Louis is a 63 year old man referred to home care for an initial assessment. He was diagnosed with HIV infection 2 years ago. His viral load is slightly above detectable and his CD4 count is 450. He is not taking any antiretroviral medication at the present. He has a past history of cardiovascular disease and bipolar disorder. Louis lives alone in a 1 bedroom apartment downtown. He is a retired musician who stopped giving private lessons 4 months ago due to deteriorating health. He tells you that he has a companion who assists him with grocery shopping and errands. He recently had to sell his prized cello to pay for his companion's services. His companion is having financial problems and sends money abroad to support his family. Louis tells you he is concerned as his companion uses his credit card to buy his groceries.

Louis tells you that he has been having difficulty moving about and using the bus so is now “housebound”. His home is cluttered and has not been cleaned in some time. During your assessment you note that Louis has difficulty with ambulation and balance. He has decreased lower extremity strength and upper extremity strength bilaterally. He scored 16/30 on the Mini Mental Status Exam. He has difficulty with his handwriting and other fine motor tasks. You suspect that Louis may have some degree of HIV Associated Neurocognitive Disorder.

Knowledge to Action
Rehabilitation in HIV
Case Study 3 - Louis

QUESTIONS

1. What are HIV Associated Neurocognitive Disorders? (click here to view 4.12.5.10 CNS - Neurocognitive Functioning)
   - There are 3 main categories of HIV related Neurocognitive Disorders: 1) HIV-Associated Dementia 2) HIV Mild Neurocognitive Disorder and 3) Asymptomatic Neurocognitive Impairment.
   - Louis appears to have HIV Associated Mild Neurocognitive Disorder (HAND) defined as impairment in at least 2 domains that produces mild interference in day to day. These could be self-reported changes in functional ability or through the observations of others.
   - The interactions between HAND and age related dementia are not well understood.

2. Is there any evidence to suggest that exercise would be an effective treatment strategy for Louis? (click here to view 6.4 Exercise)
   - Published studies support the benefits of aerobic and resistive exercise in adults living with HIV
   - Exercise intensity for aerobic exercises in HIV research ranges between 50-85% for VO2 max or 45-85% maximum heart rate, 3 times per week for 5 to 24 weeks.
   - Research recommendations for exercise intensity for resistive exercise include training of major muscle groups in upper and lower body for approximately 20-25 minutes ranging from 1 to 5 sets of 4 to 18 repetitions each, 3 times per week for 6 to 16 weeks.

3. What issues might Louise need you to help him advocate for? (click here to view 7.2 Navigation and Advocacy)
   - The relationship with his companion might be problematic as he may be taking advantage of Louis’ deteriorating cognitive status.
   - Additional resources could help Louis to be less dependent; there are also strategies to support self-advocacy that could be encouraged with Louis
   - Many communities have AIDS Service Organizations to assist with health and social services; there are also national association that provide support (e.g. CATIE in Canada and NAM in the UK)