Using body-worn sensors to measure activity patterns in diabetic individuals

- In addition to footwear, activity patterns have the potential to influence ulceration risk in diabetic patients.

- Body-worn accelerometer units are now available, however, signal processing approaches are required to quantify physical activity from the signals.

- We developed an algorithm which could accurately differentiate between a range of common daily activities and also predict walking speed.

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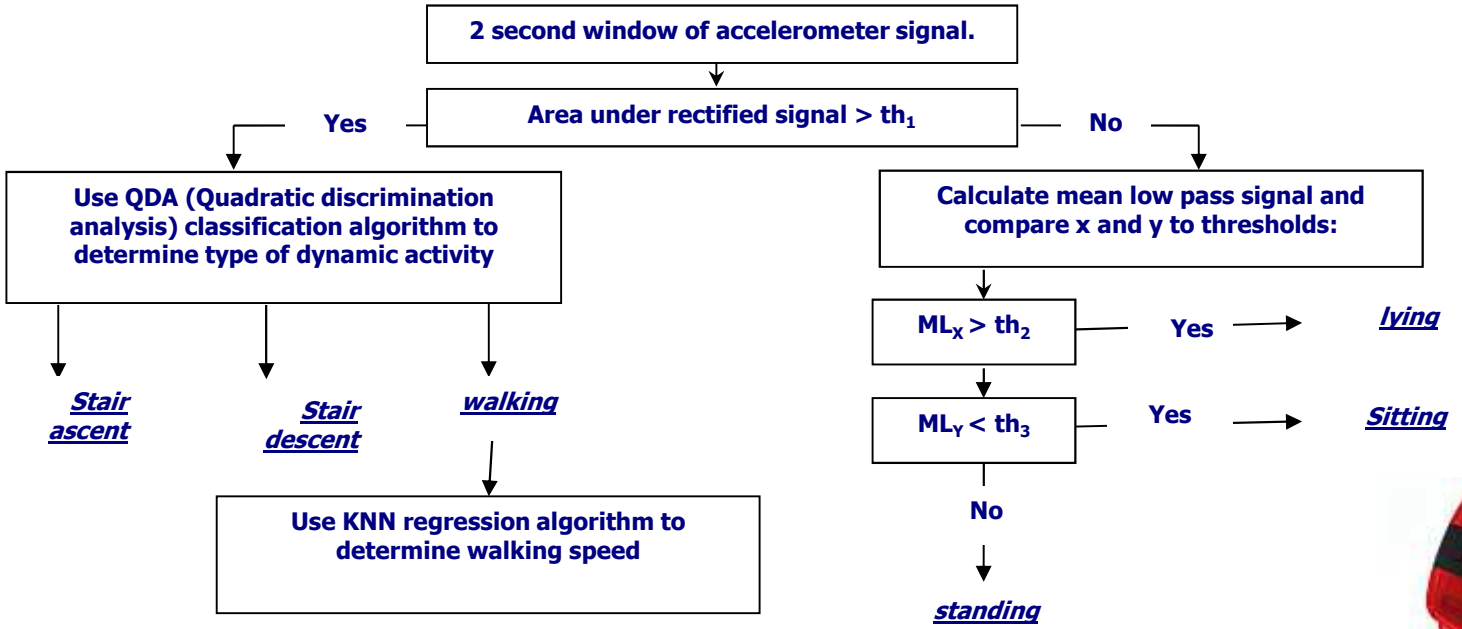

The algorithm worked well when applied to data collect using an Actigraph GT3X+ accelerometer unit and can be used to obtain a week-long activity profile.