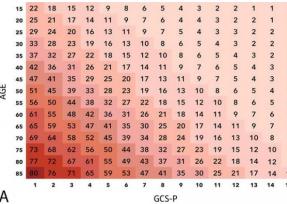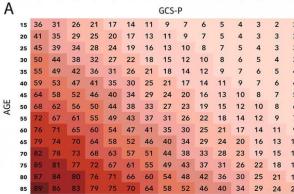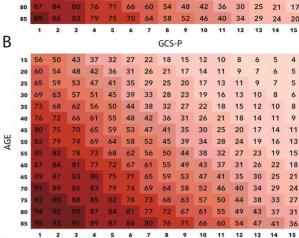| Injury / Age		Extra-axial haematoma with mass/clinical effect	Compound skull #	Mild TBI (without significant extra-axial haematoma)	ModerateTBI (without significant extra-axial haematoma)	Diffuse Axonal Injury	Devastating Brain Injury
Young& Middle-aged *refine with GCS-P CT PREDICTION CHARTS -PTO*	**Fit + well / Mild PMH** *refine with Clinical Frailty Scale -PTO*	Transfer and evacuate	Transfer and wash-out +/- elevate if necessary	Follow NICE HI guidelines	Transfer and observe	Transfer and neuroprotect with ICP monitoring	Consider ITU admission for optimisation and assessment of survivability
	Significant Co-morbidities and/or Reduced baseline function, QoL and /or known treatment limitation *refine with Clinical Frailty Scale -PTO*	Consider if potential benefit greater than others needing care?	Local washout and scalp closure	Local observation	Consider if potential benefit greater than others needing care?	Consider if potential benefit greater than others needing care? If yes, admit locally and neuroprotect with serial CT monitoring	Rapid decision of futility and withdrawal of care
Elderly and/or Frail *refine with GCS-P CT PREDICTION CHARTS Overleaf -PTO*	**Fit + well / Mild PMH** *refine with Clinical Frailty Scale -PTO*	Consider if potential benefit greater than others needing care?	Local washout and scalp closure	Consider discharge in care of adult	Local observation	Consider if potential benefit greater than others needing care? If yes, admit locally and neuroprotect with serial CT monitoring	Rapid decision of futility and withdrawal of care
	Significant Co-morbidities and/or Reduced baseline function, QoL and /or known treatment limitation *refine with Clinical Frailty Scale -PTO*	Unlikely that potential benefit greater than others needing care	Local washout and scalp closure	Encourage discharge in care of adult	Unlikely that potential benefit greater than others needing care	Unlikely that potential benefit greater than others needing care	Rapid decision of futility and withdrawal of care

GCS-P CT PREDICTION CHARTS for the **% probability of mortality 6 months after head injury** based on the patient's admission <u>GCS-P</u> (*derived as the GCS sum score minus the number of nonreactive pupils*) and age with no CT abnormality (A),

exactly one CT abnormality (B),

two or more CT abnormalities (C).

The category <u>CT abnormalities</u> comprises intracranial hematoma, absent cisterns, and SAH

A

AGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
15	22	18	15	12	9	8	6	5	4	3	2	2	1	1	1
20	25	21	17	14	11	9	7	6	4	4	3	2	2	1	1
25	29	24	20	16	13	11	9	7	5	4	3	3	2	2	1
30	33	28	23	19	16	13	10	8	6	5	4	3	2	2	2
35	37	32	27	22	18	15	12	10	8	6	5	4	3	2	2
40	42	36	31	26	21	17	14	11	9	7	6	5	4	3	2
45	47	41	35	29	25	20	17	13	11	9	7	5	4	3	3
50	51	45	39	33	28	23	19	16	13	10	8	6	5	4	3
55	56	50	44	38	32	27	22	18	15	12	10	8	6	5	4
60	61	55	48	42	36	31	26	21	18	14	11	9	7	6	5
65	65	59	53	47	41	35	30	25	20	17	14	11	9	7	6
70	69	64	58	52	45	39	34	28	24	19	16	13	10	8	7
75	73	68	62	56	50	44	38	32	27	23	19	15	12	10	8
80	77	72	67	61	55	49	43	37	31	26	22	18	14	12	9
85	80	76	71	65	59	53	47	41	35	30	25	21	17	14	11

GCS-P

B

AGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
15	36	31	26	21	17	14	11	9	7	6	5	4	3	2	2
20	41	35	29	25	20	17	13	11	9	7	5	4	3	3	2
25	45	39	34	28	24	19	16	13	10	8	7	5	4	3	3
30	50	44	38	32	27	22	18	15	12	10	8	6	5	4	3
35	55	49	42	36	31	26	21	18	14	12	9	7	6	5	4
40	59	53	47	41	35	30	25	21	17	14	11	9	7	6	4
45	64	58	52	46	40	34	29	24	20	16	13	10	8	7	5
50	68	62	56	50	44	38	33	27	23	19	15	12	10	8	6
55	72	67	61	55	49	43	37	31	26	22	18	14	12	9	7
60	76	71	65	60	54	47	41	35	30	25	21	17	14	11	9
65	79	74	70	64	58	52	46	40	34	29	24	20	16	13	10
70	82	78	73	68	63	57	51	44	38	33	28	23	19	15	12
75	85	81	77	72	67	61	55	49	43	37	31	26	22	18	15
80	87	84	80	76	71	66	60	54	48	42	36	30	25	21	17
85	89	86	83	79	75	70	64	58	52	46	40	34	29	24	20

GCS-P

C

AGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
15	56	50	43	37	32	27	22	18	15	12	10	8	6	5	4
20	60	54	48	42	36	31	26	21	17	14	11	9	7	6	5
25	65	59	53	47	41	35	29	25	20	17	13	11	9	7	5
30	69	63	57	51	45	39	33	28	23	19	16	13	10	8	6
35	73	68	62	56	50	44	38	32	27	22	18	15	12	10	8
40	76	72	66	61	55	48	42	36	31	26	21	18	14	11	9
45	80	75	70	65	59	53	47	41	35	30	25	20	17	14	11
50	82	79	74	69	64	58	52	45	39	34	28	24	19	16	13
55	85	82	78	73	68	62	56	50	44	38	32	27	23	19	15
60	87	84	81	77	72	67	61	55	49	43	37	31	26	22	18
65	89	87	83	80	75	71	65	59	53	47	41	35	30	25	21
70	91	89	86	83	79	74	69	64	58	52	46	40	34	29	24
75	92	90	88	85	82	78	73	68	63	57	50	44	38	33	27
80	94	92	90	87	84	81	77	72	67	61	55	49	43	37	31
85	95	93	91	89	87	84	80	76	71	66	60	54	47	41	36

GCS-P

Clinical Frailty Scale

1 Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

2 Well – People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.

3 Managing Well – People whose medical problems are well controlled, but are not regularly active beyond routine walking.

4 Vulnerable – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being "slowed up", and/or being tired during the day.

5 Mildly Frail – These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

6 Moderately Frail – People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.

7 Severely Frail – Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).

8 Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

9 Terminally Ill – Approaching the end of life. This category applies to people with a life expectancy <6 months, who are not otherwise evidently frail.

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia,** recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia,** they cannot do personal care without help.

These can inform and support, *not replace*, clinical judgment