

Pathways to Recovery
TBI in Ireland

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Aims – what we wanted to do

- ◆ Assess the burden of TBI in Ireland
- ◆ Understand the impacts of TBI on the lives of survivors and their families
- ◆ See how and when people with TBI accessed rehabilitation services



Objectives – how we meant to do it

- ◆ Recruit two groups of people
 - Recently head injured people
 - People with head injuries in the more distant past
- ◆ From
 - three acute hospitals
 - three rehabilitation services
- ◆ Review records
- ◆ Document current status
- ◆ Administer questionnaires twice



What we did

- ◆ Recruited from two acute hospitals, and three rehabilitation services
- ◆ Recruited mostly, but not entirely, patients diagnosed more than one year before we saw them
- ◆ Switched, predominantly, to online or phone interviews because of COVID19



Tools used

- ♦ GCS or CT to determine severity
- ♦ Some details of injury and admission
- ♦ Interview with client
- ♦ Interview with carer/ supporting family member, if the client identified someone
- ♦ Demography
- ♦ Living situation
- ♦ Rehabilitation received
- ♦ Employment



Tools used (2)

Score	Items	Good	Mean	Range	Administered
EQ5D3L	5	Higher	0.72	0.1 to 1	First
			0.74	0.09 to 1.0	Second
EQ5D3L VAS	1	Higher	68	0 to 100	First
			73	0 to 100	Second
WHOQOL-BREF	26	Higher	14.35	5.7 to 20	First
(Physical health)			15.3	5.7 to 20	Second
MPAI	29	Lower	37.0	0 to 99	Once only
EBIQ	66	Lower	1.71	1 to 2.6	First
(Core symptoms)			1.68	1 to 2.76	Second

Key results

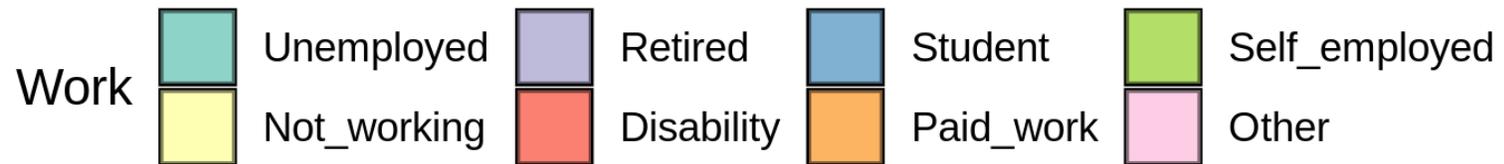
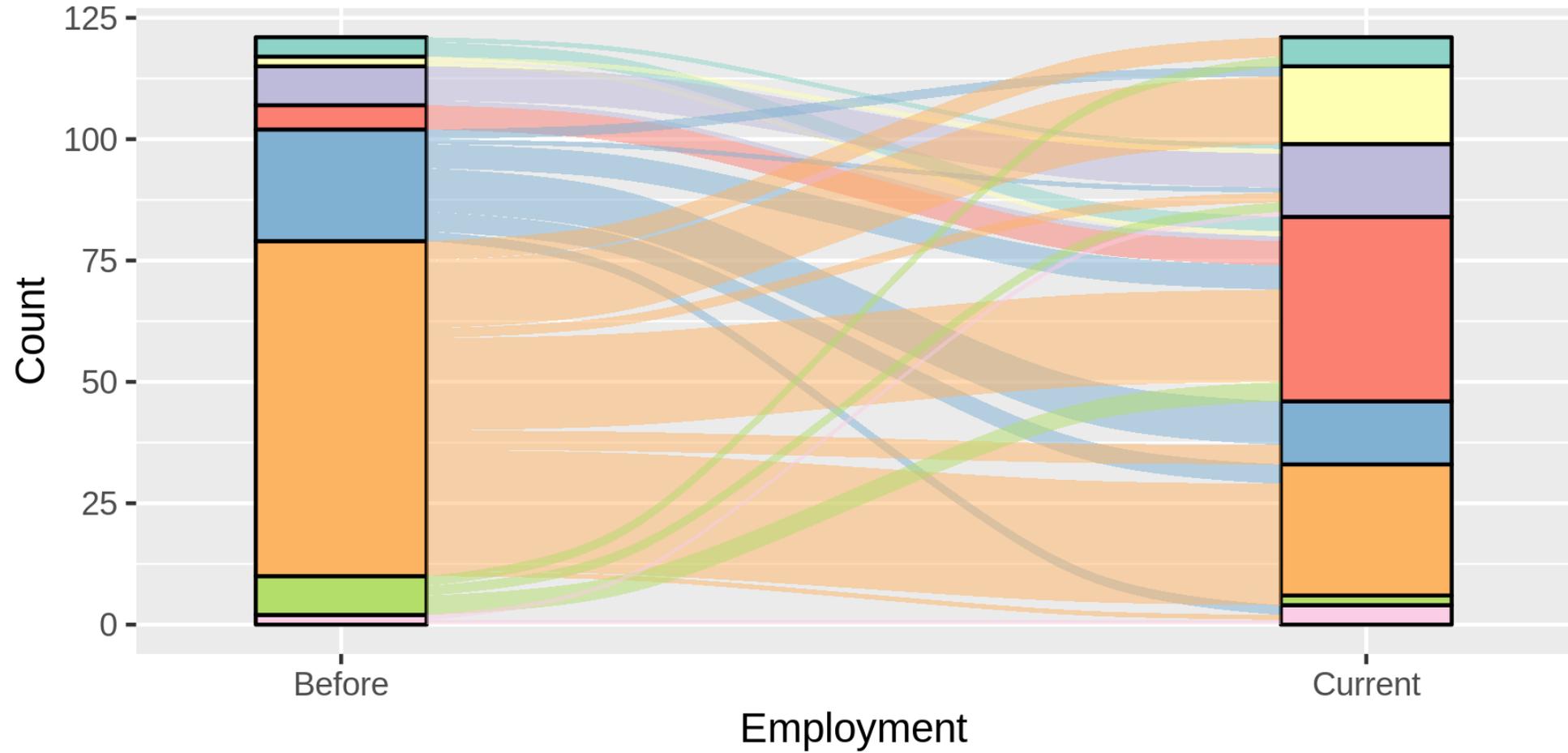
- ♦ 121 interviews completed
- ♦ 33 Female; 88 Male
- ♦ Median Age 43, Range 18 to 86
- ♦ Best estimate is 81 had a severe TBI
- ♦ Typical causes were falls and RTI
- ♦ Median time from injury to interview is 3.7 years
- ♦ High completion rate
- ♦ Response rate not known, but definitely low.



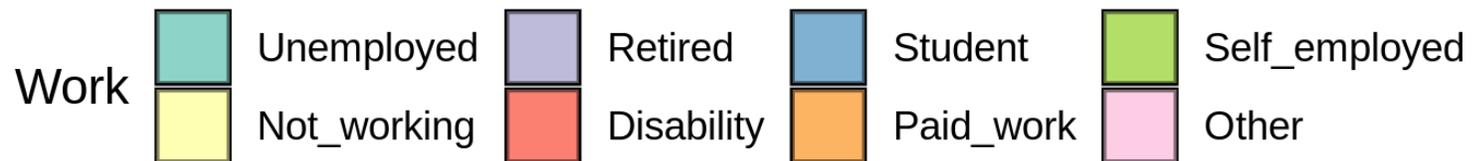
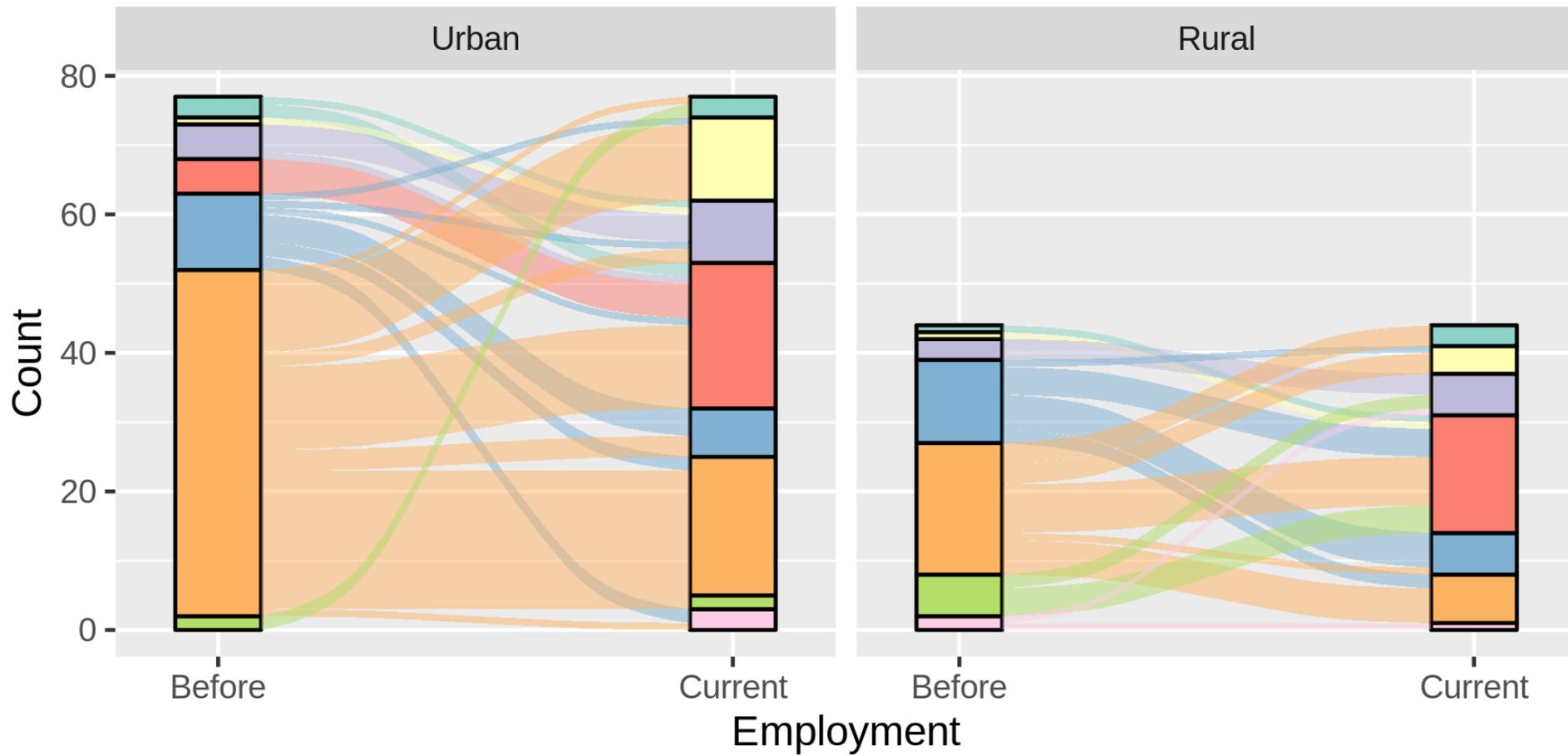
Rehabilitation sequencing

	First	Second	Third	Fourth
Inpatient	50	3	1	0
Outpatient	23	20	7	0
Community	18	30	14	6
None				

Employment status before injury, and currently

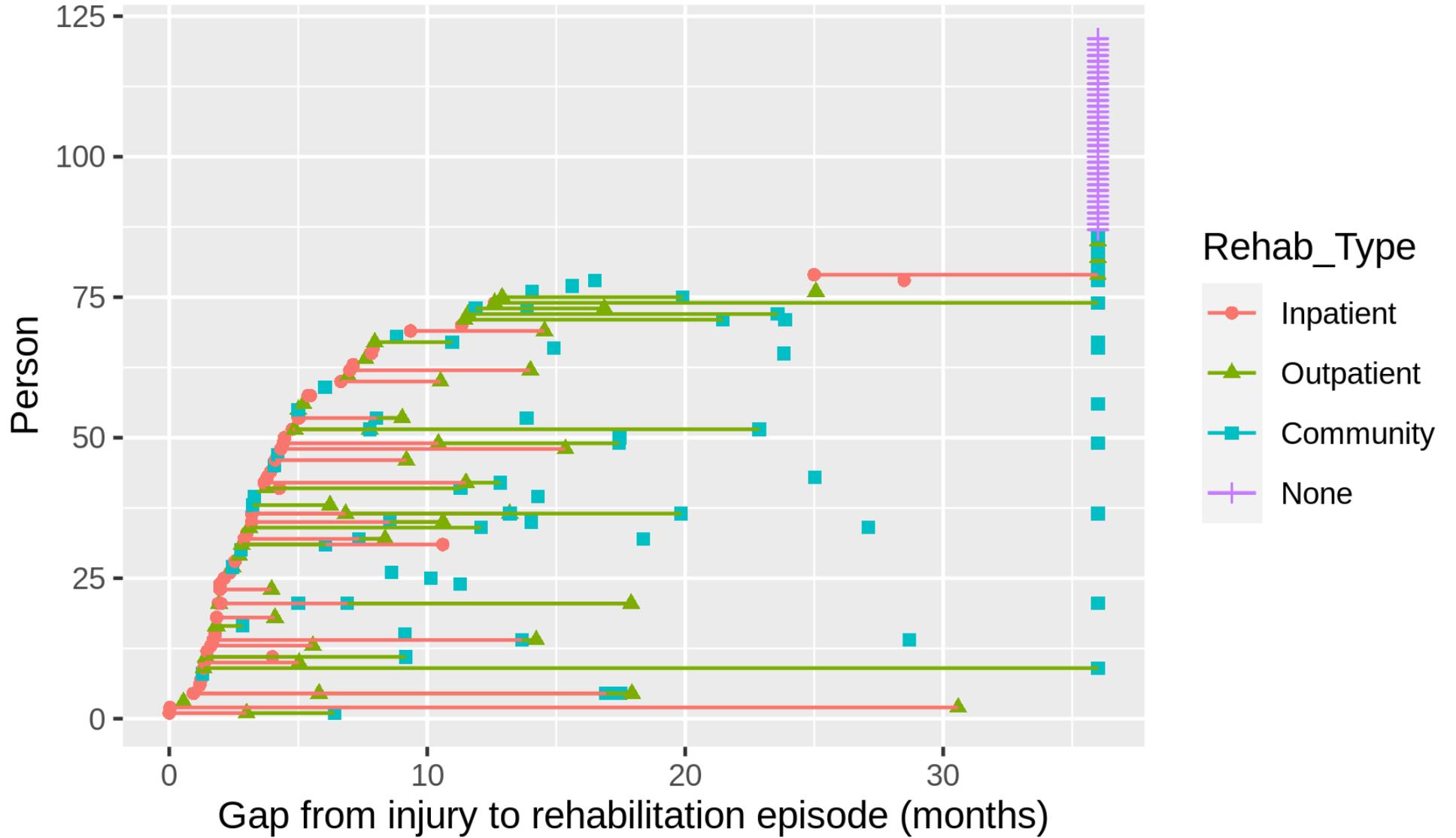


Employment status before injury, and currently, by area of residence



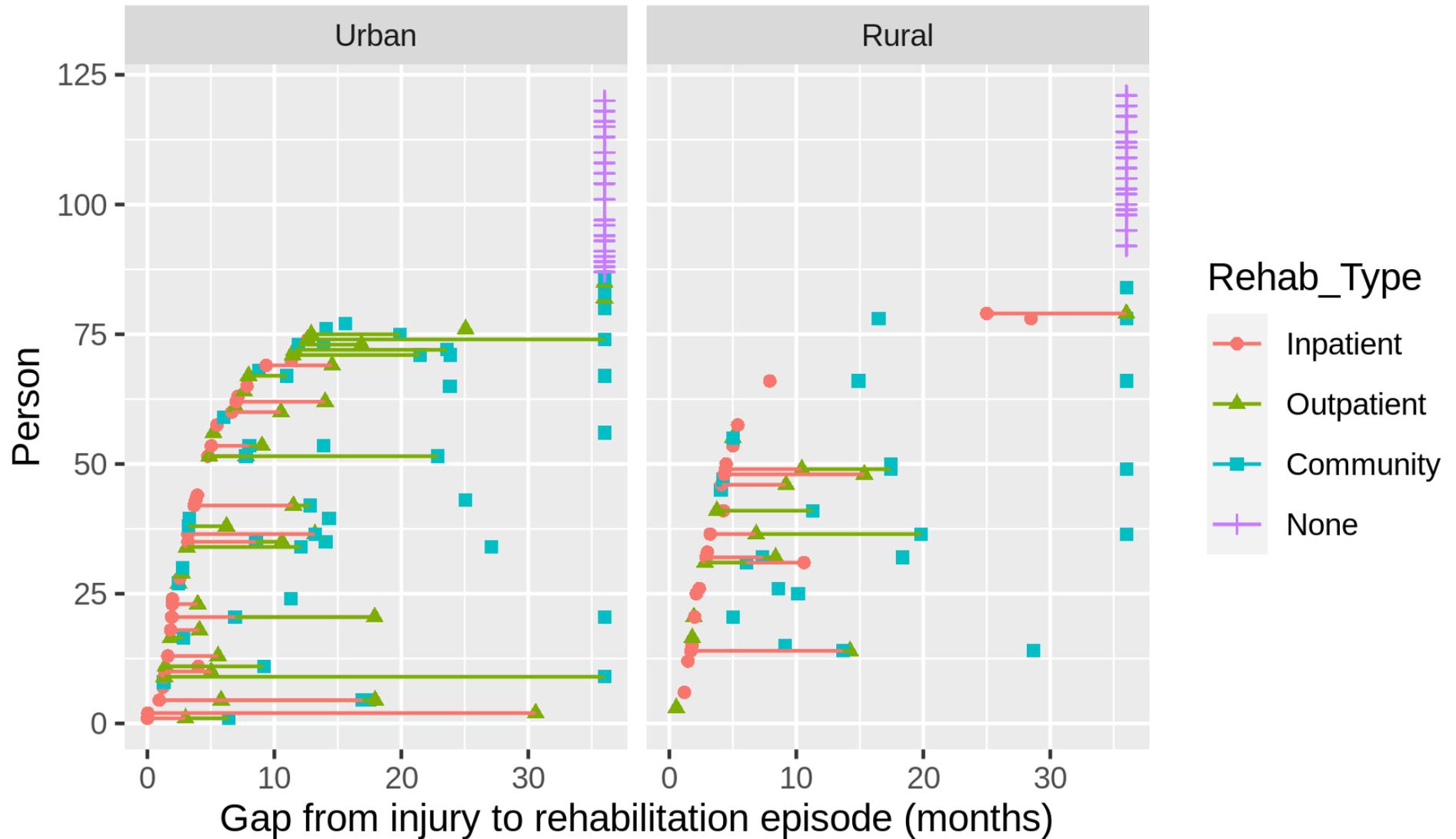
Gap from injury date to rehabilitation episodes

Gap trimmed to a maximum of 3 years from injury



Gap from injury date to rehabilitation episodes - by Area of residence

Gap trimmed to a maximum of 3 years from injury

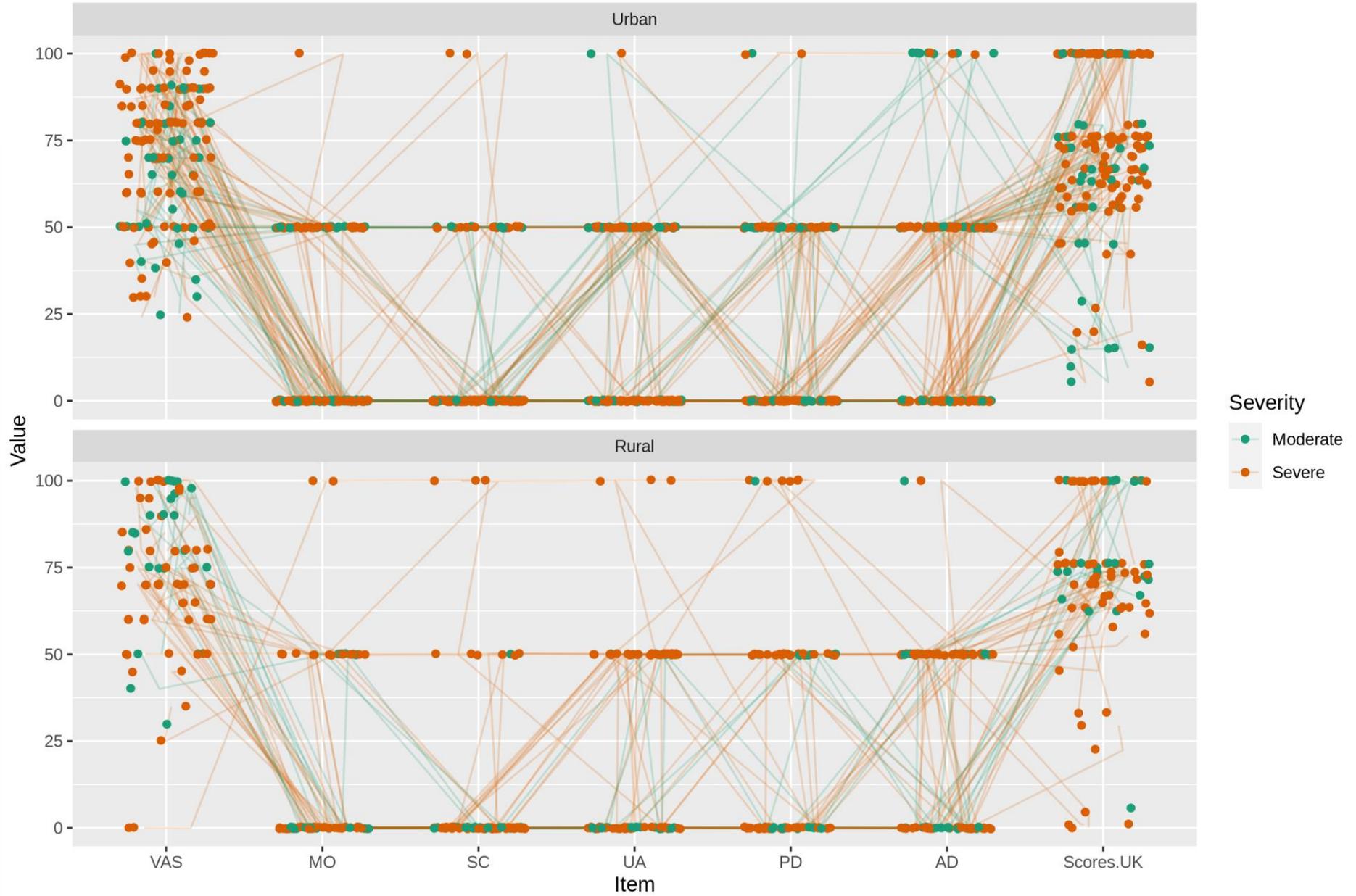


Two quality of life scales

- ◆ Higher scores are better, except for individual EQ5D3L items, for which they are worse
- ◆ All scores scaled to 0 -100 – not a standard scaling
- ◆ Presented for urban and rural areas separately, with severity of injury indicated by colour

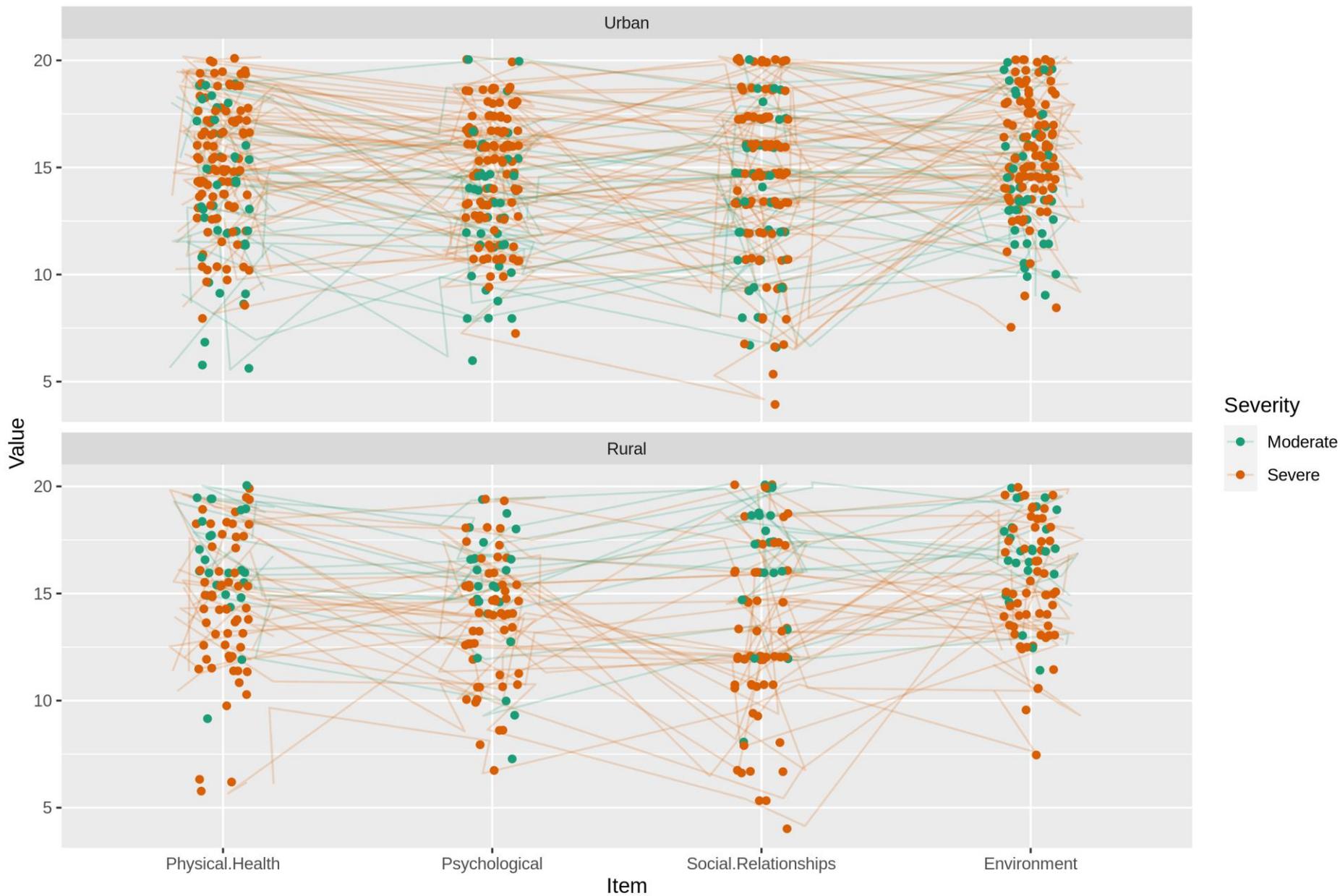


EQ5D3L VAS, Item, and Overall Results by Location and Severity



WHOQOL Item Results

by Location and Severity



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Quality of life

- ◆ Significantly reduced for most
- ◆ Widespread impact of TBI on all domains assessed
- ◆ No great evidence for differences between groups
- ◆ No evidence of much change in QOL over six months (but may be affected by COVID19).

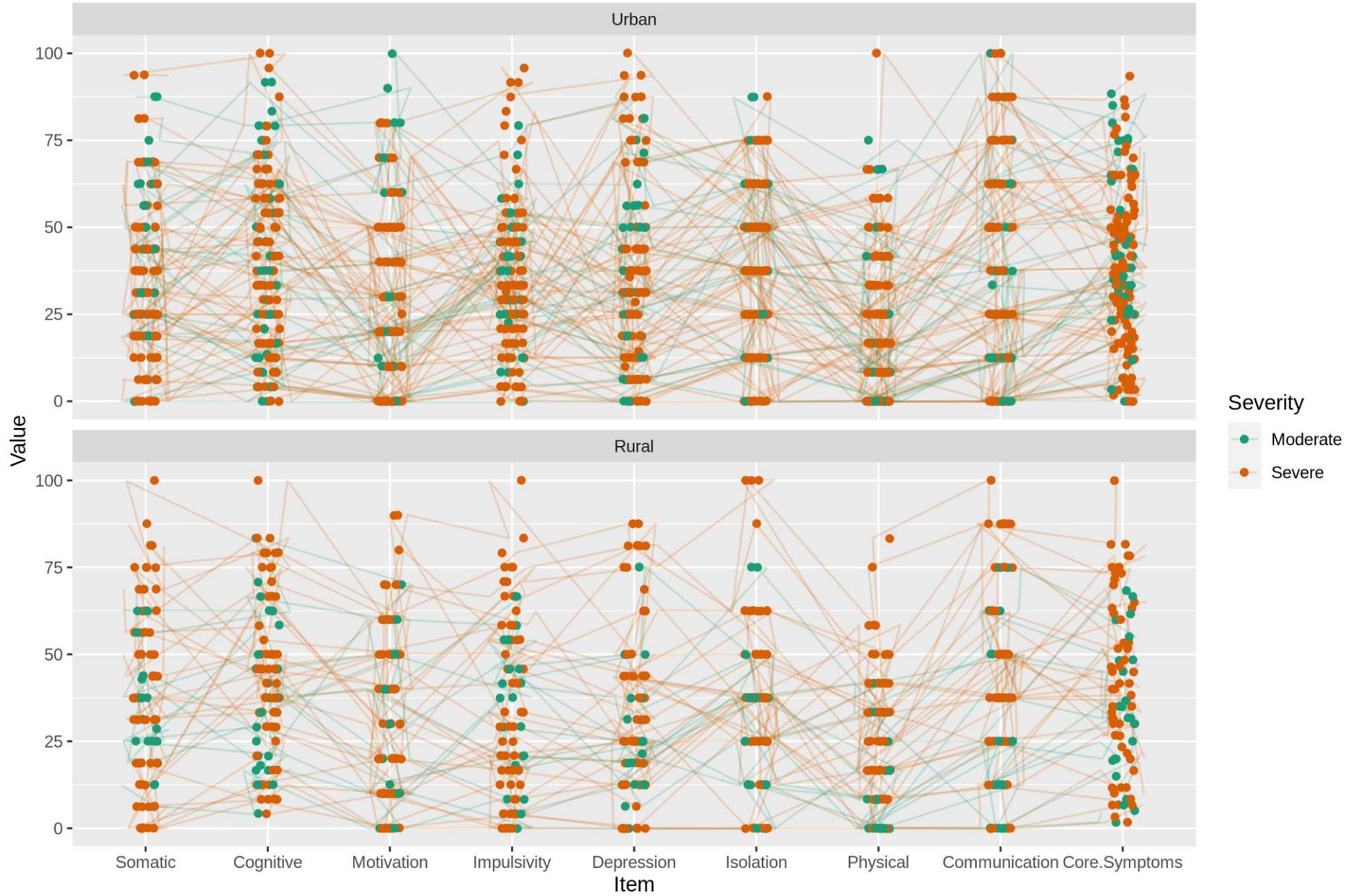


Two impact scales

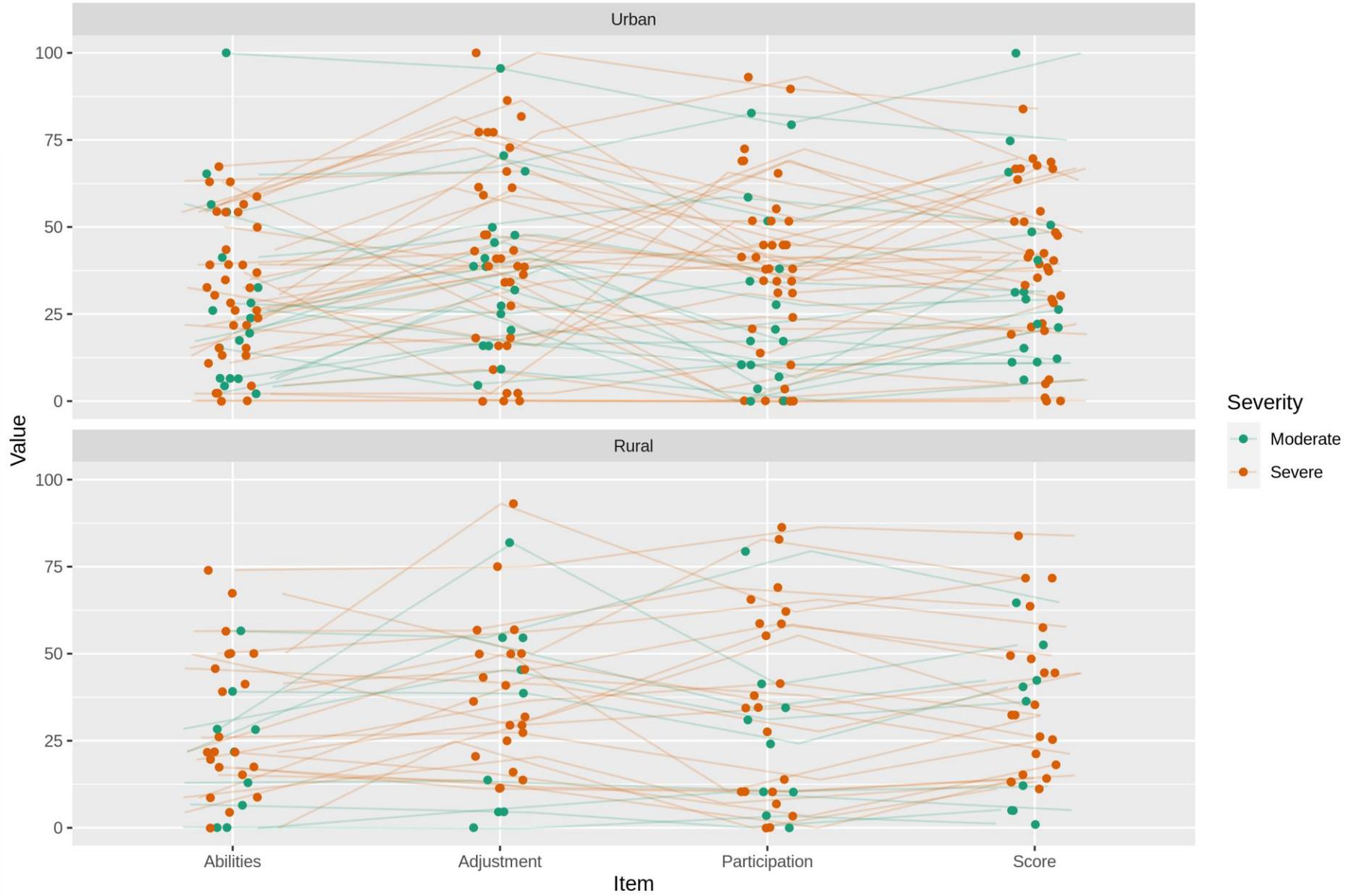
- ◆ Lower scores are better
- ◆ All scores scaled to 0 -100 – not a standard scaling
- ◆ Presented for urban and rural areas separately, with severity of injury indicated by colour



EBIQ Item Results by Location and Severity



MPAI Item Results by Location and Severity



Two impact scales

- ◆ Variable, but often very substantial impacts across all domains tested
- ◆ No indication of much change in EBIQ over six months
- ◆ Less severe for Physical measures, perhaps reflecting participant selection bias, perhaps reflecting reality

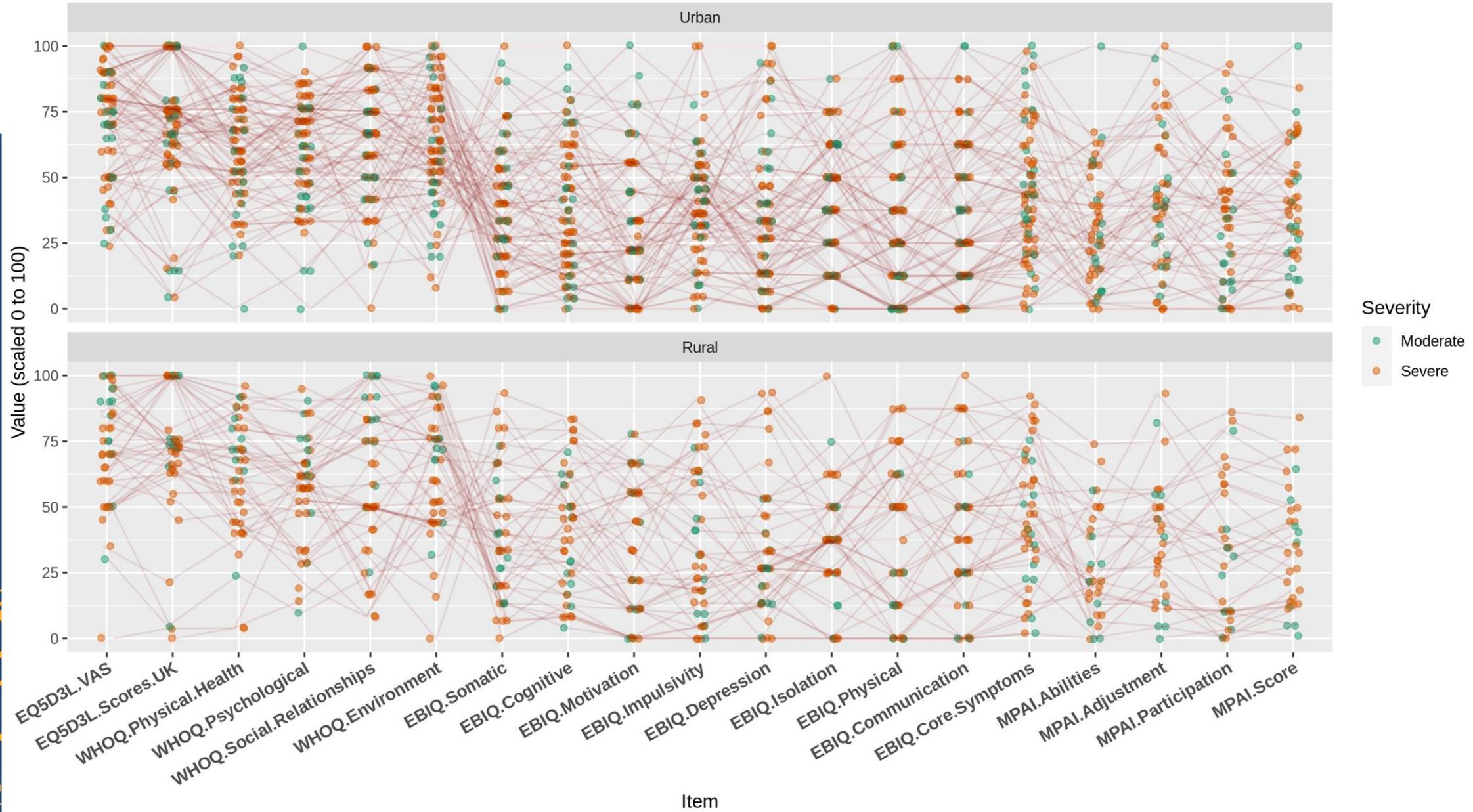


All outcome measures

- ◆ The next graph shows each person as a line
- ◆ Their scores on the first occasion for each of the outcome measures are shown as points on those lines
- ◆ In effect these are individual profiles, one per person



Plot of Outcome measures
by Location and Severity



All outcome measures

- ◆ Surprisingly little difference between those with serious and moderate head injuries
- ◆ Very diverse results
- ◆ Less severe for Physical measures, perhaps reflecting participant selection bias, perhaps reflecting reality



Strengths

- ◆ Detailed study of a range of people with moderate and severe Traumatic Brain Injuries
- ◆ Based in acute hospitals and rehabilitation services
- ◆ People took part on two occasions
- ◆ Wide range of standardized measures used (informed by CDE)
- ◆ Good completion rate of instruments



Weaknesses

- ◆ Small study – did not achieve intended sample size
- ◆ Impeded by COVID19 outbreak
- ◆ Skewed towards people with longer duration from injury to recruitment
- ◆ Response rate uncertain



Conclusions

- ♦ The impact of moderate or severe TBI is very substantial
- ♦ There is adequate evidence that intensive rehabilitation can
 - Improve outcomes and quality of life
 - Substantially reduce costs
- ♦ Despite much hard work, there is no evidence of a systematic and accessible care pathway for rehabilitation in Ireland

Recommendations

- ◆ Rehabilitation needs to be a priority
- ◆ We need a client-centered rights based approach to care and support, with adequate resources
- ◆ Not funding rehabilitation merely shifts costs to other sectors, notably inadequate long-term care, and loss of employment
- ◆ Done right, this will pay for itself in reduced costs elsewhere



Collaborators

- ◆ ABI Ireland
- ◆ Headway Ireland
- ◆ National Rehabilitation hospital
- ◆ Beaumont hospital
- ◆ Cork University Hospital
- ◆ HSE Health Intelligence
- ◆ TARN

Thanks to all of you!



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