Metastatic Spinal Cord Compression (MSCC) is a common and devastating event for patients with metastatic cancer. The patient’s functional ability both influences their treatment selection as well as being a key outcome measure.

The DEMMI is a well validated functional score for the elderly population on acute wards while the NIMEL (Table 1) is a simple, locally developed, functional score which takes into account any mobility equipment used.

**Aim:**
To assess the functional changes, from admission to discharge, of MSCC patients on an acute oncology ward using the DEMMI and NIMEL scores.

**Method & Analysis:**
- 12 months of data collection (from October 2013).
- Inclusion criteria of patients with radiological diagnosis of:
  - MSCC,
  - impending MSCC, and/or
  - cauda equina compression.
- Functional outcomes scored:
  - on admission (NIMEL),
  - after stability clearance (DEMMI), and
  - 24 hours before discharge (both NIMEL and DEMMI).
- Data analysis using R and RStudio statistical software.
- Relationship between DEMMI and NIMEL scores analysed using Spearman’s rank correlation coefficient and examined graphically.

**Results:**
- 58 patients diagnosed with significant spinal disease.
- 32 diagnosed with MSCC, 18 with impending MSCC, and 17 with cauda equina (some patients with multiple).
- 32 male and 26 female patients.
- Median patient age of 73 years.
- Commonest cancer was prostate (27%).
- Median length of stay 10 days.
- 16 treated surgically, 28 with radiotherapy and 1 with chemotherapy. 13 patients received no treatment.

**Results continued:**
- The mean DEMMI score was the same for admission and discharge (23/100, ranges 0 to 100 and 0 to 74); with a mean change of 3/100 (-20 to 33/100).
- The mean NIMEL score was also the same for admission and discharge (2/5).

Both DEMMI and NIMEL are correlated individually at admission and discharge (p <= 0.0004, R = 0.86 DEMMI, R = 0.45 NIMEL) and are strongly correlated with each other (p = 0.0002, R = -0.55 admission, R = -0.92 discharge), with negative Spearman’s rho values being due to a DEMMI score being high, and a good NIMEL score being low.

On discharge, the population used 19 more aids, with an additional 8 frames, 8 sticks, 5 other, and 3 hoists issued.

**Conclusions:**
- Most patients with MSCC have either the same or worse functional level at discharge as on admission. Many patients require either new aids, or an increased level of aid, suggesting increased dependency.
- However, there is a large variation in the change of function, with some patients having substantial deterioration, and some significant improvement.
- DEMMI appears applicable to this population with our simple local NIMEL score appearing to be closely correlated both internally (across time) and externally (with DEMMI).

**References:**

**Acknowledgements:**
This work was unfunded. The authors would like to thank the multidisciplinary MSCC team at Charing Cross. Acknowledgements go to Rachel Sharkey and Nimisha Panchmatia regarding NIMEL.