

**Table S1 Study categories: clinical area by country of telehealth implementation**

Clinical Area	Australia	Finland	Germany	Norway	Poland	UK	USA	Total
Burns							1	1
Cardio-vascular					1			1
Mental Health							2	2
Minor Injury						1		1
Ophthalmology						1		1
Paediatrics							2	2
Rural and Remote ED	1						3	3
Stroke	1	1	1				3	6
Trauma				1			2	3
<b>Total</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>13</b>	<b>21</b>

**Table S2 Study categories: clinical area by operational use of telehealth**

Clinical Area	Diagnostics	Direct consultation	Specialist support	Specialty Total
Burns			1	1
Cardiovascular	1			1
Mental Health		1	1	2
Minor Injury		1		1
Ophthalmology			1	1
Paediatrics			2	2
Rural and Remote ED		2	2	4
Stroke		1	5	6
Trauma		3		3
<b>Operational Use Total</b>	<b>1</b>	<b>8</b>	<b>12</b>	<b>21</b>

**Table S3 Study design by comparison categories of included studies**

Comparison Type	Experimental	Cohort studies	Qualitative	Comparison Subtotal
Before and after		Duchesne et al (2008) Mohr, Young et al (2018) Saffle et al (2009) Southard et al (2017) Sterling et al (2017) Westbrook et al (2008)	Muller et al (2014)	7
Cross section comparison	<b>Non-randomised</b> Bowman et al (2003) <b>Randomised</b> Benger et al (2004) Myer et al (2008)	Barlinn et al (2017) Dharmar et al (2013) Harvey et al (2017) Mohr, Vakkalanka et al (2018) Vakkalanka et al (2019) Wang et al (2000) Yaghi et al (2015)	Bolle et al (2009)	11
Early v mature telemedicine phases		Kleinrok et al (2014) Bladin et al (2020)		2
Telemedicine and population		Sairanen et al (2011)		1
<b>Study Design Subtotal</b>	<b>3</b>	<b>16</b>	<b>2</b>	<b>21</b>