

Table 1. Overview of study variables.

Level	Variable type	Variable	Measure/source	Purpose		
<b>Doctor</b>	<b>Characteristics</b>	<ul style="list-style-type: none"> <li>Age</li> <li>Gender identity</li> <li>Clinical hours per week</li> <li>Grade</li> <li>Years worked in ED (experience)</li> <li>Experience of a safety incident</li> <li>Risk aversion*</li> <li>Burnout</li> <li>Confidence</li> <li>Psychological resilience</li> </ul>	<p>All self-report</p> <p>Self-report. Adapted from [1] <a href="#">yes/no</a></p> <p>1 item self-report adapted from [2] (range = 0-100, &gt; = less averse)</p> <p>1 item self-report from [3] (1-4, &gt; = more burnout)</p> <p>5 item self-report (novel measure) (1-5, mean, &gt; = more confident)</p> <p>6 item self-report Brief Resilience Scale [4] (1-5, mean, &gt; = more resilient)</p> <p>10 item self-report (novel measure) (1-5, mean, &gt; = better)</p>	To assess sample characteristics, to control for confounders, and to assess the association between demographic variables and UT (e.g. to characterise potential intervention recipients)		
		<b>Uncertainty tolerance</b>	34 item Likert self-report (based on Physicians' Reaction to Uncertainty scale [5, 6] (1-5, mean, > = higher UT)	Primary predictor variable		
		<b>Patient</b>	<b>Characteristics</b>	<ul style="list-style-type: none"> <li>Age</li> <li>Reported gender</li> </ul>	Record extraction	To assess sample characteristics and to control for possible extraneous factors

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		<ul style="list-style-type: none"> <li>Health status</li> </ul>	1. Extractor judged American Society of Anesthesiologists physical status classification system (ASA) scores (comorbidity) (1 healthy to 4 'severe' comorbidities) based on notes, 2. Triage scores: National Early Warning Scores (NEWS, NEWS2) (0 healthy to 20 very unwell), Manc. Triage (5 non-urgent to 1 immediate)	
	<b>Episode characteristics</b>	<ul style="list-style-type: none"> <li>Mode of arrival</li> <li>Diagnosis</li> <li>Comorbidities</li> <li>Complaints</li> </ul>	All record extraction	To provide a descriptive overview of the sample within and between sites
	<b>Resource use**</b>	<ul style="list-style-type: none"> <li>Case complexity</li> <li>Admission status</li> <li>Hospital stay length</li> <li>Ordered tests (total/type)</li> <li>Ordered treatments (total/type)</li> </ul>	Extractor judged with a 2 item Likert scale (1-5, mean, > = more complex)	To assess whether case complexity moderates association(s) of interest
	<b>Patient health</b>	<ul style="list-style-type: none"> <li>30-day re-attendance***</li> <li>30-day admission upon return</li> <li>30-day mortality</li> </ul>	All record extraction	To assess whether doctor UT is associated with adverse event rates. To estimate and model episode costs as an outcome
	<b>Episode costs</b>		Record extraction	Episode costs were used as a primary outcome; costs were estimated based on <i>resource use</i> and <i>patient health</i> outcome data (see Supp. File 3).

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\*The mean of items was used for multi-item doctor measures. \*\*Data quality checks were included in the form e.g. contamination; whether patients' notes indicated that each doctor deferred their decision to admit them or consult when ordering treatment/tests. \*\*\*Return admittance/re-attendance data included patients re-presenting for conditions related to the initial complaint; reflecting returning patients who may have benefitted from admission in the initial presentation. Presentations for unrelated conditions were considered unlikely to be related to doctors' discharge decisions and were not counted.

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- [2] T. Dohmen, A. Falk, D. Huffman, U. Sunde, J. Schupp and G. G. Wagner, "Individual risk attitudes: Measurement, determinants, and behavioral consequences," *Journal of the European Economic Association*, vol. 9, no. 3, pp. 552-550, doi: 10.1111/j.1542-4774.2011.01015.x, 2011.
- [3] V. Hansen and A. Girgis, "Can a single question effectively screen for burnout in Australian cancer care workers?," *BMC Health Services Research*, vol. 10, no. 1, pp. 1-4, doi: 10.1186/1472-6963-10-341, 2010.
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- [5] M. S. Gerrity, K. P. White, R. F. DeVellis and R. S. Dittus, "Physicians' reactions to uncertainty: refining the constructs and scales," *Motivation and Emotion*, vol. 19, no. 3, pp. 175-191, 1995.
- [6] M. S. Gerrity, R. F. DeVellis and J. A. Earp, "Physicians' reactions to uncertainty in patient care: A new measure and new insights," *Medical Care*, pp. 724-736, 1990.