EXAMINATION OF THE AUDITOR-GENERAL'S PERFORMANCE AUDIT REPORTS DECEMBER 2014 - JUNE 2015

Organisation: NSW Health

Name: Ms Elizabeth Koff

Position: Secretary

Date Received: 20 July 2016

Mr Bruce Neville Notley-Smith MP
Chair, Legislative Assembly Public Accounts Committee
Parliament House
Macquarie Street
SYDNEY NSW 2000

Dear Mr Notley-Smith

Re: NSW Health response to Auditor-General's report on *Managing Length of Stay and Unplanned Readmissions* tabled in Parliament on 23 April 2015

I refer to your letter of 16 May 2016 seeking a submission from the Ministry of Health on the implementation of recommendations of the Auditor-General's Report on *Managing Length of Stay and Unplanned Readmissions in NSW Public Hospitals.*

Please find enclosed a submission for your consideration outlining responses and actions to date on the recommendations of the Audit. I am pleased to advise that all six recommendations made in the Auditor-General's Report have been actioned and are considered complete. In particular I draw your attention to the following action which has been taken:

1. A revised definition of Unplanned Readmissions has been implemented for use in the 2015-16 Local Health District (LHD) performance agreements, with an ongoing commitment to provide improved reporting tools to hospitals and LHDs for local review and investigation.
2. The ABM Portal and Relative Stay Index (RSI) Reports are used on an ongoing basis to benchmark performance and length of stay at the LHD level. Reports are distributed for the LHDs to utilise in performance improvement initiatives and progress is discussed with Chief Executives under the auspice of the performance framework.
3. The Analytics Framework has been completed by NSW Health and implementation will continue to build on existing capacity and capability across the system.
4. Each LHD is continuing to develop integrated care strategies to improve care for high risk and high utilisation groups. This work is being undertaken in collaboration with PHNs, and is supported by ACI and NSW Ministry of Health.
5. Evaluation is now mandatory for all integrated care programs and strategies developed and implemented.
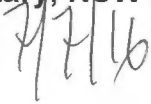
6. All NSW LHDs were connected to HealtheNet in April 2015 and all were submitting hospital discharge summaries to HealtheNet by December 2015. Post Implementation Reviews (PIRs) have been completed for the five project streams within the HealtheNet Program. A consolidated program level PIR incorporating lessons learnt is scheduled for completion in July 2016.

If you have any further queries on the attached response, please contact Mr Paul Giunta, Director, Corporate Governance and Risk Management on 9391 9654.

Yours sincerely

Elizabeth Koff
Secretary, NSW Health

IMPLEMENTATION OF RECOMMENDATIONS

Name of Agency: NSW Health

Name of Performance Audit: Managing Length of Stay and Unplanned Readmissions in NSW Public Hospitals

RECOMMENDATION		ACCEPTED OR REJECTED	ACTIONS TO BE TAKEN	DUE DATE	STATUS (completed, on track, delayed) and COMMENT	RESPONSIBILITY (Section of agency responsible for implementation)
1	As soon as possible, address the limitations in the existing specifications for measuring unplanned readmissions within 28 days of discharge. (page 15)	Partially accepted	While the review of the current unplanned readmission indicator is well under way, there are no quick and simple solutions to be found in this space. Current measures are limited by the scope of data items in the current administrative data collections and some of these limitations will not be possible to address in the short term. A more productive and cost-effective approach to this issue is the one already being pursued by NSW Health – to provide improved reporting tools to hospitals and LHDs for local review and investigation, coupled with a set of targeted and evidence-based strategies to reduce those unplanned readmissions that are potentially preventable.	ASAP	A revised definition of Unplanned Readmissions has been implemented for use in the 2015-16 LHD performance agreements; a sample is attached at Tab 1.The revised definition addresses some of the limitations raised, by removing some previous exclusions and introducing age/sex standardisation in place of the previous unadjusted methodology. National review of the readmission KPI continues, and any changes made will be implemented across the NSW system as they are developed. The NSW Health Integrated Care Strategy is ongoing and aligned with Chronic Disease Management Programs and innovation and planning in health care with a focus on delivering effective health management for people with chronic diseases at high risk of unplanned hospital or Emergency Department presentation. A formative evaluation of the NSW Health 2014 Integrated Care Strategy is currently underway. **Status: Complete**	Health System Information and Performance Reporting Branch
2	By December 2015, ensure the use of Relative Stay Index reports and Activity Based Management	Accepted	The roll-out of the Relative Stay Index reports and the Activity Based Management portal is under way in accordance with NSW Health's existing	Dec 2015	The ABM Portal and Relative Stay Index (RSI) Reports are used on an ongoing basis to benchmark performance and length of stay. The tools allow LHD/SHNs to plan local	Health System Information and Performance Reporting Branch

	portal at the Local Health District level. (page 19)		plans and is progressing well.		initiatives to improve performance, reduce cost and length of stay as appropriate. The Ministry for Health produces tailored RSI Reports for each LHD/SHN on a quarterly basis along with the potentially preventable hospitalisation, hospital readmission and ED representation reports. These reports are distributed across the system for the districts to utilise in performance improvement initiatives where progress is discussed under the auspice of the performance framework with Chief Executives. **Status: Complete**	
3	By December 2015, take appropriate actions to support local analysis and reporting of length of stay and unplanned readmissions, subject to cost-benefit considerations of providing more business intelligence tools to Local Health District and hospital staff. (page 19)	Accepted	NSW Health is currently developing its new Analytics Framework, which will address a number of current and planned initiatives for dissemination and use of appropriate business intelligence tools across the system. This builds on an array of analytical tools and reporting systems already available to Local Health Districts and hospital staff.	Dec 2015	The Analytics Framework has been completed and implementation is commencing to continue to build capacity and capability across the system. Regular benchmarking reports are provided to LHDs to allow facilities to undertake case-specific reviews and investigations, and to develop strategies to address any identified issues. Relevant Unplanned Readmission Audit Tools have also been developed locally and are being used extensively across the system; an example is attached at Tab 2. The alignment of Integrated Care and Chronic Disease Management Audit Tools has led to ongoing improvements in rehabilitation and discharge planning with increased follow up of at risk patients; audit tools for unplanned readmissions have also been tailored for specific conditions, such as Cardiac Disease, example attached at Tab 3. **Status Complete**	Health System Information and Performance Reporting Branch

| 4 | By December 2015, identify and coordinate state-wide and local strategies to reduce unplanned readmissions. These strategies should be targeted at specific conditions and patient groups who would most benefit from reductions in unplanned readmissions.(page 20) | Accepted | An in-depth review of unplanned readmissions was undertaken by the Ministry and the Clinical Excellence Commission, including a review of international evidence. This has resulted in identification of a range of evidence-based strategies that are currently being considered for implementation in NSW Health. These strategies will work in alignment with a broader set of integrated care strategies currently being implemented as part of NSW Health's Integrated Care Program | Dec 2015 | Each LHD is developing Integrated Care strategies to improve care for high risk and high utilisation groups and improve care. This work is being undertaken in collaboration with PHNs, and supported by ACI and NSW Ministry of Health.

Unplanned readmission rates have been included as a negative adjustor in Service Agreements with LHDs for the past 2 years. This has resulted in an identified reduction in rates across LHDs.

In addition the performance against the Service Measure of unplanned readmission rates is a common discussion point at Performance Meetings held with LHDs by the SPPD.

The Ministry of Health is currently undertaking a second review of the Unplanned Readmission indicator (building on the review conducted in 2014) in collaboration with 5 LHDs/SHNs to share learning across the system. This review will lead to further improvements in benchmarking and leverage effective approaches to reduce unplanned readmissions rates.

Status Complete | Health System Information and Performance Reporting Branch |
| 5 | By December 2015, ensure that out-of-hospital programs being rolled out have suitable evaluation programs attached. (page 23) | Accepted | Most state wide programs already have evaluations routinely included as part of the program. The new Integrated Care Program has a significant monitoring and evaluation component running in parallel with the actual implementation. Local Health Districts are encouraged to run smaller, targeted local evaluations for their innovation programs – these have to be commensurate to the size of local initiatives | Dec 2015 | All Integrated Care programs and strategies being developed include evaluation as a compulsory component of their implementation.

The first formative evaluation of the NSW Integrated Care Strategy was completed in November 2015 and the Report is in the process of being finalised.

All LHDs have been required to submit a project plan for Integrated Care projects into the Rigorous Program Management (RPM) tool managed by the | Health System Information and Performance Reporting Branch |

					Program Management Office (PMO). These project plans are regularly reviewed and reported to the Integrated Care Implementation Group chaired by the Secretary as a means to monitor progress of LHDs towards the implementation of the funded projects. One additional Tier 2 KPI has been developed for inclusion in the 2016/17 Service Agreement. A set of additional KPIs and Service Measures, which are being monitored by the Integrated Care Monitoring & Evaluation work stream, are expected to be included in 2017/18. **Status Complete**	
6	By June 2016, commence formal reviews and evaluations on the effectiveness of HealtheNet in supporting continuity of patient services from hospital care to primary and community care. The reviews should include IT challenges encountered during implementation, effectiveness of training and education programs, take up/utilisation rates and evidence of success. (page 23)	Accepted in principle	The current plan is for HealtheNet to be implemented in all LHDs by middle of 2015. It is important for the new system to be in operation for a reasonable period of time before any meaningful evaluative effort can take place. The evaluation will have to take into account a range of related eHealth-type initiatives, such as the Personally Controlled Electronic Health Record (Commonwealth-funded national project), as well as local initiatives aimed at supporting GP-to-hospital interactions such as shared care plans, electronic referrals and the like. This is a fast changing field with multiple inter-related projects, relying on a wide range of stakeholders, which may impact on the timing of any formal review or evaluation.	June 2016	The state-wide roll-out of HealtheNet was completed in 2015. All NSW Local Health Districts (LHDs) were connected to HealtheNet in April 2015, and all LHDs were submitting hospital discharge summaries to HealtheNet by December 2015. The HealtheNet team continues to work with the Ministry of Health and LHDS, to ensure take-up and utilisation of the system is maximised. The team also collaborates closely with the Commonwealth and Primary Health Networks to ensure that the system continues to successfully connect hospitals to primary care providers. As of May 2016, 185 public hospital and Multi-Purpose Services are connected to HealtheNet (based on the AIHW hospital list). This number continues to grow as the electronic medical record (eMR) is implemented in more facilities across NSW. Post Implementation Reviews (PIRs) have been completed for the five project streams within the HealtheNet Program. A	Office of the Chief Executive and Chief Information Officer, eHealth.

				consolidated program level PIR incorporating lessons learnt is scheduled for completion in July 2016. The resultant Program PIR & Closure Report will be subject to a PIR Gate Review to be conducted under the NSW Treasury Gateway Review System which is planned for August 2016. **Status Complete**	

INTEGRATED CARE – SERVICE MEASURES

INDICATOR: SSQ106, SSQ107, SSQ126	Unplanned hospital readmission: all unplanned admissions within 28 days of separation (%):
Previous IDs: 0001, 9A1	• All persons (*SSQ106*) • Aboriginal persons (*SSQ107*) • ABF hospitals (rate in NWAU) (*SSQ126*)

Service Agreement Type   Service Measure
Performance Area   Integrated Care

Status   Final
Version number   2.1

Scope

- SSQ106 & SSQ107: All patient admissions to public facilities in peer groups A1 – D2.
- SSQ126: All acute patient admissions to ABF hospitals only.

Goal   To identify and manage the number of unnecessary unplanned readmissions. To Increase the focus on the safe transfer of care, coordinated care in the community and early intervention.

Desired outcome   Improved efficiency, effectiveness, quality and safety of care and treatment, with reduced unplanned events.

Primary point of collection   Administrative and clinical patient data collected at admission and discharge

Data Collection Source/System   Admitted Patient Data Collection, Hospital Patient Admission Systems (PAS)

Primary data source for analysis   HIE / IQ

Indicator definition   *SSQ106 & SSQ107:* The percentage of patients who have an unplanned readmission to the same facility within 28 days following discharge for any purpose, disaggregated by Aboriginality status.

Note that Aboriginal persons include people who identify as Aboriginal and/or Torres Strait Islander.

SSQ126: The percentage of patients who have and unplanned acute readmission to the same facility within 28 days following discharge for any purpose other than mental health, expressed as a rate in NWAU per 100 weighted admissions. Both the numerator (readmissions) and denominator (admissions) are in NWAU. Rates are standardized by:

- 5 year age group
- Sex
- Aboriginality
- Peer Group
- Casemix (Modified DRGs)

Indirect standardisation adjustments have been used to compare the

LHD/SHN populations against the NSW population. The article below details the methodology in the context of age-standardisation:

http://meteor.aihw.gov.au/content/index.phtml/itemId/327276

Numerator

Numerator definition

SSQ106 & SSQ107: The total number of unplanned admissions (counted as stays not episodes) with admission date within reference period and patient previously discharged from same facility in previous 28 days for any purpose.

Where: Unplanned is defined as Urgency of Admission (emergency_status) = 1.

A readmission is defined as an admission with an admission_date within 28 days of the discharge_date of a previous stay for the same patient at the same facility (identified by MRN and facility_identifier).

SSQ126: The total number of unplanned acute admissions (counted as stays not episodes) with the admission date within reference period (where days_in_psych = 0), and where the patient was previously discharged from same facility within the previous 28 days.

Where:
- Unplanned is defined as Urgency of Admission (emergency_status) = 1, and
- Acute care is defined as episode_of_care type = 1 and episode_sequence_number = 1

A readmission is defined as an admission with an admission_date within 28 days of the discharge_date of a previous stay for the same patient at the same facility (identified by MRN and facility_identifier).

Numerator source

HIE/ IQ

Numerator availability

HIE/ IQ Available monthly

Denominator

Denominator definition

SSQ106 & SSQ107: Total number of admissions (counted as stays not episodes) with admission dates within the reference period.

SSQ126: Total number of acute admissions (counted as stays not episodes) with admission dates within the reference period, and where days_in_psych = 0.

Denominator source

HIE/ IQ

Denominator availability

HIE/ IQ Available monthly

Inclusions

SSQ106, SSQ107 & SSQ126:
- Readmissions that result in death are included in the Numerator but not the denominator;
- each index/initial admission can have at most one readmission;

- a readmission can be an index/initial admission to another readmission.

Exclusions	*SSQ106 & SSQ107.*

- Additional episodes created through a change of care type;
- Transfers from other hospital (i.e. source of referral = 4 or 5);
- Facilities in peer groups below D2.

SSQ126

- Readmission for mental health (days in psych unit > 0);
- Additional episodes created through a change of care type;
- Transfers from other hospital (i.e. source of referral = 4 or 5);
- ED only admitted episodes (i.e. Mode of Separation = 1 or 4)

Targets

Target

Reduction on previous year.

Comments

- This definition is measurable with current data available in the ISC.
- The inclusions and exclusions have been changed and it no longer is based on the UK definition. Unlike the previous version of this indicator, if a patient has more than one unplanned readmission within the period, they will all be counted.
- While the use of administrative data can be used to identify unplanned readmissions it cannot clearly identify that the unplanned readmission was either related to the previous admissions or unexpected or preventable.
- The definition does not correspond with the ACHS Clinical Indicators 2005 which requires clinical decision;
- Not all readmissions are related to the previous admission and some may be potentially avoidable.

Context

A low readmission rate may indicate good patient management practices and post-discharge care; facilities with a high readmission rate may indicate a problem with a clinical care pathway.

Useable data available from

2001/02

Frequency of Reporting

- Monthly/Annual, financial year, biannual
- State Plan - quarterly

Time lag to available data

- HIE/IQ data have a 6 month lag, available December for previous financial year
- Availability depends on refresh frequency

Business owners

Contact - Policy

Director, Integrated Care Branch

Contact - Data

Executive Director, Health System Information and Performance Reporting

Representation

Data type	Numeric
Form	Number, presented as a percentage (%)
Representational layout	NNN.N%
Minimum size	4
Maximum size	6
Data domain	N/A
Date effective	

Related National Indicator   National Healthcare Agreement: PI 23-Unplanned hospital readmission rates, 2015

http://meteor.aihw.gov.au/content/index.phtml/itemId/559020

Health
Northern NSW Local Health District

Unplanned Hospital Readmissions Audit Tool

Instructions:
Please refer to the Unplanned Hospital Readmissions Audit Tool Guide for definitions and guidance when auditing.

Site
☐ Grafton ☐ Maclean ☐ Ballina ☐ Bonalbo ☐ Casino ☐ Coraki ☐ Kyogle
☐ Lismore ☐ Nimbin ☐ Urbenville ☐ Byron Bay ☐ Mullumbimby ☐ Murwillumbah ☐ The Tweed

MRN ☐☐☐☐☐☐ **DOB** ☐☐/☐☐/☐☐ **Previous discharge date** ☐☐/☐☐/☐☐ **Readmission date** ☐☐/☐☐/☐☐

1. Principal diagnosis - previous admission

2. Principal diagnosis - readmission

3. What was the readmission potentially related to the previous admission? ☐ Yes ☐ No

4. What was the readmission category as documented in EMR? ☐ Planned ☐ Emergency ☐ Inter-hospital transfer

5. Is the readmission category as documented in EMR correct? ☐ Yes ☐ No

IF READMISSION IS NOT POTENTIALLY RELATED NO FURTHER QUESTIONS APPLY

6. Patient's functional status (regarding ADL): ☐ Independent ☐ Somewhat dependent ☐ Fully dependent

7. Patient's disposition after previous admission: ☐ Home ☐ Aged Care ☐ Sub acute/transitional care ☐ Other

8. End-stage chronic disease:

   a. Is the patient likely to die in the next 12 months?

   ☐ Strongly agree ☐ Agree ☐ Unsure ☐ Disagree ☐ Strongly disagree

   b. Is the patient likely to go into residential care in the next 12 months?

   ☐ Strongly agree ☐ Agree ☐ Unsure ☐ Disagree ☐ Strongly disagree ☐ N/A (Patient already in aged care)

9. At the time of the previous admission, what was the Ontario HARP score for this patient? (see page 2) ☐☐

10. Please indicate whether any of the following preventable factors were relevant to this readmission:

a. Factors related to hospital care during the previous admission:
- ☐ *Missed or inaccurate diagnosis*
- ☐ *Missed or inappropriate treatment*
- ☐ *Complication of a procedure*
- ☐ *Healthcare associated infection*
- ☐ *Venous thromboembolism*

b. Factors related to transition from hospital to community-based care:
- ☐ *Transition planning*
- ☐ *Discharge summary*
- ☐ *Patient education*
- ☐ *Clinical handover to community-based care*

c. Factors related to community-based care:
- ☐ *Primary care planning*
- ☐ *Access to GP or Medical Specialist*
- ☐ *Medication management*
- ☐ *Access to community health services*
- ☐ *Access to personal care (e.g. Home Care, ComPacks)*
- ☐ *Poor coordination of community-based care*
- ☐ *Access to suitable models of chronic care (e.g. cardiac/respiratory)*
- ☐ *Inadequate transport*

d. Patient factors:
- ☐ *Patient decision (against recommended care)*
- ☐ *Patient compliance/self-management*
- ☐ *Patient awareness of community-based services*
- ☐ *Currently being managed for a mental health condition*
- ☐ *Impaired cognitive state (e.g. dementia)*
- ☐ *Can't afford medicines*
- ☐ *Can't afford personal care*
- ☐ *Can't afford transport*
- ☐ *Social isolation (e.g. living alone, not socialising, isolated from family)*
- ☐ *Failure to recognise worsening symptoms (>2 days)*

e. Other factor/s: *(please specify)*

11. Was the readmission preventable? ☐ Strongly agree ☐ Agree ☐ Unsure ☐ Disagree ☐ Strongly disagree

Table 1: The simple algorithm for the previous admission

Variable name	Parameters	Assigned Score	Maximum score for variable	Score for this patient
Patient age group	0 - 64 years old	0	3	
	65-84 years old	2		
	85+ years old	3		
Discharge disposition	Transfer to home / other	0	6	
	Transfer to home with support	4		
	Transfer to acute care	6		
Acute care admission six months prior	0	0	12	
	1	3		
	2	6		
	3 +	12		
Emergency department visits six months prior	0	0	10	
	1	4		
	2	6		
	3	7		
	4 +	10		
Diagnosis Group (more than one may be applicable)	Chronic Obstructive Pulmonary Disease	3	10	
	Heart failure w/out coronary angiogram	4		
	Inflammatory bowel disease	5		
	Gastrointestinal obstruction	2		
	Cirrhosis/alcoholic hepatitis	10		
	Diabetes	1		

EXPLANATORY NOTES:

Unplanned Hospital Readmissions (UHR) is a performance measure in the LHD Service Agreement.

- Indicator definition: Unplanned readmission of a patient within 28 days following discharge to the same facility for any purpose other than mental health, chemotherapy or dialysis.
- Mental health, chemotherapy or dialysis are excluded from both the numerator (readmissions) and the denominator (admissions). More specifically, the exclusions are:
    - Readmissions that contain a cancer code (code between "C00" and "D48.99") in any diagnosis field.
    - Readmission for chemotherapy or dialysis (DRGs R63Z or L61Z).
    - Readmission for mental health (where patient has been admitted to psychiatric unit > 0 days).
    - Change of care type, transfers from other hospital (i.e. source of referral 4 or 5).
    - Facilities in peer groups below D2.
- Unplanned is defined as emergency_status = 1.

Notes:

- There is no "unexpected" in the UHR definition.
- Don't be dismayed by readmissions not related to the previous admission. In practice, we find approximately one half of all UHR are potentially related to the previous admission - we are focusing upon this half. A State-level working group is currently reviewing the indicator definition.
- The hospitals that matter most for the LHD Service Agreement are the hospitals which have activity-based funding for acute services (Tweed Heads, Murwillumbah, Lismore, Ballina and Grafton).
- Improving data quality:
    - Ensure planned admissions are not coded as unplanned (emergency_status = 1).
    - Ensure patients transferred from acute inpatient admission to hospital-in-the-home (HITH) are being correctly coded.
    - Ensure readmissions which occur on the day of discharge are being correctly coded.

Unplanned Hospital Readmissions Audit Tool

The purpose of this UHR Audit Tool is to identify practical factors which can be used to prevent UHR at your hospital. This will enable better targeted strategies to be planned and implemented to prevent UHR. Although it can be used for retrospective audit, the UHR Audit Tool is best used at the time of readmission.

Hospital Admission Risk Prediction (HARP)

This HARP predictive tool is used for early identification of people at-risk of hospitalisation within the next 30 days. This particular tool was developed for use in Ontario, Canada. With the ultimate aim of people at a higher-risk of UHR within 28 days being allocated higher priority for well-targeted strategies to prevent UHR, we are trialling the utility of using this predictive tool. We anticipate this version of the tool will be replaced in the future by a similar predictive tool for people at-risk of UHR within 28 days, which is based upon NSW Health UHR data.

Cardiac Program Assessment

MRN	☐☐☐☐☐☐	☐ Male ☐ Female
SURNAME	☐☐☐☐☐☐☐☐☐☐☐	
First Name	☐☐☐☐☐☐☐☐☐☐☐	
DOB	☐☐ / ☐☐ / ☐☐☐☐	

☐ New Inpatient ☐ Reviewed Inpt
☐ New Outpt ☐ Reviewed Outpt
Select all that apply

Date of contact: ☐☐ / ☐☐ / ☐☐

Aboriginal or TSI? ☐ Yes ☐ No ☐ Unknown

Please select your site - more than one site per patient may apply

Site ☐ Ballina ☐ Casino ☐ Kyogle ☐ Maclean ☐ Nimbin ☐ Urbenville
☐ Byron Shire ☐ Grafton ☐ Lismore ☐ Murwillumbah ☐ Tweed

Referral Source: ☐ Inpatient ☐ GP ☐ Specialist ☐ Procedural Hospital ☐ Other NNSW LHD Hospital ☐ Self ☐ Other

Specialist _____ **GP:** _____

Is patient DVA: ☐ Yes ☐ No   **Contact person, relationship to patient and phone contact:** _____

Principal Diagnosis: Current Episode *(may select multiple)*

☐ CABG ☐ Pacemaker
☐ Angina AP/UAP ☐ Coronary Angio
☐ Arrhythmia ☐ STEACS
☐ Valve ☐ NSTEACS
☐ CHF ☐ ICD
☐ PCI+/- Stent ☐ Other

PEAK Troponin _____

Principal Diagnosis Date ☐☐ / ☐☐ / ☐☐

Other Diagnoses: *(may select multiple)*

☐ Angina AP/UAP ☐ CABG ☐ STEACS ☐ ICD
☐ PCI +/- Stent ☐ CHF ☐ NSTEACS ☐ Arrhythmia
☐ Coronary Angio ☐ Valve ☐ Pacemaker ☐ Other - specify

Can you attend a Cardiac Rehabilitation Program? ☐ Yes ☐ No

If no, select reason/s why:
☐ Transport ☐ Program Time
☐ Mobility ☐ Declined / Not interested
☐ Family/Carer ☐ Other - Specify below
☐ Work

Comment _____

Patient transferred for procedure ☐ Yes *Specify details below*

Has patient received Cardiac Education? ☐ Yes ☐ No ☐ N/A

Has patient received Cardiac Info Pack? ☐ Yes ☐ No ☐ N/A

Verbal consent for followup? ☐ Y ☐ N

MEDICATIONS:

☐ N/A *Medication regime not applicable for diagnosis eg: AF, Pacemaker, Primary EST*

Medication Administration
☐ Self
☐ Carer
☐ Dosset
☐ Webster pack
☐ Other

Medication List Provided
☐ Yes ☐ No

Recommended GP for HMR
☐ Yes ☐ No

ACE/AT2	☐ Y	☐ CI	GTN spray/tablets	☐ Y	☐ NA
BBlocker	☐ Y	☐ CI	Spironolactone	☐ Y	☐ CI
Aspirin	☐ Y	☐ CI			
Statin	☐ Y	☐ CI			
Antiplatelets/ Clopidogrel	☐ Y	☐ CI			

☐ Antiarrhythmics ☐ Ca Blockers
☐ Long Acting Nitrates ☐ Digoxin
☐ Warfarin ☐ Diuretics
☐ Insulin ☐ Oral Hypoglycaemics

Other medications: _____

Allergies: _____

Stress Test	☐ Yes ☐ No ☐ Planned	**Results**
ECHO attended	☐ Yes ☐ No ☐ Planned	☐ +ve
Angiogram attended	☐ Yes ☐ No ☐ Planned	☐ -ve
		☐ Equivocal
Comments *(ECHO, EST or Angio date if relevant)*		☐ Submaximal

Date referred to Outpatient Service: ☐☐ / ☐☐ / ☐☐
☐ Cardiac Rehab (own site)
☐ Cardiac Rehab (Other site) Please specify site below
☐ Heart Failure
☐ Respiratory
☐ Diabetes Educator/Dietitian
☐ Chronic Disease Management Program (Connecting Care)

Cardiac Program Assessment

RISK FACTOR PROFILE:

Place a X in the relevant risk/s box if appropriate (may select more than one).
Then complete any relevant clinical information in the space provided.

☐ Hyperlipidaemia	*Cholesterol:* *HDL:* *LDL:* *Trig:*
☐ Hypertension	*BP:*
☐ Family history	*(1st degree relative < 65 yrs)*
☐ Alcohol	*Number of standard drinks containing alcohol per day and week*
☐ Smoking	*Refer below*
☐ Diabetes	*HbA1c:* *Type 1* ☐ *Type 2* ☐
☐ Diet/Weight	☐ *Overweight* ☐ *Underweight* ☐ *Satisfactory*
☐ Depression/Anxiety *Refer below*	

MRN ☐☐☐☐☐☐

Surname _____

Or affix patient identification label here

Risk factor notes

List any referrals made:

Smoking status:
☐ Current
☐ Previous
☐ Never

If previous, quit when?
☐ <12 months
☐ 1 - 5 years
☐ >5 years

If current, Brief Intervention ☐ Y ☐ N

On NRT? ☐ Y ☐ N

Smoking Cessation Program offered? ☐ Y ☐ N

Employment status:
Currently employed? ☐ Yes ☐ No   **Type of work:** ☐ Physical labour   ☐ Desk/office work   ☐ Driving
If not empoyed, on sickness/centrelink payments?   ☐ Yes   ☐ No

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Depression/Anxiety Assessment - Please complete for ALL patients

Over the last 2 weeks how often have you been bothered by any of the following problems:

Little interest or pleasure in doing things? ☐ 0 ☐ 1 ☐ 2 ☐ 3 } If >0 complete
Felt down depressed or hopeless?   ☐ 0 ☐ 1 ☐ 2 ☐ 3 } PHQ9

PHQ9 attended?   ☐ Y ☐ N ☐ Planned (If score >0)

Do you live alone?   ☐ Y ☐ N

Do you have enough social support from friends and family?   ☐ Y ☐ N

Please indicate if any referrals have been made: ☐ Social Worker ☐ Psychologist/MH worker ☐ GP ☐ Other (specify)
☐ Currently receiving treatment   ☐ Treatment declined

Have you ever:

Been diagnosed with depression/anxiety? ☐ Y ☐ N
(If YES, please answer the following questions)

Had counselling ☐ Y ☐ N
Been on anti depressants? ☐ Y ☐ N
Is depression/anxiety still a problem? ☐ Y ☐ N

EXERCISE *Before cardiac event:*

Breathlessness on walking?   ☐ Y ☐ N
Did you perform any regular exercise?   ☐ Y ☐ N
Type of exercise:
How many days a week and for how long?

EXERCISE *After cardiac event*

Breathlessness on walking?   ☐ Y ☐ N
Do you now perform any regular exercise? ☐ Y ☐ N
Type of exercise:
How many days a week and for how long?

Do you get angina or chest discomfort when exercising?   ☐ Y ☐ N ☐ Unknown

Do you get angina or chest discomfort at other times?   ☐ Y ☐ N ☐ Unknown

Mobility Issues/Aids:

Home Exercise Guidelines? ☐ Y ☐ N

Review Action Plan ☐ Y ☐ N

Do you have a chest pain action plan?   ☐ Y ☐ N ☐ N/A ☐ Unknown

Heart Failure action plan?   ☐ Y ☐ N ☐ N/A ☐ Unknown

Do you have a GP care plan?
☐ Y ☐ N ☐ Unknown

Is this a readmission for the same Illness (Inpatients only) ☐ Y
If yes: ☐ <28 days   ☐ N
         ☐ >28 days-12 months

Risk of readmission (all patients) ☐ High   ☐ Medium   ☐ Low
Are you presently receiving any home services? ☐ Y ☐ N
If yes, specify:

Relevant history/ Clinical / Social / Co-morbidities

Initially completed by:	_____	Signature: _____	Date: ☐☐ / ☐☐ / ☐☐
Revised by:	_____	Signature: _____	Date: ☐☐ / ☐☐ / ☐☐

Additional Heart Failure Assessment

New patient? ☐ Yes ☐ No

MRN	☐☐☐☐☐☐	☐ Male ☐ Female
SURNAME	☐☐☐☐☐☐☐☐☐☐☐☐☐	
First name	☐☐☐☐☐☐☐☐☐☐☐☐☐	
DOB	☐☐ / ☐☐ / ☐☐☐☐	

Aboriginal or TSI? ☐ Yes ☐ No ☐ Unknown

Site: ☐ Ballina ☐ Casino ☐ Kyogle ☐ Maclean ☐ Nimbin ☐ Urbenville
☐ Byron Shire ☐ Grafton ☐ Lismore ☐ Murwillumbah ☐ Tweed

INPATIENT and/or ACUTE EXACERBATION
(Complete relevant sections)

When did you start to get worse?	< 2 days	> 2 Days
Increased dyspnoea when walking/other activities	☐	☐
Awakening at night short of breath / cough	☐	☐
Needing to take more frequent rest during daytime	☐	☐
Swelling of ankles, legs or stomach	☐	☐
Loss of appetite or nausea	☐	☐
Sleeping on more pillows/or in chair	☐	☐
Chest discomfort	☐	☐

PRECIPITATING FACTORS (days)	Yes
Infection - respiratory or other	☐
Poor adherence to diet/fluid/weighs	☐
Medication issues	☐
Inadequate social support	☐
Cardiac event	☐
New AF	☐
Other (specify)	☐

Medications explained	☐ Y ☐ N
Heart Failure DVD viewed	☐ Y ☐ N
Dose Titration schedule to GP	☐ Y ☐ N

Notified of anticipated discharge date ☐ Y ☐ N ☐ N/A

EDD ☐☐ / ☐☐ / ☐☐☐☐

GP appointment within 5 working days Date ☐☐ / ☐☐ / ☐☐☐☐

Liaison/ Community Nurse visit booked *(if applicable)* Date ☐☐ / ☐☐ / ☐☐☐☐

OTHER CLINICAL ASSESSMENT

Fluid Status and Restrictions

Home restriction?	☐ Yes ☐ No	☐☐☐☐ mls
Hospital fluid restriction	☐ N/A	☐☐☐☐ mls
Daily dry weight at home?	☐ Yes ☐ No	☐☐☐ kgs
Admit weight	☐ N/A	☐☐☐ kgs

Immunisation

Flu Vac past year? (rpt every yr) ☐ Y ☐ N ☐ Unk
Pneumococcal vac (every 5 yrs x2) ☐ Y ☐ N ☐ Unk

Pathology Date ☐☐ / ☐☐ / ☐☐☐☐

Creatinine ☐☐☐   Urea ☐☐.☐   K+ ☐.☐

BNP ☐☐☐☐   Hb ☐☐☐   Sodium ☐☐☐

Salt Intake

Do you usually restrict your salt intake?	☐ Y ☐ N
Do you add salt to food?	☐ Y ☐ N
Do you eat many processed foods such as tinned or prepackaged food?	☐ Y ☐ N

NYHA Class ☐ 1 ☐ 11 ☐ 111 ☐ 1V

Does patient have an Advance Care Directive? ☐ Y ☐ N

Comments/Relevant History

Completed by: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Designation:_____   Date: ☐☐ / ☐☐ / ☐☐

Signature: _____

Health
Northern NSW
Local Health District

NSW GOVERNMENT

Cardiac Program Phase 2 Entry

MRN ☐☐☐☐☐☐ ☐ Male ☐ Female

SURNAME ☐☐☐☐☐☐☐☐☐☐☐☐☐☐

First name ☐☐☐☐☐☐☐☐☐☐☐☐☐

DOB ☐☐ / ☐☐ / ☐☐☐☐

Date commenced: ☐☐ / ☐☐ / ☐☐☐☐

Aboriginal or TSI? ☐ Yes ☐ No ☐ Unknown

Fields highlighted in grey are mandatory

Site ☐ Ballina ☐ Casino ☐ Kyogle ☐ Maclean ☐ Nimbin ☐ Urbenville
☐ Byron Shire ☐ Grafton ☐ Lismore ☐ Murwillumbah ☐ Tweed

Type of Program ☐ Group ☐ Home ☐ Education/Home Exercise ☐ Heart Failure ☐ Other _____

Individual Assessment ☐ Face to face ☐ Telephone

GP/Specialist [_____]

6 Minute Walk Test ☐ No ☐ Yes *If yes, how many metres?* ☐☐☐ metres

QOL - McNew Score (CR Patients) ☐.☐☐ **OR** Minnesota Score (HF Patients) ☐☐☐

Depression Score (PHQ9 +/- GAD7) PHQ9 ☐☐ GAD7 ☐☐

Referral ☐ No ☐ Yes *Comments:* [_____]

Weight ☐☐☐.☐ kgs ☐ *Overweight* ☐ *Underweight* ☐ *Satisfactory*

Height ☐☐☐.☐ cms *(If doing BMI)* **BMI** ☐☐.☐ **OR** **Waist** ☐☐☐.☐ cms
Target BMI 18.5 - 24.9 Target Waist <94 cm (M) - <80 cm (F)

Current Smoker ☐ No ☐ Yes *If yes:* ☐ Cessation Support ☐ Referral to smoking cessation program ☐ NRT

Goals:
What do you see as your biggest problem right now?
(see goal setting tool)

[_____]

What is it that you would really like to do that this problem stops you from doing?

[_____]

Mark the degree to which the person has: *Not at all* *Some* *Completely*

	1	2	3	4	5
- Returned to normal activities	☐	☐	☐	☐	☐
- Achieved their goals	☐	☐	☐	☐	☐

Self management action plan ☐ Yes ☐ No **Care plan** ☐ Yes ☐ No ☐ Not known

Comments

[_____]

Completed by: [_____] Signature: _____ **Date:** ☐☐ / ☐☐ / ☐☐

Health
Northern NSW
Local Health District

NSW GOVERNMENT

Cardiac Program Phase 2 Exit

MRN ☐☐☐☐☐☐ ☐ Male ☐ Female

SURNAME ☐☐☐☐☐☐☐☐☐☐☐

First name ☐☐☐☐☐☐☐☐☐☐☐

DOB ☐☐ / ☐☐ / ☐☐☐☐

Date completed: ☐☐ / ☐☐ / ☐☐☐☐

OR Incomplete: ☐

Aboriginal or TSI? ☐ Yes ☐ No ☐ Unknown

Fields highlighted in grey are mandatory

Site:
☐ Ballina ☐ Casino ☐ Kyogle ☐ Maclean ☐ Nimbin ☐ Urbenville
☐ Byron Shire ☐ Grafton ☐ Lismore ☐ Murwillumbah ☐ Tweed

If Phase 2 was not completed, why?

QOL - McNew Score (CR Patients) ☐.☐☐ **OR** Minnesota Score (HF Patients) ☐☐☐

Depression Score (PHQ9 +/- GAD7) PHQ9 ☐☐ GAD7 ☐☐

Referral ☐ No ☐ Yes *Comments:*

6 Minute Walk Test ☐☐☐ metres

Weight ☐☐☐.☐ kgs **BMI** ☐☐.☐ **OR** **Waist** ☐☐☐.☐ cms

Current Smoker ☐ No ☐ Yes *If yes:* ☐ Cessation Support ☐ Referral to smoking cessation program ☐ NRT

Goals:
Mark the degree to which the person has:

	Not at all	Some		Completely	
	1	2	3	4	5
- Returned to normal activities	☐	☐	☐	☐	☐
- Achieved their goals	☐	☐	☐	☐	☐

Self management action plan ☐ Yes ☐ No   **Care plan** ☐ Yes ☐ No ☐ Not known

Regular Exercise and ongoing exercise plan *(The Heart Foundation recommends to establish or maintain at least 30mins of moderate intensity physical activity on 5 or more days a week)* ☐ Yes ☐ No

Comments

Have they had further cardiac investigations or complications since starting Phase 2? ☐ Yes ☐ No
If yes, please specify

☐ CABG ☐ Pacemaker
☐ Angina AP/UAP ☐ Coronary Angio
☐ Arrhythmia ☐ STEACS
☐ Valve ☐ NSTEACS
☐ CHF ☐ ICD
☐ PCI+/- Stent ☐ Other - specify

Were they admitted to hospital? ☐ Yes ☐ No
If yes, was it: ☐ Planned ☐ Unplanned

Comments:

Completed by: Signature: **Date:** ☐☐ / ☐☐ / ☐☐