Table S2. Definition-based fidelity (right column) is established by taking the median of the functional, physical, and psychological fidelity, classifying low-, mid-, or high-fidelity. The level of functional, physical, psychological fidelity are determined low (-), low and high (+/-), and high (+). Conceptual fidelity distinguishes if the device is computational (C), physical (P), or computational and physical (C+P).

Source	Device	Conceptual fidelity (C, P, or C+P)	Functional fidelity (- or +/- or +)	Physical fidelity (- or +/- or +)	Psychological fidelity (- or +/- or +)	Definition fidelity (Low-Mid-High)
3-Dmed [1]	ECMO Simulation Kit	P	-	-	-	Low
Allan, *et al.* [2]	Integrated Skills Trainer	P	+/-	+	+	High
Alhomsi, *et al.* [3]	Modular ECMO simulator	C+P	+/-	-	+/-	Mid
BioMed Simulations [4]	Califia Patient Simulator	C	+/-	N/A	-	Low
BioMed Simulations [5]	Califia Lung Simulator	C	+/-	N/A	-	Low
Broman, *et al.* [6]	Aplysia	C	+/-	N/A	-	Low
Chalice [7]	Parallel Simulator	C	+/-	N/A	+/-	Mid
Colasanti, *et al.* [8]	Computational ECMO Simulator	C	+	N/A	+/-	Mid
Creaplast [9]	ECMO Trainer Evolution III	C+P	+/-	+/-	+/-	Mid
Curtis Life Research [10]	Eigenflow 2 ADVANCED	C+P	+	+/-	+	High
Endo, *et al.* [11]	Endo Circuit	P	-	-	-	Low
Erler Zimmer [12]	ECMO Trainer Professional MK2	C+P	+	+	+	High
Health Care Engineering Systems Center [13]	ECMO Training Simulator	C+P	+/-	-	+/-	Mid
Lansdowne, *et al.* [14]	Orpheus perfusion simulator	C	+/-	N/A	+/-	Mid

Mahmoud, *et al.* [15]	Cannulation simulator	C+P	+/-	-	-	Low
Medical Simulator [16]	Hybrids Vita	C+P	+/-	N/A	+/-	Mid
MSE [17]	Adult ECMO Simulator	C	+	N/A	+/-	Mid
Palmer, *et al.* [18]	Surgical model	P	-	+/-	-	Low
Palmer, *et al.* [19]	Percutaneous model	P	-	+/-	+/-	Mid
Puslecki, *et al.* [20]	ECMO therapy simulator	C+P	+	-	+/-	Mid
PVLoops [21]	Harvi ECMO	C	+	N/A	-	Mid
Telehealth Research Institute [22]	ECMOjo	C	+/-	N/A	-	Low
Texas Children's Hospital [23]	RediStick ECMO Cannulation Trainer	P	+/-	+	+	High
The Simulator Company [24]	E-Sim Pro	C+P	+	+	+	High
Thompson, *et al.* [25]	ECMO Initiation Simulator	P	-	-	+/-	Low
Zanella, *et al.* [26]	Mathematical ECMO model	C	+	N/A	-	Mid

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