

Case: Geoff Thomas

Patient Information

- **Age:** 68 years
- **Gender:** Male
- **Indigenous Status:** Not Aboriginal and/or Torres Strait Islander
- **Year:** 2024
- **ICPC-2 Codes:** K – Cardiovascular

Competency Outcomes:

1. Communication and Consultation Skills:

- Engage in effective communication with the patient, exploring his concerns and addressing the reasons behind fitness-to-drive decisions.
- Provide clear information regarding his condition, prognosis, and fitness to drive.

2. Clinical Information Gathering and Interpretation:

- Take a focused history of the cardiac event, recovery, and ongoing symptoms.
- Understand and apply relevant guidelines from the **Austroads "Assessing Fitness to Drive"** standards.

3. Diagnosis, Decision-Making, and Reasoning:

- Assess fitness to drive based on the patient's clinical history and the guidelines.
- Provide appropriate recommendations for safe driving resumption or restrictions.

4. Clinical Management and Therapeutic Reasoning:

- Develop a management plan that includes follow-up and further cardiac care.
- Balance patient autonomy with safety considerations.

5. Preventive and Population Health:

- Recognize the role of cardiac rehabilitation and ongoing cardiac risk management.

Case Features

- **Condition:** Post-cardiac arrest, now seeking clearance for driving.
 - **Key Focus Areas:**
 - Understanding the Austroads "Assessing Fitness to Drive" guidelines.
 - Discussing the risks associated with resuming driving after a serious cardiac event.
 - Considering the patient's personal and professional concerns regarding driving.
-

Instructions

- **Review** the patient record summary, clinical examination findings, and discharge summary details.
 - **Your examiner** will ask you a series of questions based on this information.
 - **You have 15 minutes** to complete this case.
 - Question 1 – 4 minutes
 - Question 2 – 1 minute
 - Question 3 – 3 minutes
 - Question 4 – 3 minutes
 - Question 5 – 4 minutes
-

Patient Record Summary

- **Name:** Geoff Thomas
- **Age:** 68 years
- **Gender:** Male
- **Indigenous Status:** Not Aboriginal or Torres Strait Islander
- **Allergies and Adverse Reactions:** Nil known
- **Medications:**
 - Bisoprolol 2.5 mg daily (for heart rate control)
 - Atorvastatin 40 mg daily (for cholesterol)

- Aspirin 100 mg daily (antiplatelet)
 - Ramipril 5 mg daily (for hypertension)
 - **Past History:**
 - Out-of-hospital cardiac arrest 2 months ago due to acute myocardial infarction (STEMI)
 - Return of spontaneous circulation (ROSC) achieved after 10 minutes of CPR and defibrillation by paramedics.
 - Underwent coronary angiography and stenting of a proximal left anterior descending (LAD) artery lesion.
 - Spent 3 weeks in the hospital ICU and cardiac ward, followed by 4 weeks in a cardiac rehabilitation program.
 - History of hypertension and hyperlipidaemia, managed with medications.
 - **Social History:**
 - Works as a part-time bus driver; previously drove 3 days a week.
 - Lives with his wife, enjoys occasional social gatherings, and walks daily.
 - Quit smoking 10 years ago after a 40 pack-year history.
 - Drinks socially, about 1-2 glasses of wine per week.
 - **Family History:**
 - Father: Deceased from a stroke at 72 years old.
 - Mother: Type 2 diabetes.
 - **Vaccination and Preventative Activities:**
 - Up to date with all routine vaccinations.
 - Attended regular GP check-ups before cardiac event.
-

Scenario

Geoff Thomas, a 68-year-old part-time bus driver, presents to your clinic 2 weeks after being discharged from a cardiac rehabilitation program following a **cardiac arrest and subsequent recovery**. He is feeling well, reports no chest pain or breathlessness, and says he has been following his medication and rehabilitation plan closely.

He has brought his hospital discharge summary, which states: "**See GP re: fitness to drive**". Geoff is eager to know if he can resume driving, as he feels back to normal and misses the routine of his job. He's keen to understand when he can return to work and whether he can drive his private vehicle.

Clinical Examination Findings

- **General Appearance:** Healthy-looking, well-groomed, appears in good spirits.
 - **Vital Signs:**
 - BP: 125/80 mmHg
 - HR: 60 bpm, regular (controlled on bisoprolol)
 - Temp: 36.7°C
 - RR: 14/min
 - SpO2: 98% on room air
 - **Cardiovascular Examination:**
 - Heart sounds: Normal S1 and S2, no murmurs.
 - No signs of heart failure (e.g., no peripheral oedema, no raised JVP).
 - **Respiratory Examination:** Clear breath sounds bilaterally.
 - **Neurological Examination:** Normal, no focal deficits.
-

Discharge Summary Key Points:

- **Diagnosis:** Out-of-hospital cardiac arrest secondary to acute STEMI.
 - **Treatment:**
 - ROSC achieved following CPR and defibrillation.
 - PCI with stenting of proximal LAD.
 - Cardiac rehabilitation completed successfully.
 - **Follow-Up:**
 - Regular follow-up with cardiologist.
 - See GP regarding assessment for fitness to drive.
-

Medical standards for licensing – cardiovascular conditions

Condition	Private standards (Drivers of cars, light rigid vehicles or motorcycles unless carrying public passengers or requiring a dangerous goods driver licence – refer to definition in Table 3)	Commercial standards (Drivers of heavy vehicles, public passenger vehicles or requiring a dangerous goods driver licence – refer to definition in Table 3)
Cardiac arrest	<p>The person should not drive for at least 6 months following a cardiac arrest.</p> <p>Limited exceptions apply – see below*.</p> <p>A person is not fit to hold an unconditional licence:</p> <ul style="list-style-type: none"> • if the person has suffered a cardiac arrest. <p>A conditional licence may be considered by the driver licensing authority subject to periodic review, taking into account the nature of the driving task and information provided by the treating doctor as to whether the following criteria are met:</p> <ul style="list-style-type: none"> • it is at least 6 months after the arrest; and • the cause of the cardiac arrest and response to treatment has been considered; and • there are minimal symptoms relevant to driving (chest pain, palpitations, breathlessness). <p><i>* A shorter non-driving period may be considered subject to specialist assessment if the cardiac arrest has occurred within 48 hours of an acute myocardial infarction, or if the arrhythmia causing the cardiac arrest has been addressed by radio frequency ablation surgery or by pacemaker implantation.</i></p>	<p>The person should not drive for at least 6 months following a cardiac arrest.</p> <p>A person is not fit to hold an unconditional licence:</p> <ul style="list-style-type: none"> • if the person has suffered a cardiac arrest. <p>A conditional licence may be considered by the driver licensing authority subject to annual review, taking into account the nature of the driving task and information provided by the treating specialist as to whether the following criteria are met:</p> <ul style="list-style-type: none"> • it is at least 6 months after the arrest; and • a reversible cause is identified and recurrence is unlikely; and • there are minimal symptoms relevant to driving (chest pain, palpitations, breathlessness).

Examiner Information Only

Twist: The Australian Driving Standards

- **Key Guideline Reference: Austroads "Assessing Fitness to Drive"** – standards for private and commercial vehicle drivers.
 - **Key Question:** "When can I start driving again? Can I drive my bus?"
 - **Relevant Guideline Points:**
 - **Private Driver:** After a cardiac arrest, a patient can usually resume driving a **private vehicle** after **6 months** if there are no significant arrhythmias or ongoing symptoms and if cleared by a medical practitioner.
 - **Commercial Driver (e.g., bus driver):** There are **more stringent requirements**. A person who has had a cardiac arrest can only resume **commercial driving** after **6 months** without any significant arrhythmias, syncope, or other symptoms, and they must be assessed and cleared by a **cardiologist**.
 - **Significance of the Twist:** Geoff may be able to drive his private vehicle, but **he cannot drive his bus** for at least **another 4 months**, and only if cleared by a cardiologist.
-

Questions and Suggested Answers

1. Clinical Assessment:

- **Prompt:** What are your recommendations for Geoff regarding driving?
 - **Answer:** Based on the **Austroads "Assessing Fitness to Drive"** standards, Geoff can drive a **private vehicle** since it has been 8 weeks since his cardiac arrest, he has completed cardiac rehabilitation, and he is symptom-free. However, he is not yet cleared to drive a **commercial vehicle**, such as a bus, as the guidelines require a **6-month restriction** and a cardiologist's clearance.

2. Evidence Interpretation:

- **Prompt:** Why is there a longer restriction period for driving a commercial vehicle after a cardiac arrest?
 - **Answer:** Commercial driving poses a higher risk due to the nature of the job and the potential impact on passenger and public safety if an event like syncope or arrhythmia were to occur while driving.

Thus, **stricter standards** ensure that there is a lower risk of such events occurring before allowing the person to resume commercial driving.

3. Patient Communication:

- **Prompt:** How would you explain the need for this restriction to Geoff?
 - **Answer:** "Geoff, I understand that you're eager to get back to driving your bus, especially since you're feeling better. The reason for the extra caution with commercial driving is to ensure that you're completely stable before you're responsible for others on the road. While you can drive your car now, returning to bus driving requires a bit more time—6 months after your cardiac event—and you'll need a cardiologist to give you the all-clear."

4. Treatment Options:

- **Prompt:** What should be included in Geoff's follow-up plan to ensure he can safely return to driving?
 - **Answer:** Ongoing monitoring of Geoff's cardiovascular status with regular follow-up with both his GP and cardiologist. This includes checking for any arrhythmias, managing his risk factors like blood pressure and cholesterol, and ensuring he continues with cardiac rehabilitation exercises. A cardiologist review after 3 months to assess for clearance to resume commercial driving is also essential.

5. Follow-Up and Referral:

- **Prompt:** When would you consider further investigations or referral for Geoff?
 - **Answer:** If Geoff experiences any new symptoms such as chest pain, palpitations, or dizziness, he should be referred urgently back to his cardiologist for further assessment. Additionally, a **formal review at 6 months** with his cardiologist is required to assess his fitness for returning to **commercial driving**.

Examiner Checklist

- **Clinical Knowledge and Skills:**
 - Correctly applied the **Austroads "Assessing Fitness to Drive"** guidelines.

- Recognized the distinction between requirements for private versus commercial driving.
- Provided appropriate follow-up and management strategies.
- **Patient Communication:**
 - Explained the rationale for driving restrictions clearly and empathetically.
 - Addressed the patient's concerns while providing realistic expectations.
 - Emphasized the importance of safety for both Geoff and others on the road.
- **Evidence-Based Practice:**
 - Utilized relevant clinical guidelines for determining fitness to drive.
 - Explained the steps required for clearance and the reasons for the guidelines.
 - Demonstrated an understanding of the risks and necessary precautions following a serious cardiac event.

This case challenges registrars to understand and apply clinical guidelines in the context of real-world patient concerns, balancing empathy with the need to ensure safety. It also emphasizes the importance of communication when addressing issues that affect a patient's independence and livelihood.