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## Assessment of Diabetes Management in Long Term Care Facilities Based on Biochemical Marker.

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### Context

Diabetes is a chronic illness affecting more than 7% of the United States population. This number increases to 20% of individuals in long-term care facilities (LTCF). The first step in diabetes management is glycemic control to prevent and reduce complications. Hemoglobin A1C is an important factor in the assessment of diabetic control. The American Diabetes Association's recommended goal for A1C is <7%.

### Design

Integra800 (Roche Diagnostic, Indianapolis, Ind.) was used to measure A1C from 37,294 specimens collected from patients in LTCF (35.3% men and 64.7% women). Patient data was separated into 6 age groups: <50, 51 to 65, 66 to 75, 76 to 85, 86 to 99, and >100 years old. In addition, each group was further separated based on gender. The prevalence of A1C < 7% or  $\geq$  8% in each group was calculated.

### Results

Patients <50 years old were statistically different from other groups. Gender difference was present up to age 75. More than two-thirds of the patients achieved the recommended A1C of < 7% (controlled diabetes), and only 14% had A1C  $\geq$  8% (uncontrolled diabetes).

### A1C Results

	Men	Women
Total Specimens Tested	13,181	24,113
Mean A1C	6.65	6.7
A1C < 7 %	69.2%	66.7%
A1C $\geq$ 8 %	14.0%	14.0%

### Conclusion

Although diabetes is common in the general geriatric population, based on biochemical indices, this study suggests that diabetes is better monitored in LTCF. Two-thirds of the LTCF patients met the recommended goal compared to only half of the adults with diabetes in the general population. The prevalence of uncontrolled diabetes in LTCF was much less (about half) of what was reported among adults with diabetes, with the "oldest old" having the lowest prevalence.

