

**MEDICAL EQUIPMENT REQUEST**  
**MEDICAL EQUIPMENT OR CONSUMABLES**

Division	Medicine	Department	Respiratory / Sleep Unit
Your name	Ruth Kingshott	Tel:	07599913138
Lead Clinician	Heather Elphick	Tel:	271 7000 bleep 235

Product Name and Description

**1 x Pulse Oximeter Radical Masimo**

Radical 7 touch screen monitor with docking station and 10ft red LNCS cable for SpO2.



**1 x Reusable Masimo SpO2 paediatric probe:**

Masimo LNCS YI multisite reusable sensor



**Single Use Masimo SpO2 infant probes**

Masimo LNCS single use infant sensors



**1 x Pulse Oximeter Viamed**

Viamed VM-2160 with SMART sat, battery powered

**1 x Reusable Viamed SpO2 paediatric probe:**

Paediatric Silicone Wrap P/N:0014592

**1 x Reusable Viamed SpO2 paediatric finger probe:**

Paediatric Silicone sensor P/N:0014751

**Single Use Viamed SpO2 infant probes**

Infant disposable plaster SpO2 sensor P/N:0014995



	<b><u>1 x Battery Powered Data Logger</u></b> Battery powered microcontroller unit (see Appendix 1)  <b><u>10 x SD Cards</u></b> 10 x MB SD cards to record anonymous research data				
Quantity	2 x oximeters, 3 x reusable probes, 2 x boxes of disposable infant sensors, 1 x data logger, 10 x SD cards	Suggested Supplier		Viamed are supplying the Masimo and the Viamed oximeters, sensors and data logger for the research study so that the algorithms can be set up identically and they know the batch numbers of the sensors used.	
Purchase cost per item – Masimo oximeter	Exc. VAT	No cost – on loan	Inc. VAT	£	
Purchase cost per item – Masimo SpO2 probe & disposables	Exc. VAT	No cost – on loan	Inc. VAT	£	
Purchase cost per item – Viamed oximeter	Exc. VAT	No cost – on loan	Inc. VAT	£	
Purchase cost per item – Viamed SpO2 probes & disposables	Exc. VAT	No cost – on loan	Inc. VAT	£	
Purchase cost per item – Battery powered data logger (from Viamed)	Exc. VAT	No cost – on loan	Inc. VAT	£	
Total purchase cost (cost per item x quantity)	Exc. VAT	£0	Inc. VAT	£0	

Medical Equipment Only	<input checked="" type="checkbox"/>	New / Additional / Replacement	Additional
Medical Equipment With Consumables	<input type="checkbox"/>	Trial (Prior to purchase) / Loan	Trial for research rather than prior to purchase
Consumables Only	<input type="checkbox"/>	Date required MM/YY	ASAP
Reason for Trial / Loan	Intent to purchase	<input type="checkbox"/>	<b><u>FOR REPLACEMENT ONLY</u></b> Original date/s of purchase or age of equipment to be replaced. Use separate sheet of paper if necessary.
	Sets/consumables deal	<input type="checkbox"/>	
	Clinical trial/research	<input checked="" type="checkbox"/>	
	Specific procedure	<input type="checkbox"/>	
Other:	Loan research kit	<input checked="" type="checkbox"/>	

Reason for purchase (in brief):	Support/parts withdrawn – obsolete	<input type="checkbox"/>
Prof Heather Elphick has been awarded an SBRI (Small Business Research Initiative) phase 1 grant along with Viamed to design a wearable paediatric oximetry probe with paediatric specific algorithms and the ability to cope with movement artefact.	Uneconomical to repair	<input type="checkbox"/>
	Equipment lost or not returned to Dept.	<input type="checkbox"/>
	Cost saving alternative	<input type="checkbox"/>
	Technological advancement	<input type="checkbox"/>
	Reduction in procedure/recovery time	<input type="checkbox"/>
	Increase in service activity	<input type="checkbox"/>
	New service/development	<input type="checkbox"/>

<p>The aim of this phase 1 grant is to look at existing clinical pathways and existing gold standard oximetry (Masimo) that is used within the sleep service and collect paediatric algorithm data in our respiratory population. For this small evaluation project the following is being done:</p> <p>Respiratory and sleep patients undergoing Masimo oximetry for clinical purposes in the wards, home and sleep unit will be approached and consented to allow the research team to also connect an additional clinical oximeter (Viamed) to the patient (this oximeter is new to the trust but used clinically in other hospitals). Both oximeters will be connected to a battery operated data logger via their isolated USB ports and all kit complies with electrical safety and patient isolation requirements. An SD card will be present in the data logger to retrieve a time stamp and the anonymous clinical data from both oximeters (Appendix 1). Ethics approval is currently being applied for (submission date Jan 15<sup>th</sup> for a panel meeting in Rotherham on 26<sup>th</sup> Jan). The anonymous data of SpO2 values and pulse rates, along with alarm status and recovery periods will be passed onto Viamed on the SD card. In addition a data sheet with the age at test, gender, ethnicity, site and type of probe are being anonymously shared (Appendix 2).</p> <p>Viamed have worked in the field of oximetry for 40 years. The clinical information will provide Viamed with paediatric data to enhance current algorithms and obtain approval and certification from the British Standards Institution (BSI) who have already approved Viamed's neonatal and adult algorithms.</p>	<p>Meets current legislation/guidelines</p>	<input type="checkbox"/>
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		Yes	No	If yes, please complete and attached the relevant form
Is this equipment or consumables standard within your area?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Masimo is standard, Viamed is new to SCH Data logger is new to SCH
Is this equipment or consumables standard within the Trust?		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Masimo is standard Viamed is new to SCH Data logger is new to SCH
Is this equipment new to the Trust?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	Risk Assessment for Viamed oximeter & data logger attached
Are consumables required?		<input checked="" type="checkbox"/>	<input type="checkbox"/>	Consumables Information Consumables will be provided by company so N/A
Will a trial be undertaken prior to purchase?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Medical Equipment Evaluation Not purchasing equipment, just using in research trial
Is this a new procedure?		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Introduction of New Interventional Procedures Checklist
Is this a variation on a current procedure?	Minor <input type="checkbox"/> Major <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

			ID Number
Is training required for the safe use and decontamination of the equipment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Training for Use and Decontamination
Does this equipment require any IT hardware?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Already have Masimo download software.
Does this equipment require a PAC's connection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Contact PACS x 60813
Does the equipment capture patient identifiable data?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No data is anonymous and only labelled at download (& only the clinical Masimo data will be downloaded and then named at SCH as per usual clinical protocol).
Is this a new service or a service development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Mini/Full Business Case
Are you requesting for funding greater than £100,000?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Capital Project Form
Are you applying to the Charity Ward/Departmental Funds?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ward/Dept. Charity Fund
Are you applying to The Children's Hospital Charity for funds?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Special Projects Grant
Are your colleagues in full agreement with this request?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	


*All forms can be located on the Intranet or contact Sian Sumner for a copy to be e-mailed.*

#### CASE OF NEED

Description of use (what does the equipment do?)	Measure pulse oximetry by measuring SpO2 oxygen saturation values and pulse rate values.
Does this request have to be compatible with other medical equipment (incl. already owned, intending to purchase or trial)?	No
Which Departments and/or Specialities will use this equipment?	Paediatric Respiratory Team
Which other areas (if any) will the purchase of this equipment affect?	No other areas
Have you liaised with the other relevant departments/committees to get their approval/feedback regarding this purchase? Particularly for Radiology equipment or Point of Care Testing. Please provide details.	N/A
What are the benefits to patients of this purchase? How many patients will benefit and for how long?	The benefits are for research rather than purchase. The research benefits will be to inform the creation of paediatric algorithms to better calculate SpO2 and pulse values in children undergoing routine oximetry.
How will this purchase benefit the Trust (incl. efficiency savings)?	No purchase. Eventually, the research will provide more accurate SpO2 recordings and better clinical interpretation of overnight SpO2 values.
How will this purchase impact on expenditure and income to the Trust?	None as no purchase.
What will be the impact of not purchasing this equipment to your department/service, patients and the	None as no purchase. Research will not be undertaken.

Trust?	
If you feel this request is eligible for Charity funding, what does the equipment do; that is above and beyond the basic NHS level of care?	N/A

**APPROVAL**

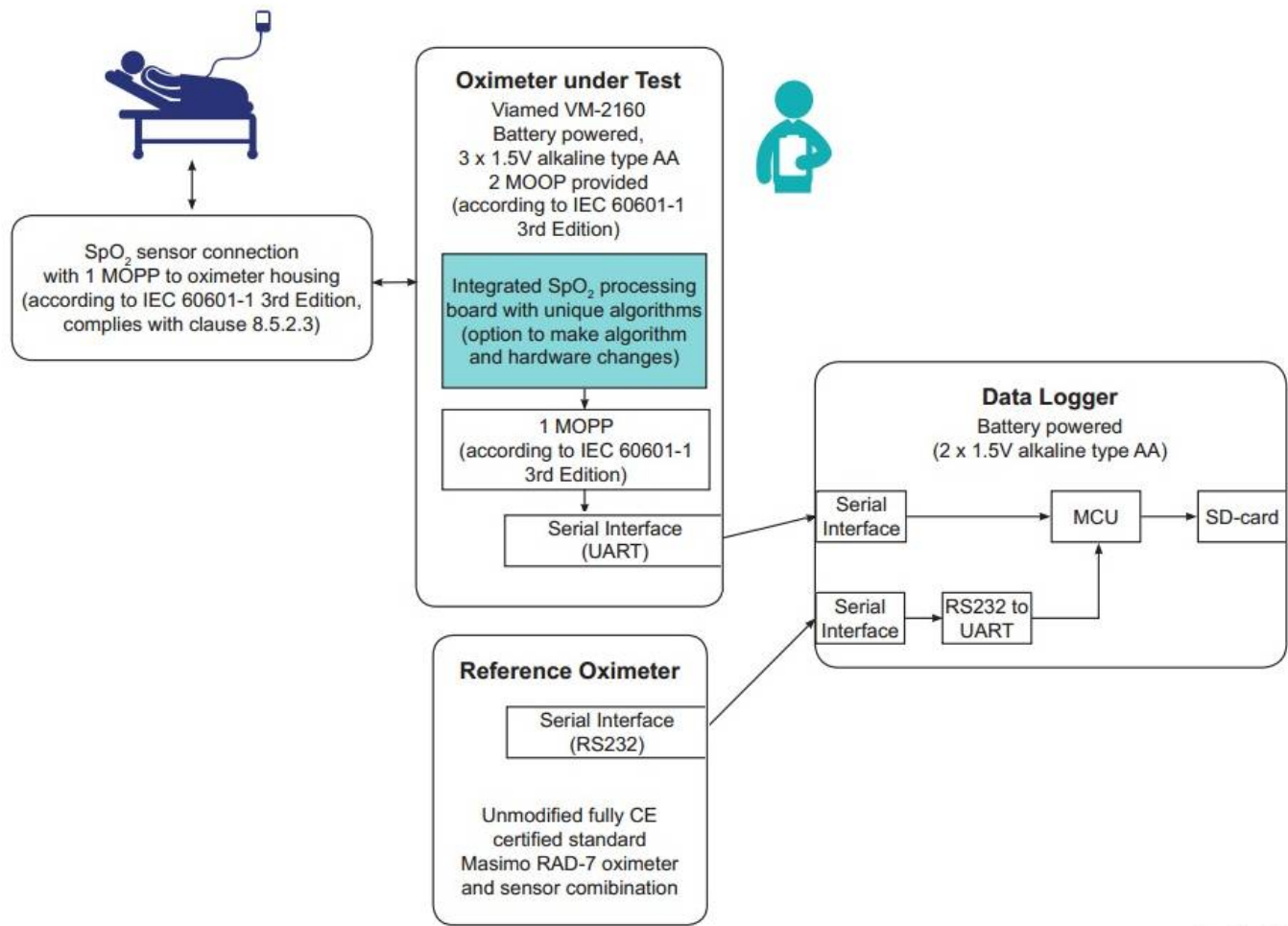
Authorities	Signature	Date
Ward/Dept. Head/Manager	Heather Elphick 	03/01/2017
Associate Director		
*Clinical Director		
Relevant Dept./Committee		
MEMG		

Funding Source	
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***\*If the procedure is new or a variation on a current procedure, the Clinical Director must approve this request.***

Please send the completed form to the Medical Equipment Officer, E52 Orange Wing

**APPENDIX 1: DIAGRAM OF EQUIPMENT**



## **APPENDIX 2: DATA COLLECTION FORM**

ID Number \_\_\_\_\_

Sheffield Children's   
NHS Foundation Trust

Study ID: \_\_\_\_\_

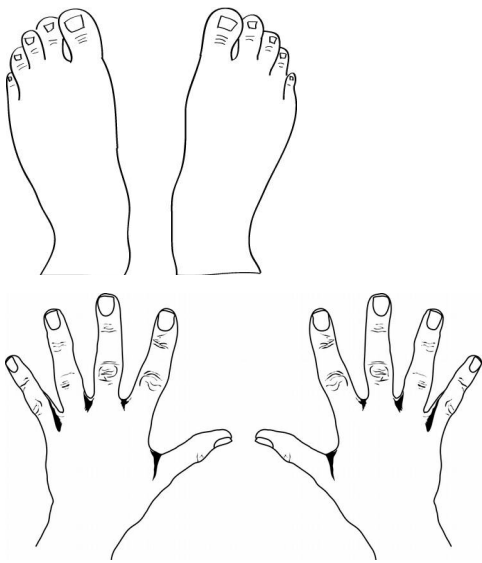
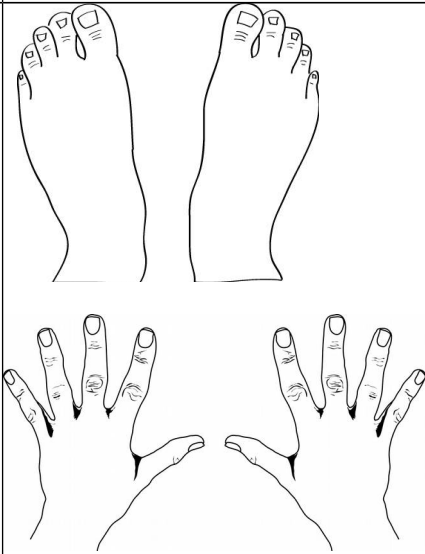
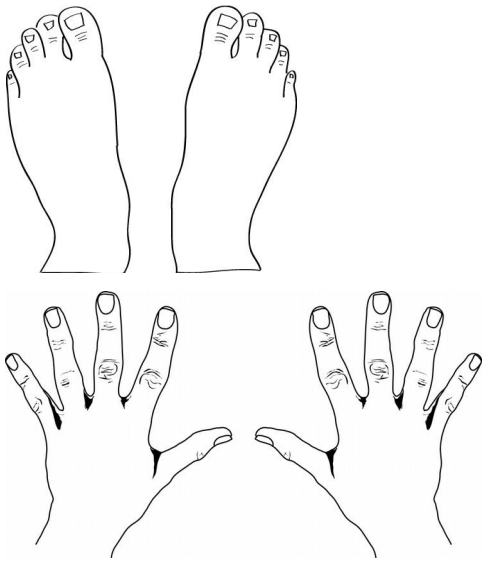
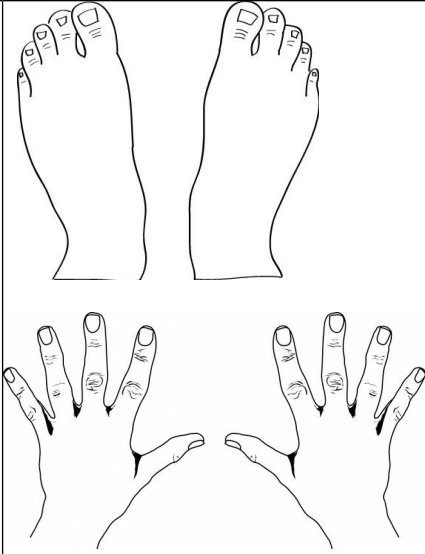
Oximetry Data Collection Form – Information to be shared with Viamed

Variable	Value
Date of oximetry	
Age (2dp) at time of oximetry (yrs)	
Height	
Weight	
Gender	
Reason for oximetry	
Co-morbidities	
Ethnicity	
Is this their first oximetry?	



Study ID: \_\_\_\_\_

## Oximetry Data Collection Form – Information to be shared with Viamed

Variable	Viamed oximeter	Masimo oximeter
Sensor type and model number		
Algorithm used		
Monitoring time started		
Site of sensor (please circle sensor site on diagram)		
Time of sensor repositioning (if appropriate)		
New site of sensor (please circle sensor site on diagram)		
Time monitoring stopped		