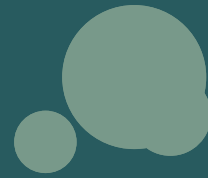


RESPIRATORY CARE FOR THE GERIATRIC PATIENT

Age-related changes • Clinical presentation • Practical care

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Respiratory Associates



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LEARNING OBJECTIVES

By the end of this course, the learner should be able to:

01

Describe age-related changes in the respiratory system and explain how they affect ventilation, gas exchange, cough, and airway clearance.

02

Recognize how common cardiopulmonary illnesses may present differently in older adults.

03

Identify barriers that can affect respiratory assessment, medication delivery, adherence, mobility, and communication.

04

Select practical respiratory-care strategies that account for functional status, frailty, cognition, and patient goals.

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AGING IS NOT A DISEASE

Aging reduces reserve. Function and treatment potential vary widely.

AGE

Years lived do not measure cardiopulmonary function.

FUNCTION

Assess mobility, strength, cognition, independence, and daily activities.

RESERVE

Less capacity to tolerate infection, surgery, immobility, or hypoxemia.

New dyspnea, weakness, confusion, or functional loss needs evaluation.

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HOW AGING CHANGES RESPIRATORY RESERVE

Small changes combine to reduce respiratory reserve.

LUNG ELASTICITY

Less recoil → earlier airway closure and lower expiratory flow.

CHEST WALL

Stiffer ribs, joints, and spine reduce compliance.

MUSCLE STRENGTH

Muscle loss reduces ventilatory and cough reserve.

GAS EXCHANGE

Greater V/Q inequality gradually lowers arterial oxygenation.

AIRWAY CLEARANCE

Cough and mucociliary clearance may weaken.

CONTROL & DEFENSE

Ventilatory responses and immune defenses may be less robust.

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LUNG & CHEST-WALL MECHANICS

Lung compliance increases; chest-wall compliance decreases.

THE LUNG

- ↓ Elastic recoil
- ↑ Lung compliance
- Earlier small-airway closure
- ↓ Expiratory flow

THE CHEST WALL

- Joint & rib-cage stiffening
- Spinal / postural changes
- ↓ Chest-wall compliance
- Greater mechanical disadvantage

NET EFFECT: less reserve when respiratory demand rises.

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AIRWAY CLEARANCE & COUGH

Airway clearance requires effective mucus transport and cough.

MUCUS TRANSPORT

Mucociliary clearance may decline.

INSPIRATORY VOLUME

Weakness, pain, or restriction limits the breath before a cough.

COUGH FORCE

Weaker expiratory muscles reduce cough strength.

AIRWAY PROTECTION

Dysphagia and poor coordination increase aspiration risk.

Possible consequences: retained secretions, atelectasis, aspiration, and infection.

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GAS EXCHANGE & RESPIRATORY RESERVE

Normal aging can reduce reserve, but significant hypoxemia should not be dismissed as “normal for age.”

GAS EXCHANGE

Greater V/Q inequality may gradually lower PaO₂.

VENTILATORY DRIVE

Responses to hypoxemia and hypercapnia may weaken, especially with illness or sedating medications.

LESS RESERVE

Pneumonia, edema, sedation, or increased work of breathing can overwhelm baseline reserve.

DON'T NORMALIZE ABNORMAL FINDINGS

New hypoxemia, tachypnea, or distress deserves an explanation.

Next: atypical presentation of respiratory disease.

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RESPIRATORY ILLNESS MAY LOOK DIFFERENT

Changes from baseline may be more revealing than classic symptoms.

ABSENT FEVER

Serious infection may occur without marked fever.

WEAK COUGH

Frailty or neurologic disease can make cough less obvious.

HIDDEN DYSPNEA

Reduced activity can hide breathlessness.

CONFUSION

Delirium or sudden functional loss may signal acute illness.

TACHYPNEA

Respiratory rate may rise before other familiar findings.

BASELINE CHANGE

Ask about oxygen, mobility, appetite, alertness, breathing, and ADLs.

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PNEUMONIA IN THE OLDER ADULT

Comorbidity, frailty, and aspiration risk often overlap.

RISK FACTORS

Weak cough/clearance
Dysphagia or aspiration
Immobility
Frailty or malnutrition
Chronic disease

PRESENTATION

Tachypnea or hypoxemia
Weakness or confusion
Functional decline
Fever/cough may be absent

RT ASSESSMENT

Work of breathing
Oxygen requirement
Secretions and cough
Aspiration risk
Airway protection

Absent fever or cough does not provide reassurance.
Watch for changes in breathing, oxygenation, cognition, or function.

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DYSPHAGIA & ASPIRATION

Impaired swallowing, airway protection, mobility, and cognition raise risk.

RISK FACTORS

- Stroke or neurologic disease
- Frailty or weakness
- Reduced alertness/cognition
- Reflux or vomiting
- Poor positioning or feeding dependence

WHAT THE RT MAY NOTICE

During meals

Cough, throat clearing, wet voice, or increased breathing effort

After meals

New congestion, secretions, oxygen need, or respiratory symptoms

Over time

Recurrent pneumonia, exacerbations, weight loss, or decline

Protect the airway → communicate → evaluate.

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CASE STUDY 1

“SOMETHING ISN'T RIGHT”

82-year-old woman from assisted living

- New confusion and weakness
- RR 28/min
- SpO₂ 89% on room air
- Temp 99.1°F (37.3°C)
- HR 104/min
- Little reported dyspnea
- Occasional weak cough

WHAT CONCERNS YOU?

**Does absent fever or prominent cough
reduce your concern for pneumonia?**

What would you assess next?

Compare with baseline.

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CASE 1 — RECOGNIZE THE PATTERN

Consider the whole pattern of change.

- 01 Tachypnea may signal respiratory illness early.
- 02 New confusion or functional loss may accompany infection or hypoxemia.
- 03 Absent fever or cough does not exclude pneumonia.
- 04 **Compare baseline breathing, oxygenation, cognition, mobility, and appetite.**
- 05 Aspiration risk: dysphagia, neurologic disease, frailty, or feeding difficulty.

Next: common cardiopulmonary conditions.

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COPD IN THE OLDER ADULT

Progressive airflow obstruction is disease, not normal aging.

WHY IT MATTERS

Smoking accelerates lung-function loss. COPD adds inflammation, remodeling, and parenchymal destruction.

COMMON CHALLENGES

Reduced reserve
Deconditioning
Heart disease
Exacerbations
Complex devices/regimens

RT PRIORITIES

Compare with baseline
Optimize inhaled therapy
Check device technique
Support mobility/oxygenation

**Smoking cessation remains a key intervention.
Evaluate chronic dyspnea and declining exercise tolerance.**

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ASTHMA MAY BE MISSED

Wheeze and dyspnea have several possible causes.

DIAGNOSIS

Symptoms can resemble COPD or heart failure.
Spirometry performance may be limited.

TREATMENT

Dexterity, cognition, coordination, and inspiratory flow affect inhaler use.

AVOID ASSUMPTIONS

New wheeze is not always asthma. Older adults with asthma do not automatically have COPD.

**Medication works only when the patient can use its device.
Assess the delivery device.**

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HEART FAILURE: A RESPIRATORY MIMIC

Heart failure can cause respiratory symptoms, including wheeze.

PULMONARY CLUES

Dyspnea or orthopnea
Tachypnea or hypoxemia
Cough, crackles, or wheeze
Increased breathing effort

SYSTEMIC CLUES

Edema or weight gain
JVD or cardiac history
Hypertension
Ischemic/valvular disease

OVERLAPPING DISEASE

Heart failure, pneumonia, and COPD exacerbation may occur together.

Wheezing is not always bronchospasm.

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COPD, PNEUMONIA, OR HEART FAILURE?

Several diagnoses may occur together.

FINDING	COPD Exacerbation	Pneumonia	Heart Failure
Cough / sputum	Often ↑ / changed	Often present	May occur
Fever	Usually absent	May be absent	Usually absent
Wheeze	Common	Possible	Possible
Crackles	Possible	Common	Common
Edema / orthopnea	Not primary	Not primary	Supports HF
New infiltrate	Not expected	Supports pneumonia	Edema possible

Use the clinical pattern, baseline, and treatment response.

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INTERSTITIAL LUNG DISEASE

Exposure history becomes increasingly important with age.

POSSIBLE CAUSES

Idiopathic pulmonary fibrosis
Drug-related injury
Occupational exposure
Connective-tissue disease

CLINICAL PATTERN

Progressive exertional dyspnea
Dry cough
Restriction/impaired diffusion
Exertional hypoxemia

RT CONSIDERATIONS

Assess oxygen needs with activity, recovery time, functional tolerance, and equipment needs.

Review medications, occupations, exposures, and connective-tissue disease.

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SLEEP-DISORDERED BREATHING

Comorbidity and sedating medications can compound sleep-related breathing problems.

WHAT MAY COEXIST

Obstructive/central apnea
Heart failure
Obesity
Neurologic disease

WHY IT MATTERS

Nocturnal hypoxemia
Fragmented sleep
Cardiovascular stress
Daytime impairment

RESPIRATORY CARE

Confirm home PAP use
Match interface/settings
Support adherence
Reassess after acute illness

Include chronic PAP therapy in the hospital care plan.

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STROKE: RESPIRATORY CONSEQUENCES

Weakness, dysphagia, and impaired airway protection create respiratory risks.

DYSPHAGIA

Aspiration may occur without obvious choking.

WEAK COUGH

Neuromuscular weakness impairs secretion clearance.

MOBILITY LOSS

Immobility reduces deep breathing and promotes deconditioning.

COMMUNICATION

Aphasia or dysarthria complicates symptom assessment.

MENTAL STATUS

Reduced alertness limits airway protection and participation.

POSITIONING

Hemiparesis can complicate aerosols, oxygen, and airway clearance.

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CASE STUDY 2

COPD, PNEUMONIA, OR HEART FAILURE?

79-year-old man with COPD and chronic heart failure

- Dyspnea increasing for 2 days
- RR 30/min; SpO₂ 86% on room air
- Yellow sputum with cough
- Bilateral crackles and wheeze
- New ankle edema
- Slept upright last night
- Temp 100.0°F (37.8°C)

WHAT IS THE DIAGNOSIS?

COPD exacerbation?
Pneumonia?
Heart failure?

Could it be more than one?

Avoid premature closure: cardiopulmonary disease often overlaps.

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WHY DIAGNOSIS IS CHALLENGING

Separate acute illness from baseline limitations and overlapping disease.

SYMPTOMS

Dyspnea may be normalized; fever or cough may be subtle.

COMORBIDITY

COPD, heart failure, infection, neurologic disease, and frailty overlap.

COOPERATION

Cognitive or physical limitations affect testing and history.

POSITIONING

Pain, kyphosis, weakness, or inability to stand affects examination/imaging.

MEDICATIONS

Multiple medications can affect breathing, alertness, and treatment.

BASELINE

Know what is normal for this patient.

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PULMONARY FUNCTION TESTING: QUALITY FIRST

Assess test quality before interpreting results.

BARRIERS

Cognitive impairment
Fatigue or weakness
Poor mouth seal
Hearing/coaching difficulty

RT RESPONSE

Demonstrate clearly
Reduce distractions
Meet hearing/vision needs
Allow rest; coach consistently

QUALITY FIRST

Confirm acceptability and repeatability before interpreting an abnormal result.

Poor-quality spirometry can create or miss a diagnosis.

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ASSESSMENT: LOOK BEYOND THE NUMBER

Connect objective findings with function and baseline change.

OXYGENATION

Reliable SpO₂?
New oxygen use?
Changes with activity/sleep?

VENTILATION

Check rate, breathing effort, and mental status. Obtain blood gases when indicated.

FUNCTION

Compare walking, speaking, eating, secretion clearance, and ADLs with baseline.

Interpret SpO₂ in context: what support was needed to reach it?

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BARRIERS TO RESPIRATORY CARE

The patient must be able to receive, understand, and use treatment.

MOBILITY

Weakness, arthritis, fractures, or deconditioning limits participation.

COGNITION

Memory loss, delirium, or dementia affects instructions/adherence.

HEARING / VISION

Adapt communication and device teaching.

DEXTERITY

Arthritis, tremor, or neurologic disease makes devices harder to handle.

POLYPHARMACY

Complex schedules and interactions add treatment burden.

SOCIAL / FINANCIAL

Consider cost, transport, caregivers, and living situation.

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POLYPHARMACY COMPLICATES CARE

More medications increase interactions, side effects, and dosing errors.

RESPIRATORY IMPACT

Sedatives/opioids may depress ventilation. Other drugs may cause cough, lung toxicity, heart-rate changes, or tremor.

CLEARANCE

Aging and renal/hepatic disease can alter drug handling and adverse effects.

TREATMENT BURDEN

Multiple inhalers, schedules, devices, and prescribers increase errors.

Medication reconciliation is part of respiratory assessment.

Ask what the patient takes, and how.

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CASE STUDY 3

IS THIS COPD — OR THE MEDICATIONS?

New somnolence and hypoventilation

81-year-old man with COPD

- Sleepiness/confusion over 24 hours
- RR 9/min; shallow breathing
- SpO₂ 91% on 2 L/min nasal cannula
- No fever/sputum increase; little wheeze
- Chronic opioid for back pain
- Bedtime benzodiazepine
- New sedating sleep medication
- Family: usually much more alert

ABG

pH 7.28; PaCO₂ 68 mm Hg
PaO₂ 64 mm Hg; HCO₃⁻ 31 mEq/L

CONSIDER

COPD exacerbation?
Medication-related hypoventilation?
Acute-on-chronic hypercapnic failure?
Overlapping processes?

New hypoventilation warrants a medication review.

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CASE 3 — ASSESS VENTILATION

Polypharmacy can become a respiratory problem.

01 COMPARE BASELINE

New somnolence, confusion, or slower breathing is a clue.

02 REVIEW MEDICATIONS

Opioids, benzodiazepines, and other sedatives may have additive effects.

03 LOOK BEYOND SpO₂

Hypoventilation/hypercapnia may worsen despite acceptable saturation.

04 ACUTE-ON-CHRONIC?

Use ABGs, breathing effort, mental status, and prior values.

05 CONSIDER OTHER CAUSES

Infection, heart failure, medication effects, and COPD may coexist.

06 COMMUNICATE & REASSESS

Escalate concern; reassess alertness, rate, gas exchange, and response.

Reconcile medications during respiratory assessment.

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MATCH THE INHALER TO THE PATIENT

Consider cognition, coordination, hand strength, inspiratory flow, and caregivers.

pMDI

Coordination required. A spacer/valved holding chamber may help.

DPI

Needs adequate inspiratory flow and correct preparation.

SMI

Slower plume may help coordination; preparation and handling still matter.

NEBULIZER

Less coordination; requires time, equipment, cleaning, and a suitable interface.

Choose a device the patient can use correctly and consistently.

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CASE STUDY 4**“TOO SHORT OF BREATH TO WALK”**

Is dyspnea from disease, deconditioning, or both?

78-year-old woman with pneumonia

- Day 5: infection/oxygenation improving
- Previously independent; walked unaided
- Mostly bed/chair during admission
- Dyspneic after walking 20–30 feet
- SpO₂: 94% rest → 92% walking
- RR: 20 rest → 30 with activity
- No new fever, chest pain, or sputum
- Weak legs; “I can’t do this.”

WHAT IS DRIVING DYSPNEA?

Pneumonia, hypoxemia, heart failure, or pulmonary embolism?

Has inactivity reduced her reserve?

What distinguishes unsafe activity from difficult activity?

Dyspnea alone does not require continued inactivity.

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CASE 4 — BREAK THE CYCLE

Weakness and dyspnea can reinforce inactivity.

DECONDITIONING CYCLE

Acute illness
↓
Less activity / bed rest
↓
Less strength / endurance
↓
More effort with activity
↓
Dyspnea / fear
↓
Even less activity

- 01 ASSESS RESPONSE**
SpO₂, RR, HR, symptoms, breathing effort, and recovery.
- 02 CHECK RED FLAGS**
Chest pain, marked desaturation, instability, altered mental status, or disproportionate distress.
- 03 POSITION & MOBILIZE**
Progress: sitting → transfers → standing → walking.
- 04 PACE ACTIVITY**
Short bouts, rest, breathing strategies, and appropriate oxygen.
- 05 WORK TOGETHER**
Coordinate with nursing, PT/OT, and the medical team.

Aim for safe, progressive recovery of function.

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CASE STUDY 5

“MY INHALER DOESN'T WORK”

84-year-old woman: COPD and worsening exertional dyspnea

- Prescribed a DPI
- Reports daily use
- Severe hand arthritis
- Inspiratory flow may be inadequate
- No alternative delivery device
- No recent technique check

WHAT NEXT?

Increase dose?
Add medication?
Assess delivery first?

“Show me how you use it.”

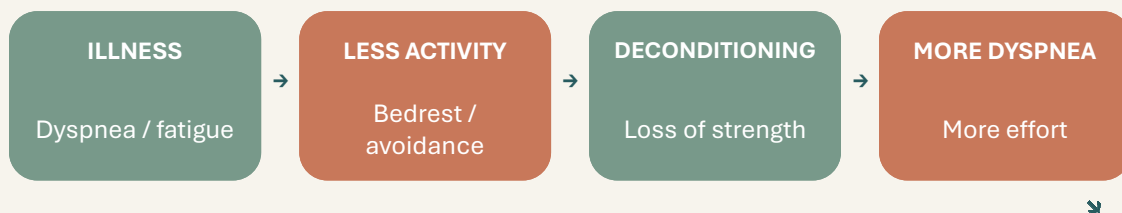
Confirm effective delivery before declaring treatment failure.

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FRAILITY & DECONDITIONING

Physical and respiratory decline can reinforce each other.



Interrupt the cycle with mobility, rehabilitation, nutrition, and appropriate respiratory support.

Ask: “What can the patient do?”

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COMMUNICATION IS PART OF TREATMENT

Adapt teaching to hearing, vision, cognition, and health literacy.

HEARING

Face the patient. Reduce noise. Speak clearly. Ensure hearing aids are available.

VISION

Use large print, good lighting, and contrast. Demonstrate within the visual field.

COGNITION

Give one step at a time. Use plain language, repetition, and caregiver support when appropriate.

TEACH-BACK

Ask the patient to explain or demonstrate the plan.

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RESPECT & AUTONOMY

Adapt care while preserving the patient's control.

ASK FIRST

Preferred name?
What matters most?
What can they do independently?

ADAPT CARE

Match communication, positioning, devices, timing, and education to ability.

PRESERVE CONTROL

Invite participation in decisions and self-care when able.

Accommodate limitations while supporting independence.

Next: respiratory therapies and goals of care.

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OXYGEN: TREAT HYPOXEMIA

Prescribe for physiologic need and titrate to the appropriate target.

ACUTE CARE

Find the cause. Titrate to clinical need. Reassess breathing effort and response.

HOME OXYGEN

Use documented chronic hypoxemia and qualifying criteria—not dyspnea alone.

FUNCTION MATTERS

Assess sleep and exertional needs when clinically indicated.

Investigate a new oxygen requirement.

Why is the patient hypoxemic? Is the requirement changing?

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HOME OXYGEN: SAFE & USABLE

Equipment, mobility, cognition, and support determine safe use.

EQUIPMENT

Can the patient operate the system and cannula?

MOBILITY

Does portable equipment support activity?

COGNITION

Can the patient recall flow settings and troubleshooting?

FALL RISK

Address tubing, weakness, and unfamiliar equipment.

FIRE SAFETY

Keep smoking and open flames away from oxygen.

FOLLOW-UP

Reassess need, adherence, fit, skin, dryness, and changing requirements.

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AIRWAY CLEARANCE: MATCH THE PROBLEM

Identify why clearance is failing, then target the limitation.

WEAK COUGH

Positioning or assisted cough; PEP when appropriate. Consider neuromuscular weakness.

RETAINED SECRETIONS

Hydration when appropriate, humidification, and mobility. Suction if unable to clear.

ASPIRATION / IMMOBILITY

Address swallowing/positioning. Mobilize early. Coordinate with nursing and therapy specialists.

Identify the clearance problem before choosing a device.

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INCENTIVE SPIROMETRY: PART OF A STRATEGY

Combine appropriate postoperative care with mobility, pain control, and deep breathing.

LIMITATIONS

Incorrect, inconsistent, or ineffective use limits benefit.

EVIDENCE

Routine IS alone has not consistently prevented postoperative pulmonary complications.

PATIENT NEEDS

What helps this patient breathe deeply, cough, mobilize, and avoid bed rest?

Teach the technique and assess performance.

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NONINVASIVE VENTILATION

NIV requires an appropriate indication and patient.

COMMON USES

Hypercapnic COPD
exacerbation
Cardiogenic pulmonary
edema
Selected chronic
ventilatory disorders

SUCCESS REQUIRES

Appropriate mental status
Airway protection
Secretion control
Interface tolerance
Close reassessment

WATCH FOR FAILURE

Worsening gas exchange
Increasing distress
Instability
Poor airway protection
Poor tolerance

Age alone does not exclude NIV; consider frailty and goals.

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MECHANICAL VENTILATION: INDIVIDUALIZE

Consider recovery potential, reserve, function, comorbidity, and patient preferences.

REVERSIBILITY

Will the acute problem
improve with treatment?

BASELINE FUNCTION

What were independence
and quality of life before
illness?

COMORBIDITY / FRAILITY

What capacity is available
for recovery?

PREFERENCES

Which treatments and
outcomes are acceptable?

VENTILATOR STRATEGY

Apply lung-protective
principles based on
physiology.

REASSESSMENT

Monitor trajectory and
revisit goals.

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CRITICAL ILLNESS HAS CONSEQUENCES

Survival may be followed by loss of strength, cognition, function, or independence.

MUSCLE LOSS

Bed rest and critical illness worsen weakness and respiratory muscle performance.

DELIRIUM

Illness, disrupted sleep, medications, and the ICU environment may contribute.

FUNCTIONAL DECLINE

Physiologic recovery may still require rehabilitation or help at home.

Consider survival and function after critical illness.

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GOALS OF CARE

Understand the patient's values before a crisis.

PROLONGING LIFE

Invasive support may fit the patient's wishes when recovery is reasonably possible.

TIME-LIMITED TRIAL

When recovery is uncertain, define treatment goals and reassessment points.

COMFORT CARE

Relieve dyspnea, anxiety, secretions, and discomfort.

DNR and DNI do not mean "no respiratory care."

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CASE STUDY 6**SAME AGE, DIFFERENT PATIENTS**

Two 85-year-olds with acute hypercapnic respiratory failure. Same treatment plan?

PATIENT A**Independent with good baseline function**

- Lives independently and drives
- Walks daily; manages all ADLs
- Cognitively intact; participates in decisions
- COPD; no admission in the past year
- Acute illness appears reversible
- “Do what you need to get me home.”

PATIENT B**Advanced frailty and declining function**

- Dependent for most ADLs
- Severe cognitive impairment
- Recurrent aspiration/recent admissions
- Functional decline over the past year
- Limited physiologic reserve
- Prefers to avoid invasive life support

Match treatment to baseline, reserve, and patient goals.

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CASE 6 — WHAT DRIVES THE PLAN?

Age is one part of an individualized assessment.

01**BASELINE FUNCTION**

What could the patient do before illness?

04**COGNITION & WISHES**

Can they participate? What prior wishes are known?

02**REVERSIBILITY**

Will the acute problem improve with treatment?

05**GOALS & PREFERENCES**

Which outcomes are acceptable?

03**RESERVE**

Can the patient tolerate illness and intervention?

06**BURDEN & BENEFIT**

Will treatment improve survival, symptoms, function, or quality of life?

Treat the patient in front of you.

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CASE STUDY 7

TREAT THE PATIENT, NOT THE BIRTHDAY

87-year-old man with acute hypercapnic respiratory failure

- Lives independently
- Drives and plays golf
- COPD; no prior intubation
- pH 7.25; PaCO₂ 72 mm Hg
- Alert and cooperative
- Marked dyspnea; accessory-muscle use
- Hemodynamically stable

A TEAM MEMBER ASKS:

**“He’s 87.
How aggressive should we be?”**

**What should drive the
decision?**

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CASE 7 — INDIVIDUALIZE THE DECISION

Match support to the patient’s needs and goals.

- 01 Is the acute problem reversible?
- 02 What were baseline function and quality of life?
- 03 Assess frailty, comorbidity, and reserve.
- 04 **What treatment and outcomes does the patient want?**
- 05 Is therapy working? What is the plan if it fails?

Next: care settings, prevention, and the RT’s role.

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RESPIRATORY CARE ACROSS SETTINGS

Make the respiratory plan work across transitions.

ACUTE CARE

Stabilize illness. Define oxygen/ventilatory needs. Prevent complications.

REHAB / SNF

Rebuild mobility. Continue indicated clearance. Simplify routines.

HOME

Ensure usable equipment, reliable technique, safety, and caregiver support.

LONG-TERM CARE

Monitor baseline changes, aspiration/infection risk, and function.

A discharge plan must be practical at home.

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PREVENTING RESPIRATORY COMPLICATIONS

Prevention supports long-term respiratory health.

VACCINATION

Follow current recommendations for age and risk.

SMOKING CESSATION

Stopping tobacco remains beneficial after decades of smoking.

MOBILITY

Limit unnecessary bed rest; support appropriate activity.

ORAL CARE

Reduce potentially pathogenic oral secretions.

ASPIRATION RISK

Use positioning, swallowing precautions, alertness, and feeding support.

DISEASE MANAGEMENT

Support inhaler technique, adherence, rehabilitation, PAP, and follow-up.

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THE RESPIRATORY THERAPIST'S ROLE

Connect physiology, function, equipment, and daily life.

ASSESS

Compare with baseline.
Assess oxygenation,
ventilation, breathing effort,
and clearance.

OPTIMIZE

Match oxygen, devices,
clearance, PAP, NIV, and
ventilatory support to ability.

TEACH

Demonstrate, check
technique, use teach-back,
and adapt communication.

ADVOCATE

Advocate for individualized
assessment and realistic
plans.

COLLABORATE

Partner with the patient,
caregivers, and
multidisciplinary team.

REASSESS

Check whether therapy
achieved its intended goal.

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FINAL CASE

PUTTING IT ALL TOGETHER

81-year-old woman returning home after pneumonia

- COPD; mild cognitive impairment
- New exertional oxygen requirement
- DPI use with weak inspiratory effort
- Coughs with thin liquids
- Walking limited to short distances
- Daughter helps several days weekly

BEFORE DISCHARGE

Oxygen and inhaler plans?

Swallowing/aspiration evaluation?

Mobility and recovery?

Teaching and caregiver support?

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FINAL CASE — BUILD A PRACTICAL PLAN

Address physiology, function, cognition, equipment, and home support.

- 01 Confirm oxygen needs; teach safe home-system use.
- 02 Check inhaler technique; select a device she can use.
- 03 Communicate swallowing concerns and address aspiration risk.
- 04 Support safe mobility and recovery.
- 05 **Use teach-back; involve her daughter and preserve independence.**

Choose effective therapy this patient can carry out.

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KEY TAKEAWAYS

AGING & RESERVE

Mechanics, gas exchange, cough, clearance, and responses change. Aging is not disease.

ATYPICAL SIGNS

Tachypnea, confusion, weakness, or functional decline may dominate.

FUNCTION MATTERS

Assess frailty, mobility, cognition, senses, dexterity, and caregivers.

MATCH THE DEVICE

Effective therapy requires correct device use.

INDIVIDUALIZE CARE

Use reversibility, baseline function, reserve, and patient goals.

REASSESS OUTCOMES

Check oxygenation, ventilation, symptoms, clearance, mobility, and function.

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REFERENCES & CURRENT GUIDANCE

CDC	Adult immunization schedule and respiratory vaccine guidance.
GOLD	Global strategy for COPD diagnosis, management, and prevention.
GINA	Global strategy for asthma management and prevention.
ATS / ERS	Pulmonary function testing standards and respiratory guidance.
AARC	Guidelines for oxygen, clearance, aerosols, and ventilatory support.
ATS	Home oxygen therapy guidance for chronic lung disease.
Original course	Arthur Jones, EdD, RRT — Geriatric Respiratory Care; foundational course.

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RESPIRATORY CARE FOR THE

GERIATRIC PATIENT

Treat the physiology.
Respect the person.

Age is one data point, not the treatment plan.

Thank you

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