APAC
Acute/Post Acute Care

NORTHERN SYDNEY CENTRAL COAST NSW HEALTH

**Professional Health Care In Your Own Environment**


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# APAC CLINICAL GUIDELINES FOR MANAGEMENT OF

# CHRONIC OBSTRUCTIVE PULMONARY DISEASE

**ACUTE/POST ACUTE CARE (APAC) NORTHERN SYDNEY CENTRAL COAST HEALTH**

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# Clinical Guidelines for Home Management of Chronic Obstructive Pulmonary Disease

## *APAC Contact Numbers*

**Northern Sydney**
Hospital In-patients:

Monday to Friday 8.00am – 5.00pm
- **(02) 9926 7292**

Monday to Friday 5.00pm – 11.00pm.
Weekends and Public Holidays
- **(02) 9926 7111** ask for APAC Nurse to be Paged

***APAC/GP Shared Care Program Patients*:**
7 days a week, including Weekends and Public Holidays
- ***0421 582 997***

**Central Coast**

7 days a week, including Weekends and Public Holidays

- **Phone (02) 4320 3482**
  7.00am – 11.00pm
- **Fax (02) 4320 3555**

**Referrals taken:** 7:00am to 11:00pm

## Clinical Guideline Statement

APAC provides comprehensive and evidence based treatment through a coordinated multi-disciplinary team, who operate according to agreed clinical pathways, supported by data from the National Institute for Clinical Excellence (2004), and Australia and New Zealand guidelines for the management of COPD (2003).

A collaborative approach to patient care is achieved through the BREATHE program, which is run by NSCCH and interlinks the services of APAC, Pulmonary Rehabilitation, HERRS and Northern Sydney Home Nursing Service respiratory program. It was developed to effectively manage chronic respiratory patients and educate them to better manage their illness. Each of the services has a different role in this process.
APAC provides intense short-term care as an alternative to hospitalisation or when a patient is known to APAC and at high risk of deterioration and hospitalisation.

Pulmonary Rehabilitation provides a comprehensive program combining exercise, education and support.

Northern Sydney Home Nursing Service provides ongoing care in an attempt to prevent relapse or deterioration and have the capacity to provide end stage care to those not appropriate for pulmonary rehabilitation.

APAC aims to provide patient education, treatment, assessment and support, in order to improve disease management, quality of life, and prevent disease exacerbation, thereby decreasing hospital admissions.

HERRS provides ongoing support and home education. Patients are followed up and management strategies reviewed in order to optimise patient outcomes and prevent relapse or deterioration.

## Scope of Practice

- First Dose of Intravenous Antibiotic should be administered either within a Hospital facility or by/in the presence of the General practitioner.
- Accredited Registered Nurses –Patient assessment and monitoring and education. Administration of 2nd and consecutive doses of IV antibiotics.
- Medical practitioners – Patient diagnosis, management plan and review.
- Physiotherapist – patient assessment and physiotherapy.
- Occupational Therapist – Patient and environment assessment and education.
- Pharmacists – Medication review and patient education.

## Outcomes:

- Improved quality of life for the patient and carer.
- Increased understanding of the disease process and progression.
- Improved symptom management.
- Establishment of action plan and improved response to exacerbation of disease.
- Identification and management of risk factors.
- Patient and/or carer comprehend and are confident with medication regime.
- Referral to community services for ongoing support in ADLs for patient and carers.
- Refer to Northern Sydney Home Nursing Service (NSHNS), HERRS or Pulmonary Rehabilitation Program as required.
- Refer to respiratory clinical psychologist where appropriate.
- Refer palliative care where appropriate.

## Definitions

**ADLs –** Activities of Daily Living
**COPD –** Chronic Obstructive Pulmonary Disease
**HERRS –** Home Education Respiratory and Rehabilitation Service
**VMO –** Visiting Medical Officer
**GP -** General Practitioner
**SMS** - Senior Medical Officer/Consultant
**CCH** - Central Coast Health Sector
**NSH** - Northern Sydney Health Sector
**NSCCH** - Northern Sydney Central Coast Health
**Hospital Facility Patient –** A patient who has been admitted to APAC through the hospital facility either from the **Wards**, **Emergency** or **EMU** departments.
**Mode of Referral –** Refers to the form of medical health professional who is referring a patient, e.g. SMS/VMO, GP, Nursing or Allied Health Worker**.**
**Clinical Management –** Refers to the medical responsibility and management of a patient, this will be either the SMS or GP.

**APAC /GP Shared Care Program (GP Direct Referrals) -** The APAC/GP Shared Care program is an extension of the APAC service that enables GPs to **directly refer** and access the APAC service. It enables GPs to determine and **initiate** the clinical management of their patient before referring the patient to APAC for them to perform the clinical treatment. The APAC program aims avoids unnecessary hospital presentations.

## Referral to APAC

### 1. APAC NSCCH Admission Criteria

To be admitted to PAC NSCCH the patient should fulfil the APAC Assessment Criteria. *(Howden & Grayson, 2002).*

- Live within the Northern Sydney Central Coast Health Area
- Patient is clinically stable *(Howden & Grayson, 2002*
- Have access to a telephone/fax *(Corwin et al, 2005)*
- Has designated Medical responsibility for the clinical management of the patient, for the duration of treatment from the APAC service
- Able to or have a carer who is able to comprehend the treatment regimen
- Able to have treatment delivered in a safe environment *(Howden & Grayson, 2002)*.
- Patient and/or carer/guardian consents to APAC service *(Corwin et al, 2005)*

**Patients residing outside the NSCCH Local Government Areas,** who no longer meet the criteria for APAC, will be transferred to appropriate services in consultation with the GP/Medical team.

**Planned/Unplanned Leave –** If the GP/Medical team has patients under their care and has to take planned or unplanned leave, they have to either:

- Arrange an accredited APAC/GP Shared Care Locum or alternate Medical Management (when hospital team) to take over the patients' clinical management. OR

Organise for the patient to be transferred to a hospital management team.

### 2. APAC referral Criteria for COPD

If the patient meets the criteria outlined above a referral to APAC can be made by, a member of the medical team, community services, pulmonary rehabilitation, HERRS, community nursing services, patients themselves, general practitioner (GP), nursing or allied health staff. This may be a hospital or community based referral.

- Hospital based assessments are conducted by the hospital Liaison, or physiotherapist. Based on the patient assessment criteria outlined below, the patient is deemed suitable or not suitable for APAC.
- Community based assessments are conducted in the patients home by the physiotherapist or respiratory clinical nurse specialist (CNS). Based on the patient assessment criteria outlined below, the patient is deemed suitable or not suitable for APAC.
- The patient requires assessment by and authorisation from a senior medical staff (SMS) member, Respiratory Physician or GP before they will be accepted onto the APAC service.
- This medical officer is required to provide medical management and regular review of the patient while they are under the care of APAC.
- Once accepted onto APAC, the patient's GP will be contacted (if this has not occurred previously) to be advised of the treatment plan and/or to arrange transfer of care to GP or a shared care arrangement with hospital SMS.

- Patients **may be excluded from APAC** if critical vital signs in the 24 hours prior to referral to APAC:
    - Temp >38.5$^{o}$C
    - Pulse rate >100/minute
    - Hypotension (≤100/50mm Hg or 30mm Hg < 'normal' BP) (Micheal et al, 2006)

According to Ewig et al, *(2004),* **hospital admission** should be considered if the patient has any of the following:

- Temperature (T) < 35°C or ≥ 38.5$^{0}$ - 40°C$^{+}$
- Heart Rate (HR) >125/min
    - Respiratory Rate (RR) >30/min
    - Systolic BP <90mmHg and/or Diastolic BP <60mmHg
    - New and/or significant confusion

## Patient Diagnosis and Assessment Requirements

### 1. History

- Present complaint, symptoms, duration and prior treatment disease process, action plan. In comparison to patients normal health status.
- Childhood or adult history of pulmonary disease eg cystic fibrosis, asthma, TB, bronchiectasis, chronic bronchitis, COPD, asbestosis, pneumonia.
- Environmental exposure to pollutants.
- Occupation, job history, effect of the occupation on disease.
- Smoking history; number of cigarettes smoked per day, duration, date ceased. Record in pack/year history.
- Co-morbidity: diabetes, asthma, renal failure, recurrent exacerbations, major surgery (eg: lobectomy) cardiac failure, liver disease, prior hospitalisation, confusion, ethanol, mental function.
- Oxygen therapy how much, how many hours a day, CO2 retainer?
- Exercise tolerance.
- Respiratory and other medications.
- Social factors including geography, accessibility, established community services and support of carers and family.
- Recent pneumovax and/or fluvax

### 2. Baseline Investigations (to be taken before patient begins treatment, unless recent results available)

- Arterial blood gases if required.
- Spirometry if required.
- Chest X-ray.
- CT Scan if required.
- Baseline blood tests; EUCs, LFTs, CRP, FBC.
- Sputum microscopy, culture and sensitivities.
- ECG

### 3. Examination

- Vital signs, PO2 saturation on room air and oxygen.
- Cardiac, respiratory and abdominal examination.
- Other relevant signs documented briefly.

## General Care

### 1. APAC

- Provide standardised and evidenced based intervention
- Encourage patients to drink at least 1,5L per day unless contraindicated by co-morbidities
- Monitoring of medical condition and potential complications
- Prevent and treat complications and exacerbations.
- Clinical response means:
    - Temperature < 37.8$^{o}$C for 24 hours (if greater than this at admission)
- Education re. self-management strategies.
- Education and support of patient and carer.
- Institution of action plan.
- Relieve symptoms.
- Prevent disease progression.
- Assess patient's progress and coping mechanisms
- Improve exercise tolerance and health status
- Prevent disease recurrence
- Monitor pharmacotherapy
- Support early discharge of patients admitted to the hospital setting with COPD who are medically stable and progressing well.
- Prevention of hospitalisation for patients who would otherwise need treatment as an in-patient.
- Reduce mortality.
- Assessment and education on respiratory medications and the accurate use of inhalers, spacer, and oxygen at home.
- Identification and reduction of risk factors.
- Education on smoking cessation.
- Assessment of precipitating factors for admission to hospital and implementation of strategies to prevent re-admissions.
- Communication with Medical Officers, and/or Respiratory physician as required
- Allied Health services, Occupational Therapy, Physiotherapy, Pharmacy and Social Work advice *(Howden & Grayson, 2002).*
- If an in-patient, APAC Registered Nurse should complete the APAC Admission prior to discharge. If patient is referred from GP, APAC staff member will complete the APAC admission on the first home visit to the patient.

Once referral and admission are confirmed with APAC, the first home visit be conducted within 24 hours.

**Home Visit:**

A home visit will be conducted by an APAC team member and documented in the progress notes within 24 hours of the patient's return home or referral to APAC. Home visits are timed with the need for the administration of treatment such as antibiotics, with consideration to patient requirements.
Patients, who have new home oxygen therapy, require a visit within 24hours of their discharge from hospital.
APAC aim to stabilise patients for up to 14 days in their home environment.

APAC Clinician attends:

- Respiratory work sheet completed daily (see appendices).
- Administration of intravenous antibiotics and maintenance of intravenous access site where required.
- Complete "My Health Record".
- Implementation of an Action Plan.
- Assessment of patients progress, coping mechanisms, disease management strategies
- Education on energy conservation, activity levels, and optimising quality of life
- Assistance with activities of daily living (ADLs).

**Multi-disciplinary team:**

- Physiotherapists.
- Occupational Therapists.
- Respiratory Clinical Nurse Specialist.
- Pharmacist.
- Registered Nurses.
- Community Care Aids.
- Access to a Clinical Psychologist

## 2. Carers and Families:

- Patients and families should be given information and feedback on the progress of the exacerbation.
- It needs to be recognised that by the time the patient returns home, families may experience stress and may require emotional support.
- Goal setting and action plan should involve the patient and family members if appropriate.
- Carers should receive all necessary equipment and training in moving and handling the patient safely within the home environment.
- Referral to carer support services where required.

## 3. SMS/GP Clinical Management

- Complete Hospital discharge letter if patient an In-patient.

**Medical Review**

- Regular review every 2-3 days (at least)
- Re-ordering of medications on appropriate medication chart by attending Medical team/GP. Updating of treatment care plan in the patient's APAC health care file.

### 4. Criteria for Transfer to the Emergency Department or GP Review

- Significant change in Critical Vital signs:
  O2 Sa <89%
  Increased Dyspnoea
  Respiratory Rate >30 / min
  Temp > 38.5 C
  Pulse Rate >110 / min (not on Salbutamol) or <60 / min
  Increased Cyanosis
- Worsening Chest Pain
- Increased sputum production and / or change in sputum colour to green/brown.
- Increasing fatigue and respiratory effort
- New confusion
- Increased Peripheral Oedema
- Drug reaction
- Or any patient the clinician has concerns about their medical condition.
- Impaired mental status
- Respiratory rate < 30/min
- Blood pressure (SBP <90mmHg or<60mmHg)
- Any new problem needing prompt medical assessment.
- Drug reaction so review of antibiotic therapy is required.

*Ref.: American College of Chest Physicians, 2004*

NOTE: If a patient requires transfer to the Emergency Department, the treating Medical team or GP should be contacted after the review by Emergency Staff.

## Treatment Options

### 1. Exclusion criteria

Critical Vital signs prior to admission to APAC:

- O2 Sa < 89%
- Temp >38.5 C
- Respiratory Rate >30 / min
- Pulse Rate >110 / min (not on Salbutamol) or <60 / min
- SBP <90 mm Hg or DBP > 100 mm Hg
- New confusion
- Disabling dyspnoea
- New Peripheral Oedema

### 2. Pharmacotherapy

Acute Exacerbations of COPD are often caused by viral infection of the respiratory tract. The pathophysiology of COPD exacerbations is difficult to determine. Chronic bacterial contamination of the airway is common in COPD and may be an important part of the pathogenic process even when the disease is stable. *(McKenzie et al 2003).*

Patients who have an acute infective exacerbation of COPD may require oral and/or intravenous antibiotics. The rationale for antibiotic treatment for COPD is to optimise outcomes and to minimise resistance, at a reasonable cost to the patient and health care system. Sputum culture, microscopy and sensitivities should be performed prior to commencing antibiotic treatment. *(Pauwels RA 2001).*

APAC clinical guidelines for administration of intravenous antibiotics are adhered to, in accordance with Therapeutic Guidelines: Respiratory 2005 and Antibiotic 2003.

APAC treats the majority of patients with a third generation cephalosporin and a macrolide antibiotic for a minimum of 5 days.

- Ceftriaxone 1-2g daily (IVI)
- Roxithromycin 150 BD (PO) or 300mg (PO) daily
- Other antibiotic treatment regimens are at the discretion of the treating physician, dependant on which pathogen is the causative organism

## APAC Documentation

- A comprehensive record of all patient contact, direct and indirect, including communication with the patients SMS/GP or any other health representative, must be documented in the patients Health Care File within 24hrs of the patient contact.
- Patients clinical condition at each visit must be documented
- Official APAC documentation should be used and completed as required
- Each page of documentation must be headed with the patient's name, date of birth and medical record number.
- Each entry into the patients medical records must be dated, timed, and have the attending health care workers signature, first initial and surname, and employee identifying number.

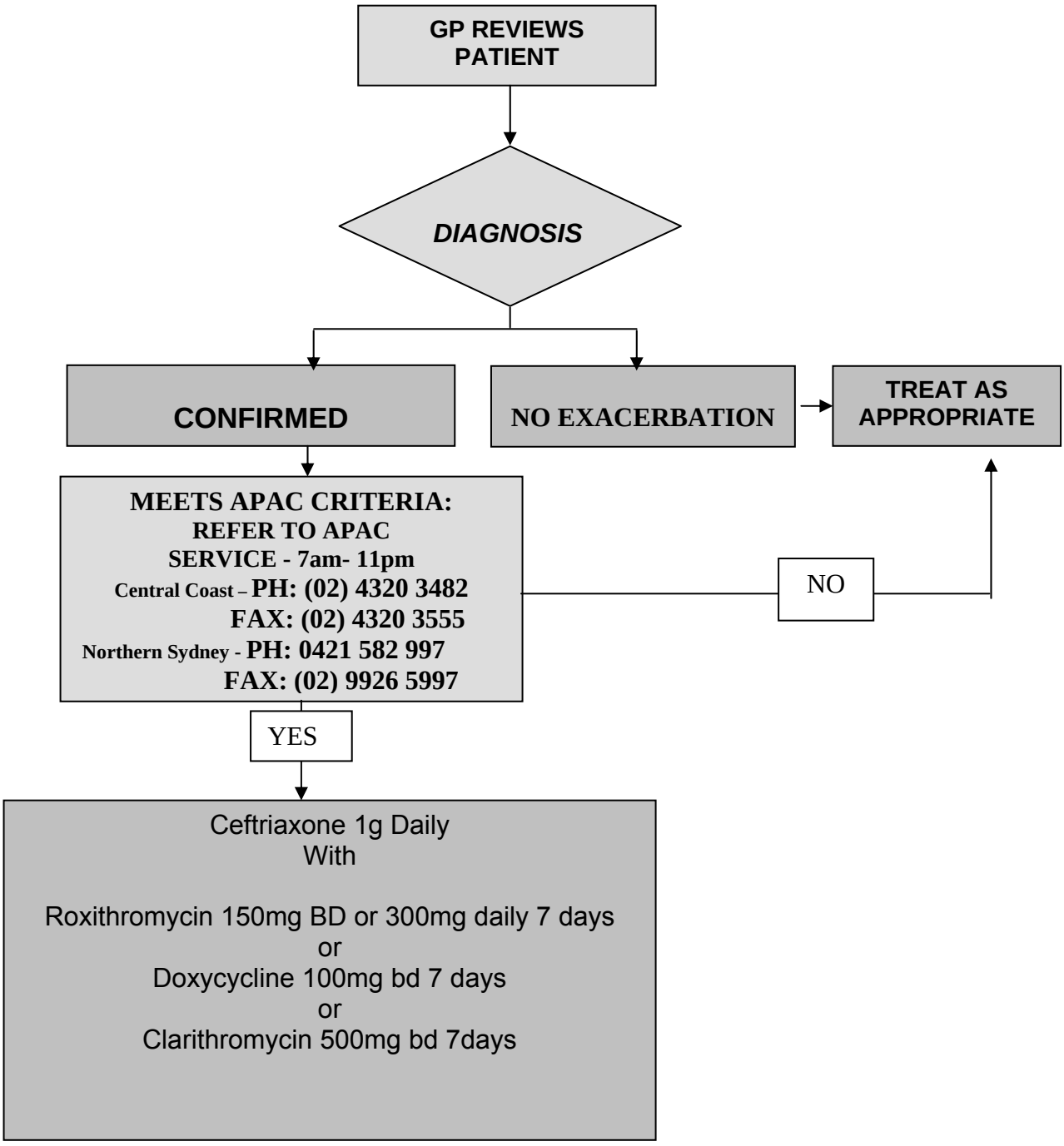
## Discharge Process

For patient discharge from APAC there should be:

- Full physical medical review from the treating SMS/VMO or GP either in the patients home/hostel/nursing home, doctors consultation rooms or hospital emergency department.
- Noted improvement in clinical parameters, patient's condition, and if required laboratory/imaging results.
- If the patient has had intravenous antibiotic therapy, a review by the medical officer managing patient care, is required to confirm cessation of treatment, and prescription of continuing oral antibiotic therapy, if this is required.

- If a patient has not been managed by the GP, they will be referred back to their GP, (regardless of their involvement in clinical management while with APAC), with details of their APAC admission and ongoing medical needs.
- APAC discharge letter and documentation is to be completed.
- The APAC member conducting the final visit is required to liaise with the medical officer managing patient care and to confirm suitability for discharge from APAC.
- Referral to Northern Sydney Central Coast Health (NSCCH) Pulmonary Rehabilitation Program and/or NSHNS respiratory program for continued support as required.
- Patient is referred to community services as appropriate.

# APAC/GP Shared Care - Chronic Obstructive Pulmonary Disease (COPD) Flow Chart




The pneumococcal urinary antigen assay can be performed either before or after commencing treatment to identify the pathogen.

It is advised that a chest X-ray is performed within 48 hrs of commencement of treatment

***NB*: Please refer to APAC GP Shared Care Clinical Guidelines for Home Management of Community Acquired Pneumonia***

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Authorisation Stamp

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# Appendix

NORTHERN SYDNEY CENTRAL COAST
NSW HEALTH

MRN: DOB:

FAMILY NAME:

FIRST NAME:

ADDRESS:

# ACUTE / POST ACUTE CARE RESPIRATORY WORKSHEET

Primary Respiratory Diagnosis

Has patient attended Pulmonary Rehab? o Yes o No o Referred o Declined

CALD o Yes o No

My Health Record o Present o Issued o Declined

Action Plan o Issued o Modified o Declined o N/A

Health Care Plan o Yes o No

Education booklet given o Yes o No

Client Lives alone o Yes o No

Carer Well o Yes o No o No carer

Flu vaccine: o < 12 months o Due o Declined

Pneumococcal vaccine: o < 5 years o Due o Declined

Preventers: *Oral Corticosteroid*: > 6 weeks Dose: _____ mg

*Inhaled Corticosteroid:* o Beclomethasone (®Qvar) _____ mcg bd o Budesonide (®Pulmicort) _____ mcg bd

o Fluticasone (®Flixotide) _____ mcg bd o Other:

Relievers and Symptom Controllers:

*Long-acting $\beta_2$ agonist:* o Salmeterol (®Serevent) _____ mcg bd o Eformoterol (®Oxis) _____ mcg bd

*Short-acting $\beta_2$ agonist:* o Salbutamol (®Ventolin) _____ mg _____ o Terbutaline (®Bricanyl) _____ mcg _____

*Anticholinergic:* o Ipratropium Bromide (®Atrovent) _____ mcg _____ o Tiotropium (®Spiriva) 18mcg d

*Combination Therapy:* o Fluticasone & Salmeterol combined (®Seretide) _____ mcg bd o Other:

o Budesonide & Eformoterol combined (®Symbicort) _____ mcg bd

Delivery Devices: o Spacer o Nebulised Medication _____ / day o Has own Nebuliser

Oxygen Therapy:

Home Oxygen: o No o Yes If "Yes" _____ L/ min hours / day

Smoking History:

o Yes o No o EX

*CPAP / BiPAP: o Yes o No* _____ *cm $H_2O$*

*Tracheostomy: o Yes o No*

Copies of ABG and Spirometry results provided o

PEFR: L/ min Date:

BMI: Date:

Medical Council Dyspnoea Scale (MRC)

At present I;

0. Am not troubled by breathlessness except with strenuous exercise.
1. Am troubled by shortness of breath when hurrying on the level or walking up a slight hill.
2. Walk slower than people of the same age on the level because of breathlessness or have to stop for breath when walking at my own pace on the level.
3. Stop for breath after walking about 100 yards (110 metres) or after a few minutes on the level.
4. Am too breathless to leave the house or breathless when dressing or undressing.

BORG Rating of Perceived Exertion

0 No breathlessness
0.5 Very, very slight (just noticeable)
1 Very slight
2 Slight breathlessness
3 Moderate
4 Somewhat severe
5 Severe breathlessness
6
7 Very severe
8
9 Very,very severe
10 Maximal (almost max)

| Outcome | MRC | K10 | |
|---|---|---|---|
| ADM | | | |

| | | | | |
|---|---|---|---|---|
| D/C | | | | |

NORTHERN SYDNEY CENTRAL COAST
NSW HEALTH

MRN: DOB:

FAMILY NAME:

FIRST NAME:

ADDRESS:

# ACUTE / POST ACUTE CARE RESPIRATORYCARE PLAN

Dr. ordering medication: Contact details:

*CODES V: Variance (See Notes) N/A: Not Applicable Transport: CCA or P: Private Y: Yes N: No*

| Medication | BD/D | First dose (date/time) | Last dose (date/time) | Review (date/time) | Review (place) | Dr reviewing | Transport arranged | Initial |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Date** | | | | | | | |
| **Time** | | | | | | | |
| Day since APAC admission | | | | | | | |
| H/L assess/plan/review | | | | | | | |
| APAC policies/procedures | | | | | | | |
| SMS review | | | | | | | |
| GP review | | | | | | | |
| | | | | | | | |
| **Observations** Temperature | | | | | | | |
| Pulse rate/strength/regularity | | | | | | | |
| Blood pressure | | | | | | | |
| Respiratory rate | | | | | | | |
| $O_2$ Saturation on room air (RA) at rest | | | | | | | |
| O2 Saturation Lpm at rest | | | | | | | |
| Desaturation post | | | | | | | |
| Desaturation post exercise m RA | | | | | | | |
| GMR | | | | | | | |
| Bowels open | | | | | | | |
| Voiding issues | | | | | | | |
| **Pain** scale (0-10) | | | | | | | |
| Site | | | | | | | |
| Type | | | | | | | |
| Analgesia | | | | | | | |
| Weight | | | | | | | |
| **Dyspnoea** Borg RPE (0 – 10) PTO Rest | | | | | | | |
| Borg RPE (0 – 10) Exertion | | | | | | | |
| $FEV_1$ | | | | | | | |
| Peak Expiratory Flow Rate | | | | | | | |
| **Air Entry & Breath sounds**<br>C: Crackles W: Wheeze AW: Audible Wheeze<br>L: Left R: Right >:Greater than <: Less than =: Equal |  | | | | | | |
| **Cyanosis** **P**: Peripheral **C**: | | | | | | | |
| **Peripheral Oedema**<br>H: Hands L: Legs F: Feet<br>Describe affected area (mild, moderate, severe) | | | | | | | |
| **Cough** S: Strong or W: Weak<br>D: Dry or M: Moist<br>E: Effective or I: Ineffective | | | | | | | |
| **Sputum** Amount | | | | | | | |
| **Sputum** Colour | | | | | | | |
| **Sputum** Consistency | | | | | | | |
| **Print name** | | | | | | | |
| **Sign** | | | | | | | |
| **Designation (PTO)** | | | | | | | |

| NORTHERN SYDNEY CENTRAL COAST NSW HEALTH | MRN: DOB: |
|---|---|
| | FAMILY NAME: |
| ACUTE / POST ACUTE CARE RESPIRATORY CARE PLAN (CONT'D) | FIRST NAME: |
| | ADDRESS: |

*CODES V: Variance (See Notes) N/A: Not Applicable Transport: CCA or P: Private Y: Yes N: No*

| **Date** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Medications | Oral Corticosteroids | | | | | | | |
| | Antibiotics (PO/IV) | | | | | | | |
| Exercise Tolerance | Distance | | | | | | | |
| | Conditioning in no. of repetitions | | | | | | | |
| **Fluid/Diet intake** | F: Fluid intake – amount<br>FR: Fluid restriction – amount | | | | | | | |
| | D: Number of meals<br>S: Supplements (type) | | | | | | | |
| **IVC** | IVC insertion date | | | | | | | |
| | IVC site | | | | | | | |
| | Removed | | | | | | | |
| | Scalp vein | | | | | | | |
| Dressing attended | | | | | | | | |
| Chronic Respiratory Disease Care Plan attended | | | | | | | | |
| **Respiratory Nurse consult** | | | | | | | | |
| **Medication supervision** | | | | | | | | |
| Psycho-social assessment | | | | | | | | |
| Rest/activity education | | | | | | | | |
| | | | | | | | | |
| **Equipment/drug Check** | | | | | | | | |
| Length of visit in minutes | | | | | | | | |
| **Print Name** | | | | | | | | |
| **Sign** | | | | | | | | |
| **Designation** | | | | | | | | |

## OCCASION OF SERVICE RECORD FOR ALLIED HEALTH AND RN

| **Date** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Time | | | | | | | |
| Administer IV medication | | | | | | | |
| Temperature | | | | | | | |
| Pulse rate/ strength/ regularity | | | | | | | |
| Blood pressure | | | | | | | |
| Respiratory rate | | | | | | | |
| $O_2$ saturation | | | | | | | |
| **RN** | | | | | | | |
| **PH** | | | | | | | |
| **PT/OT** | | | | | | | |
| **SW/CCA** | | | | | | | |
| **Medication supervision** | | | | | | | |
| Length of visit in minutes | | | | | | | |
| **Print Name** | | | | | | | |
| **Sign** | | | | | | | |
| **Designation** | | | | | | | |

## CLINICAL PATHWAYS FOR CHEST INFECTION

**Prior to APAC Admission**

- Medical management defined, and length of treatment prescribed.
- Review plan arranged.
- APAC policies, visiting times and procedures explained; patient given APAC brochure.
- Diagnosis and treatment explained to patient/carer, including instructions to monitor for deterioration and actions if any concerns.
- Patient consents to treatment, medical management and individual care plan.
- IV access established and secured safely if appropriate and patient educated re IVC, including complications and showering instructions
- Provide copies of recent pathology results, ABG's, investigations and spirometry in APAC file.
- Complete "Respiratory Worksheet" -assessment on pages 2-3. Also complete page 1 (including MRC on admission) if chronic respiratory background present
- If a chronic respiratory background is present ensure a "Chronic Respiratory Care Plan" is present in notes; refer to Respiratory nurse and appropriate Allied Health professionals.
- Devise treatment plan involving interdisciplinary team and set goals re length of APAC involvement and referral to ongoing services if required.
- Ensure patient has adequate and correct medication supply and assess patient's pharmaceutical knowledge.
- Psychosocial needs assessed and addressed.
- Carer involved if appropriate.

**First Visit (Day One)**

- APAC visiting times, policies and procedures reinforced.
- Education re condition and treatment continued with patient and carer.
- Ensure patient has adequate and correct medication supply and assess patient's pharmaceutical knowledge.
- Ongoing assessment and support of general condition.
- Treatment given according to care plan.
- Establish pre-illness functional level and aim to return to this level and quality of life by addressing care issues outlined in APAC respiratory care plans.
- If the patient has a chronic respiratory background, address any issues by completing the "Chronic Respiratory Disease Care Plan" at each visit.
- Advice given re ACBT and handout given.
- Assessment of coping abilities, support and understanding of illness. Encourage self-management.
- Organise services/equipment required to aid returning to independent state.
- Assess use of home oxygen; complete oxygen checklist (if applicable).
- Changes to condition and treatment documented and reported to doctor and the APAC Clinical Coordinator if required.

**Ongoing Visits (Day 2 - 5)**

- Continue treatment as per plan, and reinforce support / education as per day 1.
- Ongoing assessment if general condition by allied health professionals /respiratory nurse if required.
- Expect general improvement by day 3– 5; if no improvement, facilitate review with the doctor responsible for care.
- Educate regarding self - management techniques if the patient has a background of a chronic respiratory disease, and continue to update "Chronic Respiratory Disease Care Plan".

**Discharge Planning (at reviews)**

- Liaise with the doctor reviewing the patient and the APAC respiratory team and keep the patient and carer informed of the expected outcome and treatment duration.
- Ensure "Chronic Respiratory Disease Care Plan" has been completed if appropriate.
- Document all updates clearly in patient records and inform the APAC Clinical Coordinator of plan.
- Discuss NSHNS and Pulmonary Rehabilitation options, and provide "*Breathe Program*" brochure and refer patient if appropriate.
- Ensure all data is collected on Respiratory Worksheet, attend MRC Dyspnoea Scale on discharge.

**Expected Outcome (Day 10 – 14)**

- Patient is reviewed by the doctor responsible for their care or an advocate, condition has resolved to the point of not requiring APAC support.
- Patient care is transferred from APAC to the care of allocated medical officer and/ or community services (eg: "*Breathe Program")* if required.

**Variance**

- Patient not improving **Action:** patient reviewed and care plan altered.
- Patient develops new issues **Action:** patient reviewed and care plan altered.
- Patient deteriorated **Action:** patient reviewed and care plan altered.