**(interRAI**™ Instructions: Using information from the resident's Fracture Risk Scale: Manual Score Calculation latest RAI-MDS assessment, respond to questions to direct you to the resident's Fracture Risk Scale Score (MDS response locations appear in square brackets. What is the resident's ability to walk in START 4 where applicable). Document the responses using HERE 4 the corridor score? [G1da] Resident: Date: the check boxes. Instructions for calculating BMI are presented on the back side. 1-3 (Supervision to extensive assistance) 4, 8 (Total assistance, or walking did not occur) 0 (Independent) ☐ Yes ☐ Yes ☐ Yes What is the resident's BMI? What is the resident's BMI? Did the resident fall in the last 30 days? [J4a] □ 18 - 30 30+ □ 18 - 30 30+ **□** ≤18 **□** ≤18 ☐ Yes □ No □Yes ☐ Yes ☐ Yes ☐ Yes ☐ Yes □Yes Has the resident **FRS FRS** Is this resident **FRS FRS** Does the What is the had a previous fall? resident wander? 3 85 years or resident's transfer [Any fall in past older? status [G1ba]? [E4aa] 180 days; J4b] ☐ Yes ■ No □ 0. 1 □ 2, 3 □ No ☐ Yes  $\Box$  0 - 3 □ 4. 8 What is the (No, infrequent (less than daily, (independent Does the (total assistance. resident's Cognitive wandering) daily wandering) - extensive resident wander? did not occur) Performance Scale assistance) [E4aa] **FRS** ☐ Yes ☐ Yes score? ☐ Yes Has the resident ☐ Yes FRS had a previous fall?  $\Box 0-2$ □3-6  $\Box 0 - 2$ □3 [Any fall in past (No, infrequent, (Moderate (Daily (Intact - mild 180 days; J4b] less than daily - severe impairment) FRS wandering) wandering) impairment) □ No ☐ Yes ☐ Yes ☐ Yes ☐ Yes ☐ Yes Has the resident What is the had a previous resident's Cognitive This resident's FRS score is: fracture? [Any, in Performance Scale **FRS FRS** past 180 days; J4d] score? This resident is at **LOW** risk for fractures. at **HIGH** risk for fractures. ☐ No ☐ Yes □ 1 - 6 □0 (borderline - severe

Risk Scores
Yearly Hip Fracture

Incidents

**LOW RISK** 

1.8%

0.6%

3

2.5%

3.1%

**HIGH RISK** 

6

6.8%

7.8%

8

12.6%

5

5.0%

(intact cognition)

□Yes

**FRS** 

**FRS** 

**FRS** 

impairment)

☐ Yes

**FRS** 

## 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
	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
НЕІGHT	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
平	5'9" 5'10"	175.2 177.8	13 13	15 14	16 16	18	19 19	21 20	22 22	24 23	25 24	27 26	28		31 30	33 32	34	35 34	37	38 37	40 39	41 40	43 42
_	5'10" 5'11"	180.3	13	14	15	17 17	18	20	21	22	24	25	27 27	29 28		32 31	32	33	36 35	36	38	39	42
	6'0"	182.8	12	14	15	16	18	19	20	22	23	24	26	27	29 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

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

loannidis 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;7e016477.

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).



Adapted from https://bmicalculatorcanada.com



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Treatment C	onsiderations										
	LOW RISK		HIGH RISK								
1	2	3	4	5	6	7	8				
• Vitamin D: 8	300-2000IU 00mg (daily tota	aldiat &	Vitamin D: 800-2000IU     Calcium: 1200mg (daily total diet & supplement)								
supplement)	- , -	ai uiei d	• Exercise: functional strength & balance								
• Exercise: fu	nctional strengt	h & balance	Osteoporosis medications								

Hip protectors

## Considerations for medication use

- Fracture risk residents at high risk should be treated
- Residents' preferences and goals forcare
- Life expectancy (> 1 year)
- Kidney function (creatinine clearance)
- Swallowing issues (dysphagia)