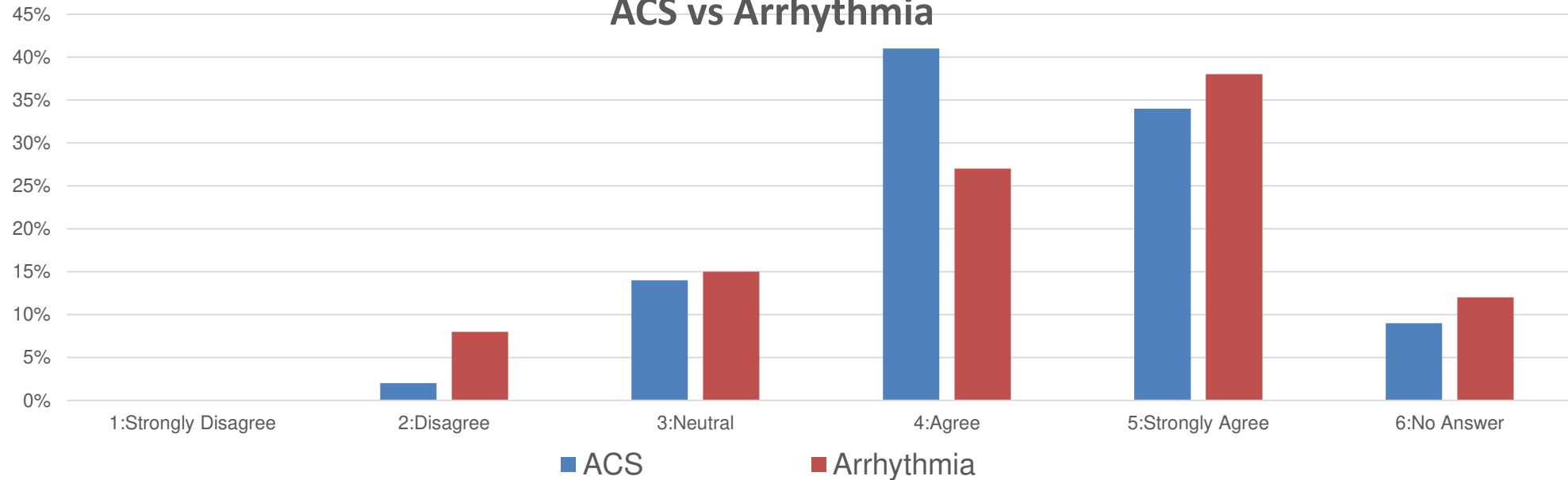
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Of Interest !

Patients were asked the question:
Would you benefit from additional
***“individualised support” specific* to their**
diagnosis after discharge?

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Patients interest in “individualised support” after discharge ACS vs Arrhythmia



71% of all patients (60/84) believe they **would benefit from additional “individualised support” specific to their diagnosis after discharge**

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Of Interest !

CORONARY CARE

- 76% (38/50) of **ALL** patients **agree** additional “individualised support” would be **beneficial** after discharge
- 45% (17/38) of patients **both** agree they would benefit from individualised support and plan to attend CR

Therefore, 55% wanted individual advice but did not plan to attend CR

CARDIOLOGY WARD

- 65% (22/34) of **ALL** patients agree additional “individualised support” would be beneficial after discharge
- 18% (4/22) of patients **both** agree they would benefit from individualised support and plan to attend CR

Therefore, 82% wanted individual advice but did not plan to attend CR

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ACS - Support vs CR

- ACS patients interested in individualised **support** following discharge
 - 45/59 = 76%
- ACS patients planning to attend **CR**
 - 20/59 = 34%
- ACS patients **both** requested individualised **support** and planned to attend **CR** following discharge
 - 17/45 = 38%

**Therefore, 62% of ACS patients wanted individual advice
but did not plan to attend CR**

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Arrhythmia - Support vs CR

- Arrhythmia patients requesting individualised **support** following discharge
 - 16/25 = 60%
- Arrhythmia patients planning to attend **CR**
 - 5/25 = 20%
- Arrhythmia patients **both** requested individualised **support** and planned to attend **CR** following discharge
 - 4/16 = 25%

**Therefore, 75% of Arrhythmia patients wanted individual advice
but did not plan to attend CR**

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Limitations

- The patients previous cardiac history, including the assessment or hospital admission history was not investigated
- Given the purpose of the study was to provide an observational insight in a clinical setting, no predetermined hypothesis or statistical methodology was preformed

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Future considerations

- It would be valuable to re-assess this methodology once new education processes are implemented in cardiology areas, including:
 - Evaluate the influence of nursing competencies
 - Evaluate consistency between inpatient education and advice and documented discharge recommendations for both the patient and medical providers

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Conclusion

At time of discharge Cardiology patients:

- **Are satisfied** with the written and verbal information they received during their admission
- **Feel confident** with essential self-management and risk factor knowledge

However:

- There is **poor recall of critical aspects of management**, despite the patients perceived knowledge

Therefore:

- Are cardiology staff assuming patient knowledge?
- Does the assumption of patient knowledge influence the magnitude of staff driven verbal discussion/education?

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Conclusion

The study highlights:

- The necessity to establish compulsory **nursing competency** and standardised **processes** for inpatient education
 - To foster staff confidence to deliver all aspects of education
- The importance of:
 - **Consistency** of advice and recommendations
 - **Reinforced** advice and recommendations
 - **Concise** discharge documentation with **visible directives** to patients and their health care team
- There is a **poor association** between the patient's need for individualised support following discharge and the ability for CR services to meet that need
 - This may be influenced by ward staff knowledge of the intricacies of CR outpatient services

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Impact on practice

- HPH cardiology staff will be required to complete the 6 e-learning modules
- HPH cardiology areas (CCU/CW) discharge paper work will include the 6 steps
- Education prompts will be available within the ward areas to assist staff to recall the 6 steps
- Evaluate and develop processes to improve and maintain a better understanding of the intricacies of CR

These strategies will promote:

- Consistent delivery of information through all phases of a patient's admission
- Optimal care in cardiology areas at HPH
- The foundation for improved adherence to long term health management strategies.

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