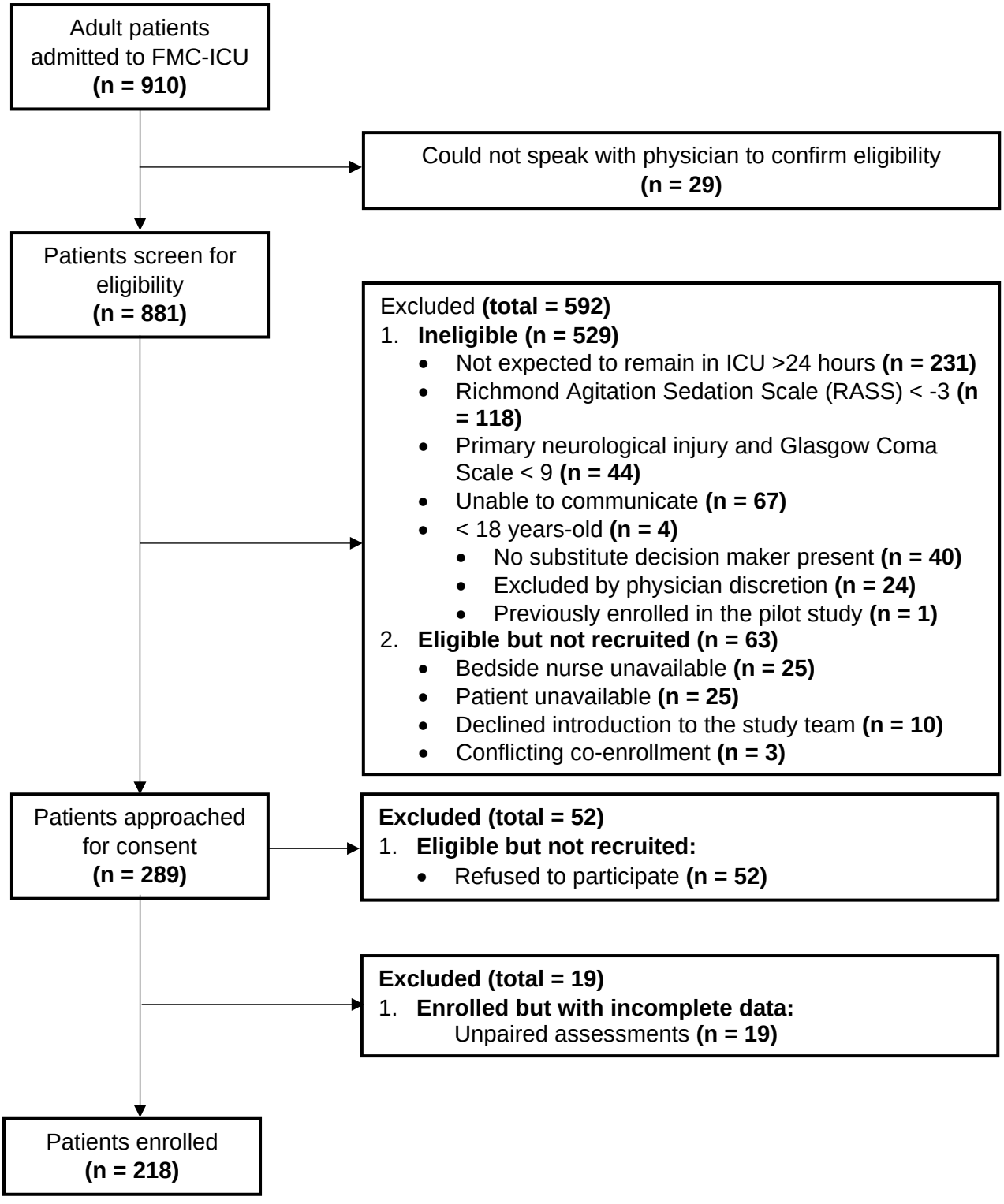
Supplementary Table S1. Comparison between the Chart-based Delirium Detection Instrument (CHART-DEL) and Intensive Care Unit CHART-DEL (CHART-DEL-ICU) scoring

Level of confidence (probability)	Description (CHART-DEL)	Description (CHART-DEL-ICU)	Example (CHART-DEL-ICU)
Definite (85%+)	Diagnosis is unequivocal; confirmed diagnosis made by an experienced reference standard rater (i.e., attending neurologist, geriatrician, psychiatrist).	Diagnosis is unequivocal; confirmed diagnosis made by an experienced reference standard rater (i.e., attending neurologist, ICU physician, geriatrician, psychiatrist).	"Issues for today: Delirium ?hypoactive – try trazadone" [Physician Progress Notes]
Probable (60-85%)	a. All four Confusion Assessment Method (CAM) features are present in the notes: (1) acute onset/fluctuation (2) inattention (3) disorganized thinking or (4) altered level of consciousness. b. Acute onset of disorientation or hallucinations, especially with evidence of reversibility or evidence of attribution to medications (in someone with no history of preexisting cognitive impairment)	a. All four Confusion Assessment Method (CAM) features are present in the notes: (1) acute onset/fluctuation (2) inattention (3) disorganized thinking or (4) altered level of consciousness (from CAM-ICU): Patient's level of consciousness is anything other than alert, such as being vigilant (hyperalert), lethargic (drowsy but easily aroused), in a stupor (difficult to arouse) OR a score in the 10-point Richmond Agitation-Sedation Scale (RASS) of -3, -2, +1, +2, +3 or +4 b. An ICDSC score ≥ 4 is reported in the notes. c. Acute onset of disorientation or hallucinations, especially with evidence of reversibility or evidence of attribution to medications (in someone with no history of preexisting cognitive impairment)	"ICDSC 5, confused, does not communicate" [Physician Progress Notes]
Possible (40-60%)	Not all CAM features are present, but at least 2 or more, plus other	Not all CAM features are present, but at least 2 or more, plus other	"Awake all night, restless pulling lines"

	supporting features (such as presence of agitation or inappropriate behavior).	supporting features (such as presence of agitation* or inappropriate behavior). *RASS score of +2 to +4	[EMR] “O/E: RASS: -1 to +1” [Physician Progress Notes]
Uncertain (10-40%)	Cases where nurses wrote ambiguous statements unrelated to features of delirium (e.g., confusion), but nothing else--no description, no details about the confusion, and the next day no further comment.	Cases where healthcare providers wrote ambiguous statements unrelated to features of delirium (e.g., confusion), but nothing else--no description, no details about the confusion, and the next day no further comment.	“drowsy, pain not controlled with movement, confused” [EMR]
No evidence (<10%)	In general, the overarching principle is that the patient’s behavior must be well outside the range of normal behavior. So, for instance, a report of transient episode of disorientation upon awakening from a nap would not be considered abnormal. Forgetfulness or sleepiness as isolated symptoms are not sufficient.	In general, the overarching principle is that the patient’s behavior must be well outside the range of normal behavior. So, for instance, a report of transient episode of disorientation upon awakening from a nap would not be considered abnormal. Forgetfulness or sleepiness as isolated symptoms are not sufficient.	

Abbreviations: EMR, electronic medical record; ICDSC, Intensive Care Delirium Screening Checklist; RASS, Richmond Agitation-Sedation Score.



Supplementary Figure S1. Participant flow diagram.