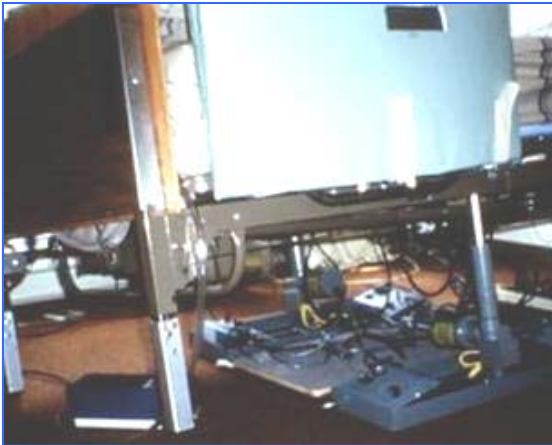


## Di Goodwin: Past Projects

### Bed Tilter



Bed tilter, linear actuator extended



Switches mounted to bed rail pad

A man with ALS would wake up, feeling he was going to suffocate because of the saliva buildup in his mouth. He would need to wake an attendant every hour during the night to tip him to one side or the other and allow the saliva to drain. He suggested that if he could tilt the bed somehow, he could independently drain his mouth and would not need to wake his attendant. Using switches which he could operate with his feet, and linear actuators which tilted the bed when they extended, we were able to accomplish this. Eventually, he lost the use of his legs, and the system was set up on a timer so the linear actuator would extend, stay there for a time, and then retract, bringing the bed back to horizontal. The bed tilter was designed in such a way that the height adjustability of the bed was maintained for ease of transfers.

Dianne designed this when she worked at Tamarack Habilitation Technologies. Occupational therapists at the University of Minnesota were involved. It was funded by the Muscular Dystrophy Association of Minnesota.

[^](#) Back to Di's page