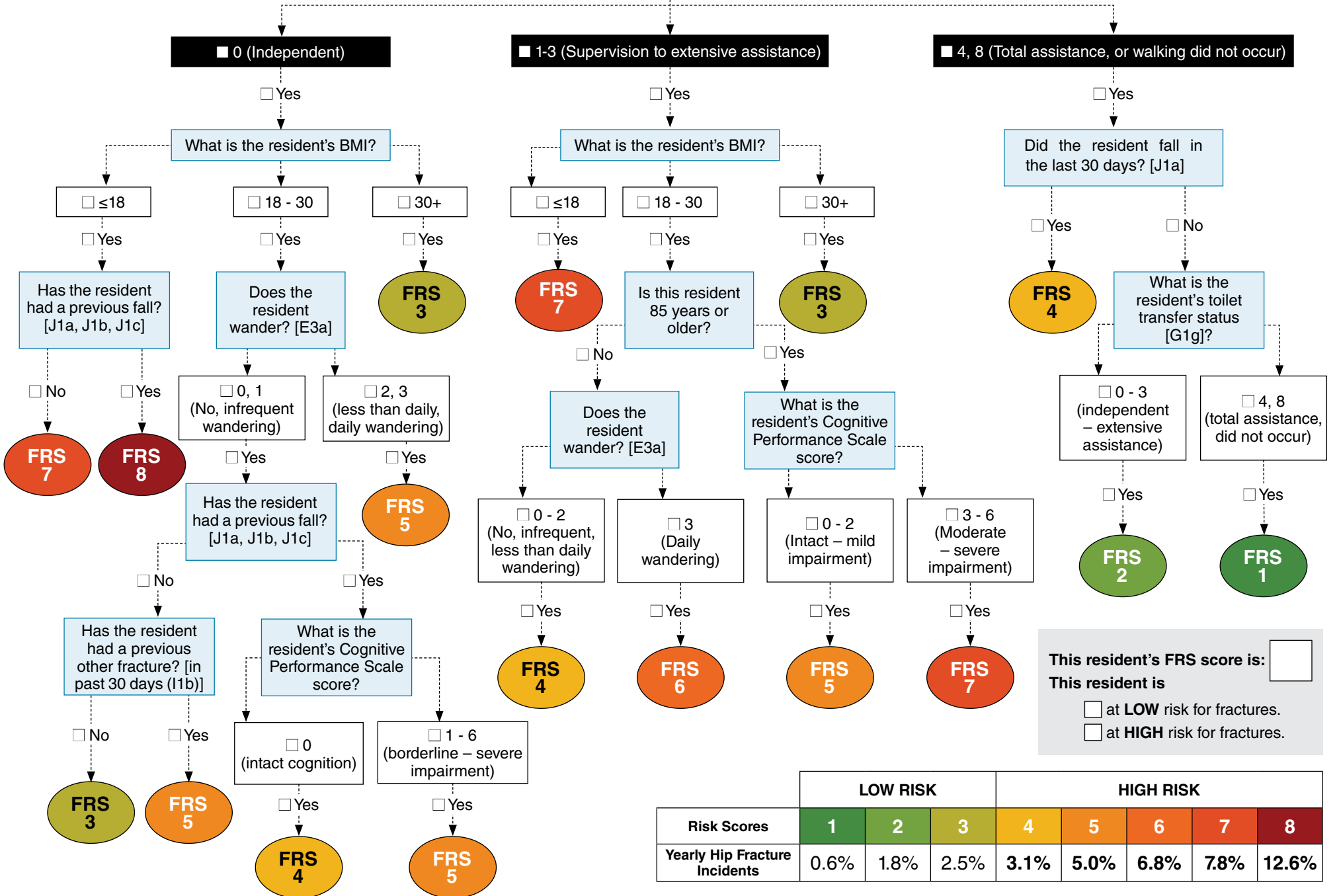


Instructions: Using information from the resident's latest LTCF assessment, respond to questions to direct you to the resident's Fracture Risk Scale Score. Document the responses using the check boxes. Instructions for calculating BMI are presented on the back side.

LTCF Fracture Risk Scale: Manual Score Calculation

START HERE What is the resident's ability to walk? [G1e]

Resident: _____ Date: _____



This resident's FRS score is:

This resident is

at **LOW** risk for fractures.

at **HIGH** risk for fractures.

| | LOW RISK | | | HIGH RISK | | | | |
|-------------------------------|----------|------|------|-----------|------|------|------|-------|
| Risk Scores | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Yearly Hip Fracture Incidents | 0.6% | 1.8% | 2.5% | 3.1% | 5.0% | 6.8% | 7.8% | 12.6% |

How to find BMI: Locate where the resident's height and weight intersect; BMI is listed in the square

| | | WEIGHT | | | | | | | | | | | | | | | | | | | | | |
|--|-------|--------|----|-----|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------------|-----|-----|-----|
| | | lbs | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 | 210 | 220 | 230 | 240 | 250 | 260 | 270 | 280 | 290 |
| | | kgs | 41 | 45 | 50 | 54 | 59 | 64 | 68 | 73 | 77 | 82 | 86 | 91 | 95 | 100 | 104 | 109 | 113 | 118 | 122 | 127 | 132 |
| HEIGHT | ft/in | cm | | | | | | | | | | | | | | | | | | | | | |
| | 4'8" | 142.2 | 20 | 22 | 25 | 27 | 29 | 31 | 34 | 36 | 38 | 40 | 43 | 45 | 47 | 49 | 52 | 54 | 56 | 58 | 61 | 63 | 65 |
| 4'9" | 144.7 | 19 | 22 | 24 | 26 | 28 | 30 | 32 | 35 | 37 | 39 | 41 | 43 | 45 | 48 | 50 | 52 | 54 | 56 | 58 | 61 | 63 | |
| 4'10" | 147.3 | 19 | 21 | 23 | 25 | 27 | 29 | 31 | 33 | 36 | 38 | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 59 | 61 | |
| 4'11" | 149.8 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 | 51 | 53 | 55 | 57 | 59 | |
| 5'0" | 152.4 | 18 | 20 | 21 | 23 | 25 | 27 | 29 | 31 | 33 | 35 | 37 | 39 | 41 | 43 | 45 | 47 | 49 | 51 | 53 | 55 | 57 | |
| 5'1" | 154.9 | 17 | 19 | 21 | 23 | 25 | 26 | 28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 43 | 45 | 47 | 49 | 51 | 53 | 55 | |
| 5'2" | 157.4 | 16 | 18 | 20 | 22 | 24 | 26 | 27 | 29 | 31 | 33 | 35 | 37 | 38 | 40 | 42 | 44 | 46 | 48 | 49 | 51 | 53 | |
| 5'3" | 160.0 | 16 | 18 | 19 | 21 | 23 | 25 | 27 | 28 | 30 | 32 | 34 | 35 | 37 | 39 | 41 | 43 | 44 | 46 | 48 | 50 | 51 | |
| 5'4" | 162.5 | 15 | 17 | 19 | 21 | 22 | 24 | 26 | 27 | 29 | 31 | 33 | 34 | 36 | 38 | 39 | 41 | 43 | 45 | 46 | 48 | 50 | |
| 5'5" | 165.1 | 15 | 17 | 18 | 20 | 22 | 23 | 25 | 27 | 28 | 30 | 32 | 33 | 35 | 37 | 38 | 40 | 42 | 43 | 45 | 47 | 48 | |
| 5'6" | 167.6 | 15 | 16 | 18 | 19 | 21 | 23 | 24 | 26 | 27 | 29 | 31 | 32 | 34 | 36 | 37 | 39 | 40 | 42 | 44 | 45 | 47 | |
| 5'7" | 170.1 | 14 | 16 | 17 | 19 | 20 | 22 | 24 | 25 | 27 | 28 | 30 | 31 | 33 | 34 | 36 | 38 | 39 | 41 | 42 | 44 | 45 | |
| 5'8" | 172.7 | 14 | 15 | 17 | 18 | 20 | 21 | 23 | 24 | 26 | 27 | 29 | 30 | 32 | 33 | 35 | 37 | 38 | 40 | 41 | 43 | 44 | |
| 5'9" | 175.2 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 25 | 27 | 28 | 30 | 31 | 33 | 34 | 35 | 37 | 38 | 40 | 41 | 43 | |
| 5'10" | 177.8 | 13 | 14 | 16 | 17 | 19 | 20 | 22 | 23 | 24 | 26 | 27 | 29 | 30 | 32 | 33 | 34 | 36 | 37 | 39 | 40 | 42 | |
| 5'11" | 180.3 | 13 | 14 | 15 | 17 | 18 | 20 | 21 | 22 | 24 | 25 | 27 | 28 | 29 | 31 | 32 | 33 | 35 | 36 | 38 | 39 | 40 | |
| 6'0" | 182.8 | 12 | 14 | 15 | 16 | 18 | 19 | 20 | 22 | 23 | 24 | 26 | 27 | 28 | 30 | 31 | 33 | 34 | 35 | 37 | 38 | 39 | |
| 6'1" | 185.4 | 12 | 13 | 15 | 16 | 17 | 18 | 20 | 21 | 22 | 24 | 25 | 26 | 28 | 29 | 30 | 32 | 33 | 34 | 36 | 37 | 38 | |
| 6'2" | 187.9 | 12 | 13 | 14 | 15 | 17 | 18 | 19 | 21 | 22 | 23 | 24 | 26 | 27 | 28 | 30 | 31 | 32 | 33 | 35 | 36 | 37 | |
| 6'3" | 190.5 | 11 | 13 | 14 | 15 | 16 | 18 | 19 | 20 | 21 | 23 | 24 | 25 | 26 | 28 | 29 | 30 | 31 | 33 | 34 | 35 | 36 | |
| 6'4" | 193.0 | 11 | 12 | 13 | 15 | 16 | 17 | 18 | 19 | 21 | 22 | 23 | 24 | 26 | 27 | 28 | 29 | 30 | 32 | 33 | 34 | 35 | |
| 6'5" | 195.5 | 11 | 12 | 13 | 14 | 15 | 17 | 18 | 19 | 20 | 21 | 23 | 24 | 25 | 26 | 27 | 28 | 30 | 31 | 32 | 33 | 34 | |
| 6'6" | 198.1 | 10 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 20 | 21 | 22 | 23 | 24 | 25 | 27 | 28 | 29 | 30 | 31 | 32 | 34 | |
| 6'7" | 200.6 | 10 | 11 | 12 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 32 | 33 | |
| 6'8" | 203.2 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 29 | 30 | 31 | 32 | |
| 6'9" | 205.7 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 24 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | |
| 6'10" | 208.2 | 9 | 10 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | |
| 6'11" | 210.8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 25 | 26 | 27 | 28 | 29 | 30 | |
| BMI<18 - High fracture risk for residents who walk independently | | | | | | | | | | BMI 18 – 30 low – high risk dependent on the presence of other risk factors | | | | | | | | | | BMI 30+ low risk | | | |

Online BMI Calculators:

<https://bmicalculatorcanada.com/>

<https://www.calculator.net/bmi-calculator.html>

https://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/english_bmi_calculator/bmi_calculator.html

Adapted from <https://bmicalculatorcanada.com>

Papaioannou et al. Recommendations for preventing fracture in long-term care. CMAJ 2015 187(15), 1135–1144.

Ioannidis et al. Development and validation of the Fracture Risk Scale (FRS) that predicts fracture over a 1-year time period in institutionalized frail older people living in Canada: an electronic record-linked longitudinal cohort study. BMJ Open 2017;7:e016477.

McArthur et al. Developing a Fracture Risk Clinical Assessment Protocol for Long-Term Care: A Modified Delphi Consensus Process, JAMDA, Sep 20, 2020 (e-pub ahead of print).



| Treatment Considerations | | | | | | Considerations for medication use | |
|--|---|---|---|---|---|---|---|
| LOW RISK | | | HIGH RISK | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| <ul style="list-style-type: none"> • Vitamin D: 800-2000IU • Calcium: 1200mg (daily total diet & supplement) • Exercise: functional strength & balance | | | <ul style="list-style-type: none"> • Vitamin D: 800-2000 IU • Calcium: 1200mg (daily total diet & supplement) • Exercise: functional strength & balance • Osteoporosis medications • Hip protectors | | | <ul style="list-style-type: none"> • Fracture risk – residents at high risk should be treated • Residents' preferences and goals for care • Life expectancy (> 1 year) • Kidney function (creatinine clearance) • Swallowing issues (dysphagia) | |