

## Physical Activity Recommendation Case Study

Mr. James is a 57-year-old, African American male diagnosed three months ago with stage IIIB colon cancer. Four weeks after recovering from surgery to resect his tumor and stage his disease, he began chemotherapy with FOLFOX. He did not require an ostomy postoperatively.

On treatment days, he reports nausea, vomiting, and overall fatigue. His nausea and vomiting are managed by the antiemetic prescriptions he has at home, but nothing is relieving his fatigue, no matter how much he rests or naps during the day at the urging of his wife. In fact, some days he naps so much, he has trouble sleeping at night, and these changes in energy level and sleep patterns are making him “miserable.”

In assessing Mr. James, the nurse finds that he has no issues with peripheral neuropathy, cardiac or pulmonary history, or any musculoskeletal signs or symptoms, including bone metastases or decreased bone mineral density. She notes his body mass index (BMI) indicates he is overweight, which he says is “one of those things I’ve been meaning to work on—just never got around to.”

1. What benefit(s) do you anticipate that Mr. James may receive from engaging in physical activity?
2. What types of barriers do you anticipate you may need to address with Mr. James?
3. Why do some nurses hesitate to recommend physical activity to their patients?

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The nurse talks with Mr. James about the strong and growing body of evidence linking physical activity to improved symptom control and other outcomes for people with cancer. His first reaction is disbelief, saying “That just doesn’t make sense. I am so tired I can barely get up to take care of myself some days after chemo. How do you expect me to go to a gym and get all sweaty? I won’t even make it out of the parking lot to go inside!”

Mr. James reports that, for the most part, he is not exercising beyond walking slowly around his house or between the car and the clinic. He has had no issues with ambulation and describes no physical barriers in his environment that might increase his risk of falls.

In reviewing his medical history, the nurse notes that Mr. James has no history of a cardiac condition, past exercise restrictions, current chest pain on exertion, or loss of balance or consciousness. Aside from antiemetics or his chemotherapy regimen, Mr. James typically takes an over-the-counter omeprazole for occasional indigestion. His past medical history reveals only mild indigestion, and past surgical history includes a cholecystectomy in 2004.

4. The nurse's assessment of Mr. James should include questions about his readiness for physical activity. Based on the PAR-Q questions listed below, is it okay to continuing to work with Mr. James to determine an appropriate physical activity recommendation?

Physical Activity Readiness Questionnaire (PAR-Q)

- Has your doctor ever said that you have a heart condition and that you should only do physical activity recommended by a doctor?
- Do you feel pain in your chest when you do physical activity?
- In the past month, have you had chest pain when you were not doing physical activity?
- Do you lose your balance because of dizziness, or do you ever lose consciousness?
- Do you have a bone or joint problem (for example, back, knee or hip) that could be made worse by a change in your physical activity?
- Is your doctor currently prescribing drugs (for example, water pills) for your blood pressure or heart condition?
- Do you know of any other reason why you should not do physical activity?

5. Next, the nurse assesses Mr. James' current level of physical activity using the Godin Leisure Time scale. The nurse asks him to estimate for a typical a week how many times he engages in exercise for more than 15 minutes (strenuous, moderate, and light exercise). Mr. James has stated that he is not exercising beyond walking slowly around his house or between the car and the clinic. According to the interpretation of his Godin scale score, what is his current level of activity?
6. Mr. James has which of the following physical conditions, which would require medical clearance before beginning physical activity?
7. Based on the assessment of Mr. James, it is safe for the nurse to make physical activity recommendation without needing medical clearance?

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Because assessment of Mr. James did not identify any risk factors that would require medical clearance before beginning to increase his physical activity level, the nurse continues to discuss with Mr. James the potential for him to increase physical activity. Mr. James is experiencing significant fatigue, with his fatigue score being 5 (on a 0–10 scale) on his treatment day and 8 on his “bad days” during his chemo cycle. Therefore, the nurse tells Mr. James that he can start very slowly to establish a routine of daily activity, such as walking short distances as tolerated, and work to add extra minutes or distance on his “good days.”

The nurse reviews the change in evidence over the years from promoting rest to avoiding inactivity and points out the evidence for physical activity as symptom management for both fatigue and sleep-wake disturbances. Mr. James says “Well, I guess I thought you meant I have to get into special clothes and try

running or something. I will definitely try moving more if you say it'll help. I still have to see it to believe it, but you all haven't steered me wrong so far with this treatment."

8. Based on what you know about Mr. James, what would be the most appropriate physical activity recommendation?
  9. What RPE do you think would be most appropriate for Mr. James at this point in his treatment?
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Mr. James and the nurse decide to set a goal to walk for 10 minutes three times per week for the next two weeks, achieving a rate of perceived exertion of 3. Mr. James states that he can think of at least two routes around the block in his neighborhood that would take that amount of time, have sidewalks, are relatively flat in incline, and are very safe to be out alone in during daylight hours.

Mr. James is instructed to use caution and listen to his body when walking, and to slow down or take a break during his walk if he feels a rate of perceived exertion beyond 3 (his goal RPE) during the first two-week period. He should stop walking and contact his healthcare provider if he has any chest pain, feels lightheaded or dizzy, or has any other concerns.

The nurse stresses that the intention is to slowly increase his ability to tolerate increased physical activity over time, and that they will revise his goal as he feels able, eventually working toward the overall exercise goals for all survivors of cancer. Mr. James understands that achieving 150 minutes of moderate exercise per week is a long-term goal, but acknowledges the importance of "getting into shape once and for all. The last thing I need is to beat cancer and then keel over from a heart attack in front of one of my grandkids some day!"

10. Based on what you know about Mr. James, complete the Physical Activity Recommendation Form.

# Answer Key

## Physical Activity Recommendation Case Study

*Note to instructors: For these questions, the answers listed are the minimum to be correct. Other answers may also be appropriate, but at a minimum make sure the answers listed are addressed by the learners.*

Mr. James is a 57-year-old, African American male diagnosed three months ago with stage IIIB colon cancer. Four weeks after recovering from surgery to resect his tumor and stage his disease, he began chemotherapy with FOLFOX. He did not require an ostomy postoperatively.

On treatment days, he reports nausea, vomiting, and overall fatigue. His nausea and vomiting are managed by the antiemetic prescriptions he has at home, but nothing is relieving his fatigue, no matter how much he rests or naps during the day at the urging of his wife. In fact, some days he naps so much, he has trouble sleeping at night, and these changes in energy level and sleep patterns are making him “miserable.”

In assessing Mr. James, the nurse finds that he has no issues with peripheral neuropathy, cardiac or pulmonary history, or any musculoskeletal signs or symptoms, including bone metastases or decreased bone mineral density. She notes his body mass index (BMI) indicates he is overweight, which he says is “one of those things I’ve been meaning to work on—just never got around to.”

11. What benefit(s) do you anticipate that Mr. James may receive from engaging in physical activity?

Answer: Increase energy level, improvement in his sleep-wake patterns

12. What types of barriers do you anticipate you may need to address with Mr. James?

Answer: Lack of motivation to engage in physical activity, current lack of energy

13. Why do some nurses hesitate to recommend physical activity to their patients?

Answer: Fear of harming their patient, fear of liabilities, lack of knowledge about how to make appropriate physical activity recommendations

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Mr. James reports that, for the most part, he is not exercising beyond walking slowly around his house or between the car and the clinic. He has had no issues with ambulation and describes no physical barriers in his environment that might increase his risk of falls.

In reviewing his medical history, the nurse notes that Mr. James has no history of a cardiac condition, past exercise restrictions, current chest pain on exertion, or loss of balance or consciousness. Aside from antiemetics or his chemotherapy regimen, Mr. James typically takes an over-the-counter omeprazole for occasional indigestion. His past medical history reveals only mild indigestion, and past surgical history includes a cholecystectomy in 2004.

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- Do you have a bone or joint problem (for example, back, knee or hip) that could be made worse by a change in your physical activity?
- Is your doctor currently prescribing drugs (for example, water pills) for your blood pressure or heart condition?
- Do you know of any other reason why you should not do physical activity?

Answer: Yes - the answers to all these questions was no.

15. Next, the nurse assesses Mr. James' current level of physical activity using the Godin Leisure Time scale. The nurse asks him to estimate for a typical a week how many times he engages in exercise for more than 15 minutes (strenuous, moderate, and light exercise). Mr. James has stated that he is not exercising beyond walking slowly around his house or between the car and the clinic. According to the interpretation of his Godin scale score, what is his current level of activity?

Answer: Insufficiently active/sedentary

16. Mr. James has which of the following physical conditions that would require medical clearance before beginning physical activity? Nausea and vomiting, history of cardiac disease, ostomy

Answer: None of these. While he has nausea and vomiting, that does not preclude him from engaging in physical activity.

17. Based on the assessment of Mr. James, it is safe for the nurse to make physical activity recommendation without needing medical clearance?

Answer: True

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Because assessment of Mr. James did not identify any risk factors that would require medical clearance before beginning to increase his physical activity level, the nurse continues to discuss with Mr. James the potential for him to increase physical activity. Mr. James is experiencing significant fatigue, with his fatigue score being 5 (on a 0–10 scale) on his treatment day and 8 on his “bad days” during his chemo cycle. Therefore, the nurse tells Mr. James that he can start very slowly to establish a routine of daily activity, such as walking short distances as tolerated, and work to add extra minutes or distance on his “good days.”

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18. Based on what you know about Mr. James, what would be the most appropriate physical activity recommendation?

Answer: Walk for 10-15 minutes, three times per week. (Any answer that would fall under the ‘light’ activity category would be correct.)

19. What RPE do you think would be most appropriate for Mr. James at this point in his treatment?

Answer: 1-3

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shape once and for all. The last thing I need is to beat cancer and then keel over from a heart attack in front of one of my grandkids some day!”

20. Based on what you know about Mr. James, complete the Physical Activity Recommendation Form.  
(As time permits)