WHEELCHAIR MAINTENANCE  
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Introduction

Some people using wheelchairs have little or no interest in the ongoing need for mechanical intervention. This workshop will help clinicians working in the field identify when a chair is initially set up so that it rolls with as little effort as possible and when it needs maintenance to keep it rolling. For those with a mechanical bent it will also demonstrate how to perform those adjustments.

Objectives

1. After completing the workshop, the participant will:
2. learn three checks they should routinely perform on new manual chairs
3. learn a simple test to check rolling resistance
4. learn the impact toeing error has on performance

Description

Deterioration in wheelchair performance is incredibly common due to its insidious onset. Even if a chair is set up perfectly when it is received by the user (a dangerous and all too often erroneous assumption) it still needs to be looked after to maintain efficiency.

Caster bearings pick up hair, bearings, nuts and bolts become loose, air is lost from the inner tubes, tires wear and wheel locks go out of adjustment. All these things which contribute to rolling resistance and wear and tear on the wheeler happen incrementally over time and because the user is in his or her chair on a daily basis they are often unaware of the change.

It is not unusual for us to find tires inflated to less than 20% of their recommended inflation, for bearings to have completely seized and the once “tight as a drum” seat sling to be woefully sagging.

This workshop will help you identify the issues that commonly occur so that you can either send your client to a technician who can rectify it. Or if you are handy with tools it will provide you with step by step instructions on how to fix it yourself.

A comprehensive illustrated guide is available on line at:

http://www.assistive-technology.ca/studies/wm_full.pdf

This can be used by clinicians or wheelchair users alike to help keep their chairs working efficiently and help protect shoulders from premature burn out.

References


**Speaker Bio:**

Ian Denison has worked as a physiotherapist and equipment specialist at GF Strong since 1980. He is a regular presenter at conferences in the US and Canada on various aspects of mobility. He has received awards for his work on understanding and enhancing mobility from OT, PT and Seating & Mobility Associations. Including the Mundy Award in 2004 and the Vancouver Coastal Health Healthcare Hero Award in 2015.