Canberra Hospital and Health Services
Medical - in - Confidence
Respiratory
(Discharge Summary)

[DoB:] Male
Ph:

To: Dr.
Cc: Dr.
Discharged To: Home

First Admitted: 08:31

Discharge Date: 10:30
Ward/Location:
Discharge Method: Specialist Medical Practitioner

Encounter History

Episode	Admission Date	Discharge Date	Episode Type	Discharge Unit	Discharge Doctor	Discharge Destination
			Inpatient Service	Respiratory		Home

Discharge Location
has been discharged from: The Canberra Hospital

Primary Discharge Diagnosis
Infective exacerbation of COPD secondary to smoking

Additional Diagnosis
Left Upper Lobe Community Acquired Pneumonia, treated as bacterial
Nicotine dependence

Complications Treated during this Admission
Type 1 Respiratory Failure
Hypomagnesaemia
Hypokalaemia
Septic Shock (suspected on admission)

Presenting History & Symptoms (including reason for encounter)
is a 53 year old gentlemen, brought to Canberra Hospital from Cooma Hospital with increasing Oxygen requirements. Initial presentation for productive cough of white-clear sputum, sortness of breath, increased work of breathing and fevers for 2 days. Associated with nausea, but no vomiting. Recent prolonged drive to QLD, of >7000km in 1 week by car. Also complains of pleuritic chest pain, brought on by coughing, radiating into the left shoulder, which has been present for 3 months now. Sick contact with his wife, who has a similar presentation and prodrome.
On a background of unintentional 12kg weight loss over a few months, with intermittent haemoptysis with exertion for year now. Last haemoptysis episode 1 week ago. 3 months history of increasing fatigue, lethargy and reduced stamina. Change in function to 3 m before SOB from 1-2km. Denies night sweats.

E/O: Sat 88% on RA in Cooma, Sat 96% on 2L via NP, RR 25/min, Bp 103/66 mmHg, HR 97 bpm, afebrile,
Cardio: HSD NM, JVP not elevated, no peripheral oedema,
Chest: increased work of breathing, using accessory muscles, reduced air entry in upper zones, bilateral expiratory wheeze in lower zones
Abdo: S NT
Periphery: cachexia

Past Medical History
Resp:
- Emphysema: (2014) current smoker of 15-10 cig/day with 145 pack years (as of April 2019); history of Asbestos exposure, non compliant with treatment,
- Pneumonia (2014)

Cardio:
- Angiogram (2017): minor CAD disease, N LV function;
- Rheumatic fever

Surg:
- Appendectomy

Social:
- baseline function: 1-2km prior to SOB

Summary of Investigations / Observations
CXR: increased opacification/patchy consolidation in the left upper zone, hyper inflated lung fields, no caridomegally,
CT Chest: Severe emphysematous changes in both lungs. Moderate patchy consolidation in the left upper and lower lobes. A few scattered granulomas. No suspicious pulmonary nodules.
Abdo US: The right kidney is mildly hydronephrotic. - This may be the cause of the patient's right upper quadrant pain. - Further evaluation with a CT urogram is recommended in the first instance to assess for possible calculi/cause of obstruction. 2. No biliary tract abnormality demonstrated. - The gallbladder is sonographically normal without features of cholelithiasis or cholecystitis. - No features of biliary tract obstruction.

Pathology: as below

Summary of Management
Issues List:
1) Infective exacerbation of COPD/Left Upper Lobe Community Acquired Pneumonia:
- IV antibiotic therapy with Benzylpenicillin and Clindomycin, switched to Ceftriaxone and Azithromycin,
- Oxygen supplementation with saturation aims of 88-92%
- Prednisolone course of 50mg for 3 days
- Additional anaerobic cover with Metronidazole 10 day cover total
- Prolonged antibiotic course with Amoxicillin 1g TDS for 3 weeks

2) Septic Shock
- fluid unresponsive hypotension, febrile, tachycardia
- ICU admission on 8/4/19 (the day of admission)
- required Metaraminol
- IV steroids

3) Aspiration
- poor dentition, cachexia
- speech pathology cleared, with no risk of aspiration currently identified

4) Current Smoker
- nicotine replacement therapy

5) Hypomagnesaemia & Hypokalemia
- both replaced orally in hospital

Pending Results / Investigations for GP to Follow-up
nill

Ongoing Issues / Recommendations to GP
Dear Dr

Thank you for your ongoing care of

He is being discharged from hospital after treatment of Infective exacerbation of COPD, which required an ICU admission. We would like to share our follow up plan with you:
1) Please review the week of his discharge for follow up on his symptoms and to ensure a timely recovery.
2) We believe that would benefit from a regular respiratory physician, and we ask you to refer him to one in his new local community.
3) We'd like to suggest a repeat Chest X-ray in the 2 weeks time, and another one in 6-8 weeks time to ensure resolution of consolidation and to rule out any underlying lung lesions.
4) A number of symptoms on this admission were suggestive of an underlying malignancy, we would encourage you to investigate that further, including all age appropriate cancer screenings.
5) A repeat Chest CT in 3 months would also be of benefit
6)Please arrange Pulmonary Function Test in 8-10 weeks post discharge.
7)Please ensure regular vaccinations for as well.

Thank you and kind regards
-

Follow-up Required
· Service Requested: GP
· Service Requested: Respiraotry Physician

Patient Instructions
Dear

We wish you well in your recovery

Pleas ensure to see your GP the week of your discharge to follow up on your symptoms and ensure a timely recovery.
You are going home on 3 antibiotics:
> Doxycycline Tablet 100 mg Oral Twice Daily for a further 6 days
> Amoxicillin Capsule 1g Oral Three Times Daily for a further 3 weeks
> Metronidazole 400mg oral twice daily for a further 9 days
The new inhalers start to help with your breathing include:
> Symbicort Turbuhaler 200/6 2 Puffs Inhalation Twice Daily
> Tiotropium bromide Capsule 18 mcg Inhalation Once Daily
> AND Salbutamol 100mcg/1doses MDI 8 puffs Inhalation when needed
A repeat Chest X-ray and follow up with a respiratory specialist will be organised by your GP.
We further recommend that you undergo all age appropriate cancer screening, and your GP can help you with that as well.

Warm regards
- The Respiratory Team

Patient Weight
·
  · Patient Weight: 55 kg
  · Date:

Medications on Admission
· Tiotropium bromide Capsule 18 mcg Inhalation Once Daily NON COMPLIANT
· Paracetamol Tablet 1000 mg Oral Six Hourly
· Ibuprofen regular
· Ipratropium bromide monohydrate 21mcg/1doses MDI 4 puffs Inhalation Six Hourly NON COMPLIANT

Complete List of Medications on Discharge

- Doxycyclin 100mg BD PO (Supply on Discharge), Supply: 6 days
- Salbutamol 100mcg/1doses MDI 8 puffs Inhalation Six Hourly PRN (Supply on Discharge), Supply: 1 week
- Paracetamol Tablet 1000 mg Oral Six Hourly PRN (Supply on Discharge), Supply: Own supply
- Amoxicillin (Amoxycillin) Capsule 1000 mg Oral Three Times Daily (Supply on Discharge), Supply: 3 weeks
- Metronidazole 400mg PO BD (Supply on Discharge), Supply: 9 days
- Nicotine Transdermal Patch 21 mg Transdermal Once Daily (Supply on Discharge), Supply: 5 days
- Phosphate-Sandoz Effervescent Tablet 500 mg 1 Effervescent Tablet Oral Three Times Daily (Supply on Discharge), Supply: 5 days
- Potassium chloride 600mg Modified Release Tablet 1200 mg Oral Twice Daily (Supply on Discharge), Supply: 5 days
- Symbicort Turbuhaler 200/6 2 Puffs Inhalation Twice Daily (Supply on Discharge), Supply: 1 week
- Tiotropium bromide Capsule 18 mcg Inhalation Once Daily (Supply on Discharge), Supply: 1 week

Details of Pre-Inpatient Medications Ceased during this Admission

- Ipratropium bromide monohydrate 21mcg/1doses MDI 4 puffs Inhalation Six Hourly

Allergies / Sensitivities

- Substance: NKDA

Relevant Pathology

Hematology [redacted] 06:14 : FBC & General Haem
1.)Image : TOTAL NEUT: is the sum of Neutrophils, Bands, Myelocytes, Metamyelocytes.

CUMULATIVE REPORT

Req No:	P136952	P139568	P140618	P142563	P143684		
Date:	[redacted]						
Time:	09:49	09:37	14:45	11:00	06:14		
Hosp.:	TCH	TCH	TCH	TCH	TCH	Units	Ref Range
BLOOD COUNT							
Hb	131L	137	153	143	144	g/L	135-180
WCC	12.6H	13.3H	12.8H	13.4H	13.7H	x10^9/L	4.0-11.0
Plat	481H	541H	680H	654H	696H	x10^9/L	150-400
RCC	4.21L	4.34	4.84	4.53	4.43	x10^12/L	4.30-6.50
HCT	0.40	0.41	0.46	0.43	0.42	L/L	0.40-0.53
MCV	95	94	95	94	94	fL	80-96
MCH	31.1	31.6	31.7	31.5	32.4	pg	27.0-33.0
MCHC	329	335	334	334	343	g/L	320-360
RDW	13.6	13.6	13.8	14.0	13.9	%	11.0-14.5
White Cell Differential							
Tot Neut	7.85H	10.91H	8.19H	10.85H	10.54H	x10^9/L	1.8-7.5
Myel		0.13H	0.13H	0.13H		x10^9/L	0.00
Bands		0.27	0.26			x10^9/L	0.00-0.5
Neut	7.85H	10.51H	7.81H	10.72H	10.54H	x10^9/L	1.8-7.5
Lymph	3.74	1.46	3.33	1.74	1.75	x10^9/L	1.2-4.0
Mono	0.72	0.66	0.77	0.54	1.10H	x10^9/L	0.10-1.0
Eos	0.15	0.27	0.51	0.27	0.26	x10^9/L	0.00-0.7
Baso	0.14				0.05	x10^9/L	0.00-0.2 Status: F

Chemistry [redacted] 06:14 : Routine Chemistry
1.)Image : ----------

Request No:	P136952	P139568	P140618	P142563	P143684		
Date:	[redacted]						
Time:	09:49	09:37	14:45	11:00	06:14		
Hospital:	TCH	TCH	TCH	TCH	TCH	Units	Ref Range
Fasting:	No	No	No	No			
Sodium	140	137	136	137		mmol/L	135-145
Potassium	3.3L	4.0	4.6	4.1		mmol/L	3.5-5.2
Chloride	104	100	99	102		mmol/L	95-110
Bicarbonate	24	26	25	22		mmol/L	22-32
Anion Gap	15	15	17H	17H		mmol/L	8-16
Urea	6.5	6.3	6.9	7.1		mmol/L	3.4-9.0
Creatinine	57L	58L	65	69		umol/L	60-110
Est. of GFR	>90	>90	>90	>90		*	>90
Glucose	6.5H	4.1	3.8	5.8H		mmol/L	3.5-5.5
Osmol-calc	291	283	283	286		mOsm/kg	280-300
Bili Tot.				7		umol/L	2-20
ALT				49H		U/L	<40
ALKP				106		U/L	30-110
New GGT				111H		U/L	<71
Protein				69		g/L	60-80
Albumin	28L	27L	31L	31L	32L	g/L	33-50
Globulin				38		g/L	24-41
Calcium	2.27	2.32	2.40		2.44	mmol/L	2.10-2.60
CorrCalcium	2.51	2.58	2.58		2.60	mmol/L	2.10-2.60
Phosphate	0.84	0.97	1.19		0.90	mmol/L	0.75-1.50
Magnesium	0.70	0.71	0.79		0.78	mmol/L	0.70-1.10
CRP	131.8H	109.0H	138.4H	98.7H	75.8H	mg/L	<6.0
Haemolysis Index							
Haemolysis	0.13	0.06	0.06	0.07	0.12		

Age Related Reference Intervals
Where appropriate, the age-related Reference Interval is quoted for each analyte. These Reference Intervals are available from the laboratory. Status: F

Microbiology [redacted] 09:49 : Blood Cultures
1.)Image : LAB.NUMBER: M208995
SPECIMEN: BLOOD CULTURES
DESCRIPTION: PERIPHERAL
BLOOD CULTURE RESULT:

Mycobacteria/Fungal Bottle: No growth after 48 hours incubation

No further report will be issued unless growth occurs. Status: F

Microbiology [redacted] 14:10 : Blood Cultures
1.)Image : LAB.NUMBER: M208987
SPECIMEN: BLOOD CULTURE
DESCRIPTION: PERIPHERAL
BLOOD CULTURE RESULT:

Aerobic Bottle: No growth after 48 hours incubation

Anaerobic Bottle: No growth after 48 hours incubation

No further report will be issued unless growth occurs. Status: F

Microbiology [redacted] 11:43 : Blood Cultures
1.)Image : LAB.NUMBER: M209708
SPECIMEN: BLOOD CULTURE
DESCRIPTION: PERIPHERAL
BLOOD CULTURE RESULT:

Aerobic Bottle: No growth after 48 hours incubation
Anaerobic Bottle: No growth after 48 hours incubation

No further report will be issued unless growth occurs. Status: F

Immunology [redacted] 17:08 : Respiratory Serology
1.)Image : MYCOPLASMA PNEUMONIAE SEROLOGY (LiaisonXL)
Mycoplasma IgG - Liaison (AU/mL) : <10 (<10)
Mycoplasma IgM - Liaison (Index) : Not Detected

Mycoplasma pneumoniae Comment:
No serological evidence of infection.

This result does not exclude the possibility of very early
Mycoplasma pneumoniae infection.
If early infection is suspected, suggest repeat serology in 2 to
4 weeks.

Chlamydia Group (GP) Antigen Serology
Chlamydia (gp) IgA Calc Titre : <50
Chlamydia (gp) IgA Interpretation: Not Detected

Chlamydia (gp) IgG Calc Titre : <100
Chlamydia (gp) IgG Interpretation: Not Detected

Comment:
There is no indication of current or past infection.

This sample has been tested as a single specimen; however
Chlamydia serology for respiratory diseases requires parallel
testing of serum. Please collect a second serum in 10 to 14 days
if recent infection is still suspected.
STORAGE
This specimen was NOT forwarded to an interstate laboratory for:

1)LEGIONELLA

Serological tests usually require at least 10-14 days, after the onset
of the illness, to become positive. In the case of Legionella it may
take 4-6 weeks. A positive or rising antibody titre in a convalescent
specimen is normally indicative of acute infection.

This specimen will be held until a convalescent specimen is received,
at which stage both specimens will be referred for testing in combination.
If this specimen has in fact been taken 10-14 days after the onset of the
illness please contact the Immunoassay Department on 5124 4263.

Cumulative Report

Request No: P130095
Date: [redacted]
Time: 17:08

Mycoplasma

Mycoplasma IgG	<10
Mycoplasma IgM	Not Detected

Chlamydia Group (GP) Antigen

Chlamydia GP Ag IgA Titre	<50
Chlamydia GP Ag IgA Interp	Not Detected
Chlamydia GP Ag IgG Titre	<100
Chlamydia GP Ag IgG Interp	Not Detected

Comment: Status: F

Microbiology [redacted] 16:35 : Urine MC&S
1.)Image : Lab. Number: M204880
SPECIMEN: URINE

MICROSCOPY:

Leucocytes	< 10 x 10^6/L	Normal value <10 X 10^6/L
Erythrocytes	< 10 x 10^6/L	Normal value <10 X 10^6/L
Squamous Epithelial Cells	< 10 x 10^6/L	Normal value <10 X 10^6/L

If the squamous epithelial cell count is >10 x 10^6/L, this is suggestive of improper collection.

DIPSTICK CHEMISTRY:

pH	6	Normal value 4.5 - 8.0
Protein	Negative	Normal value < 0.3 g/L
Glucose	+++ (15 - 40 mmol/L)	Normal value < 2 mmol/L
Nitrite	Negative	Normal value is Negative

MICROBIAL ANTIGENS:

Streptococcus pneumoniae	Not Detected
Legionella pneumophila serogroup 1	Not Detected

The sensitivity of this test ranges from 70 - 85% therefore a negative result cannot exclude Streptococcus pneumoniae infection and appropriate specimens should be taken for culture.

The negative test for Legionella pneumophila serogroup 1 antigen in urine suggests that there has been no recent or current infection in this patient. However, infection due to Legionella species cannot be entirely excluded since other serogroups and species may also cause disease, but less frequently. Antigen may not always be present in urine in early infection or may be below the detection limit of the test. If there is a strong clinical suspicion of Legionella infection we suggest that an acute and

convalescent sera be sent for serological testing. If sputum is being produced this could be sent for Legionella culture.

COLONY COUNT:
<10^6/L

Normal MSU values for	
Males	<10^6/L
Asymptomatic Females	<10^8/L
Symptomatic Females	<10^5/L

CULTURE:
No growth after overnight incubation. Status: F

Molecular [redacted] 16:03 : Viral PCR
1.)Image : Specimen Type: Flocked Swab in VTM
Site: Nasopharyngeal

TEST: Respiratory Pathogen Test Report

METHOD: Real-Time PCR

Influenza A:	Not Detected
Influenza A Subtype:	Not Detected
Influenza B:	Not Detected
RSV:	Not Detected
Rhinovirus/Enterovirus:	Not Detected
Parainfluenza Virus 1:	Not Detected
Parainfluenza Virus 2:	Not Detected
Parainfluenza Virus 3:	Not Detected
Parainfluenza Virus 4:	Not Detected
Adenovirus:	Not Detected
Human Metapneumovirus:	Not Detected
Bordetella pertussis:	Not Detected
Mycoplasma pneumoniae:	Not Detected

This result must be interpreted with clinical findings.

The AusDiagnostics Respiratory Pathogens Panel C Assay detects prevalent strains of Influenza A and B, Respiratory Syncytial Virus, Rhinovirus, Enterovirus, Human parainfluenza virus (1-4), Adenovirus, Human Metapneumovirus, Bordetella species including pertussis and Mycoplasma pneumoniae. A negative result cannot exclude any of the tested agents particularly at levels below the limit of detection of this assay.

For interpretation advice, please contact the Clinical Microbiologist or Registrar on duty on (02) 6244 2514. Status: F

Microbiology [redacted] 14:30 : Respiratory MC&S
1.)Image : LAB.NUMBER: M209765
SPECIMEN: SPUTUM
DESCRIPTION: Salivary

GRAM STAIN:

```
Polymorphs                    ++
Epithelial Cells              +
Gram positive cocci           +
Gram positive bacilli         ++
Gram negative bacilli         ++
Yeast cells                   Scanty

1. Staphylococcus aureus                              Light growth
2. Candida albicans                                   Light growth


with a moderate growth of respiratory tract flora.

SENSITIVITIES:   1

Penicillin       R
Flucloxacillin   S
Clindamycin      S
Cotrimoxazole    S  Status: F



Microbiology [redacted] 13:30 : Blood Cultures
1.)Image : LAB.NUMBER: M209749
SPECIMEN:    BLOOD CULTURES
BLOOD CULTURE RESULT:

Aerobic Bottle:             No growth  after 48 hours incubation
Anaerobic Bottle:           No growth  after 48 hours incubation

No further report will be issued unless growth occurs.  Status: F
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Relevant Diagnostic Imaging

Abdomen [US] [redacted] 12:58
1.)Abdomen [US] :
URN: [redacted]
Clinical History Admission with community acquired pneumonia RUQ pain, concern for biliary disease Technique Abdominal ultrasound. Findings The pancreatic head and body demonstrate normal sonographic appearance. The liver measures 13.1 cm in midclavicular line, demonstrates homogeneous echotexture and smooth liver edge. No focal hepatic lesion nor intrahepatic duct dilatation is evident. Trace perihepatic free fluid is visualised overlying the right liver lobe. The portal vein and hepatic veins are patent, demonstrates normal antegrade flow. The gallbladder is nontender, demonstrates normal sonographic appearance. The common bile duct measures up to 2.4 mm in calibre. The right kidney measures 12.8 cm in length. There is mild right hydronephrosis. The left kidney measures 11.1 cm in length and is sonographically normal. The spleen measures 8.7 cm in length. The aorta measures 1.8 cm in diameter. No significant pelvic free fluid. Conclusion 1. The right kidney is mildly hydronephrotic. - This may be the cause of the patient's right upper quadrant pain. - Further evaluation with a CT urogram is recommended in the first instance to assess for possible calculi/cause of obstruction. 2. No biliary tract abnormality demonstrated. - The gallbladder is sonographically normal without features of cholelithiasis or cholecystitis. - No features of biliary tract obstruction.
Status: Final
Preliminary Reading Doctor: Authorising Doctor: ;

Angiography- Initial - Chest [CT] [redacted] 14:18
1.)Angiography- Initial - Chest [CT] :
URN: [redacted]
CT PULMONARY ANGIOGRAM CLINICAL NOTES: Hypotensive, non-responsive to fluid. Pain on cough, recent haemoptysis. Admission for pneumonia, appearance of nodules on x-ray, weight loss, emphysema, smoker. TECHNIQUE: Post contrast images were obtained. FINDINGS: Good opacification of pulmonary arteries. No pulmonary emboli. No evidence of right heart strain. Mildly prominent hilar and mediastinal lymph nodes.

No enlarged axillary lymph nodes. Trace of pericardial effusion. Severe emphysematous changes in both lungs. Moderate patchy consolidation in the left upper and lower lobes. A few scattered granulomas. No suspicious pulmonary nodules. No focal bone abnormality. CONCLUSION: No pulmonary emboli. Severe emphysematous changes in both lungs. Left upper and lower lobes pneumonia. Electronically signed by Dr

Status: Final
Preliminary Reading Doctor: Authorising Doctor: ;

Chest [XR] [redacted] 02:46
1.)Chest [XR] :
URN: [redacted]
X-RAY CHEST CLINICAL HISTORY Productive cough & fever. FINDINGS The cardiothoracic ratio is normal. The lungs are shown with coalescing/ confluent parenchymal opacity through the left mid to upper zone. No pleural mass, or collection. No focal bone lesion. CONCLUSION Coalescing/ confluent opacity consistent with acute infective pneumonia. A follow up film in 8 weeks is advised to ensure clearance. Electronically signed: Dr

Status: Final
Preliminary Reading Doctor: Authorising Doctor:

Amendment Reason
Amended at [redacted] ***08:59*** *by* [redacted]
Chest CT recomendation

Clinician: [redacted] **Signature:**
For Consultant: [redacted] **Date:** [redacted] 08:59

Canberra Hospital and Health Services
PO Box 11 Woden
ACT 2606

URN:
Patient Name:
DOB:
Episode ID:

Discharge Summary CC List Transmission History:

Transmission To: **Dr**

List of Recipients:

Name	Suburb	Phone	Fax	HealthLink Address	Del via HealthLink	Primary Contact