স্মারক নং-স্বাঃঅধিঃ/ Respiratory Management/হাসঃ/ /২০২০/৬৮৫   তারিখঃ ০৯-০৬-২০২০খ্রিঃ।

বিষয়ঃ COVID-19 রোগী ব্যবস্থাপনার জন্য Artificial Intelligence based Respiratory Management বিষয়ক Initiative

বর্তমান অবস্থার পরিপ্রেক্ষিতে গুরুতর COVID-19 রোগীদের ব্যবস্থাপনার জন্য USA ভিত্তিক প্রতিষ্ঠান Medtronic কর্তৃক প্রস্তাবিত "Artificial Intelligence based Smart Technology System Called vital sync" প্রযুক্তিটি গুরুতর COVID-19 রোগীদের ব্যবস্থাপনার জন্য প্রস্তাব করেছেন। বর্ণিত প্রযুক্তিটি নিয়ে আমাদের Critical Care বিশেষজ্ঞদের সংগে একাধিক Zoom সভা অনুষ্ঠিত হয়েছে এবং সভা পরবর্তী আমাদের বিশেষজ্ঞগণ এই প্রযুক্তিটি কাজে লাগানোর সংগে মতামত ব্যক্ত করেন। স্বাস্থ্য অধিদপ্তরের মতে, এই প্রযুক্তিতে কাজে লাগানো অতি অল্প সংখ্যাক সেবা প্রদানকারী দিয়ে অনেক সংখ্যাক রোগীর সেবা প্রদান করা যাবে। দ্রুততম সময়ে যা অনেক রোগীর জীবন রক্ষা করতে সমর্থ হবে। Medtronic USA ২২,৪১,৮৩,৫০০/- টাকার একটি আর্থিক প্রস্তাবনা দিয়েছেন (সংযুক্ত)।

বর্ণিত প্রস্তাবনাটি প্রাথমিকভাবে একটি হাসপাতালে Piloting করা যেতে পারে। Piloting এর ফলাফল দেখে চূড়ান্ত সিদ্ধান্ত নেওয়া যেতে পারে। প্রস্তাবটি বাস্তবায়নের জন্য অর্থের সংস্থানসহ প্রয়োজনীয় নির্দেশনার জন্য অনুরোধ করা হল।

এতে মহাপরিচালক মহোদয়ের অনুমোদন আছে।

(ডাঃ মোঃ আমিনুল হাসান)
পরিচালক (হাসপাতাল ও ক্লিনিক সমূহ)
স্বাস্থ্য অধিদপ্তর, মহাখালী, ঢাকা-১২১২
Email:directorhospital@ld.dghs.gov.bd
ফোন: ০২-৫৫০৬৭১৫০ ফ্যাক্স নং: ৫৫০৬৭১৫১

বিতরণঃ

অতিরিক্ত সচিব (প্রশাসন অনুবিভাগ)
স্বাস্থ্য সেবা বিভাগ
স্বাস্থ্য ও পরিবার কল্যান মন্ত্রণালয়
বাংলাদেশ সচিবালয়, ঢাকা।

অনুলিপিঃ সদয় অবগতির জন্যঃ

১। সচিব, স্বাস্থ্য সেবা বিভাগ, স্বাস্থ্য ও পরিবার কল্যান মন্ত্রণালয় (দৃঃআঃ সচিব মহোদয়ের একান্ত সচিব)।
২। মহাপরিচালক, স্বাস্থ্য অধিদপ্তর, মহাখালী, ঢাকা (দৃঃআঃ উপ-পরিচালক, সমন্বয়)

SCHEDULE 1 SOW
MASTER SUBSCRIPTION AND SYSTEM AGREEMENT
ORDER FORM
Respiratory Monitoring Description of Services / Remote Deployment Work Plan

Solution Overview

Medtronic Respiratory Monitoring with remote monitoring system to detect respiratory compromise. Capnography with pulse oximetry and Vital Sync™ (VPMP) virtual patient monitoring platform provides the solution foundation for the monitoring. This single platform is designed to help you gain greater value from your medical devices while responding more proactively to your patients' needs to take meaningful action with immediate access to the most-timely data available in order to monitor patients' actively, especially to help identify signs of respiratory compromise. Medtronic teams outlined in this SOW will provide additional clinical and technical support for the phases and implementation. The following outlines the tasks and responsibilities to be performed.

Medtronic and Bangladesh Health Ministry will begin with planning and then implementation of the production of Capnography with pulse oximetry devices and Vital Sync™ VPMP within a hospital environment to integrate with the following devices:

Area(s) of care	COVID - ICU	Quantity of Workstations	To be provided by customer
Device Types	Capnography (Cap20)	Quantity of Devices	400
Software	Vital Sync™ (VPMP)		

High-Level Services

The following list identifies the services Medtronic will provide during the deployment phases.

Service	Description
Project Management	A Medtronic project manager will be assigned to the implementation for planning, communication, scheduling, monitoring, and execution of this scope.
Remote Install	Remotely set up initial configuration and install software application on servers within hospital's environment.
Installation/Go Live Support	Telephone and/or online guidance self-installation of physical connections to equipment onsite including configuring application and ensure system is functioning properly.
Go Live Clinical Training Support	Provide a virtual plan for train-the-trainer methods. Remote clinical support for questions during Go Live.
Go Live Technical Training	Remote technical training session, up to 2 hours to a BioMed/IT.

*These are estimates only and may change depending on requirements and planning needs.

Discover

A dedicated project manager will be assigned to your implementation to lead and facilitate the activities to drive the project to close. This will begin with a formal kick-off to introduce project team members and the Medtronic methodology.

Define

A project manager will work closely with the facility contact to coordinate workstreams (defined as various work sessions to define requirements) and discussions needed to collect a complete list of technical and user requirements within the scope of the solution.

- A Clinical Product Specialist (CPS) will work with the hospital's clinical staff to document workflows and key configurations during a up to three (3) 30-90-minute meetings within the Clinical Workflow Workbook and develop a training plan.
- A Medtronic Solution Architect and/or integration specialist (if in scope) may assist in the design and technical workbook to be completed over (2) one-hour sessions to collect and finalize the technical requirements (if applicable) to review the IT Systems Planning document with customer point of contact in preparation of installation materials and pre-requisites.

Design

A CPS and/or Solution Architect in collaboration with a project manager will provide customized printed and electronic resources to support your chosen workflows, and on-going training and adoption. These include the following deliverables, which will require formal approval upon delivery and install of the solution: ***Clinical Workflow Workbook; Training Plan; Visio; Project Plan; Technical Workbook***

Medtronic

Deploy / Deliver
Installation

Medtronic will remotely install and configure software on the designated server including configuring any special requirements such as SSL or customized URLS.

- Application configurations to Vital Sync defined in the Technical and Clinical Workflow Workbook via Remote Access.
- Install and configuration of Central Workstations, testing, and validation with IT/BioMed of system which include audible alerts, ensuring PCs are active, printing functionality, and monitor device connectivity via WebEx or Remote Access.
- Configure patient monitor devices to communicate via a network connection (Ethernet or Wi-Fi) to the Vital Sync system(s).
- Configuration all integration interfaces in scope to production/Live

Clinical End User Training

Our Medtronic Clinical Product Specialists (CPS) will execute a virtual training program created in the design phase. This will be determined by a combination Reference Guides, Video Modules and/or virtual education sessions up to 5 days. The focus of education will be Medtronic device training and system functionality of those which are in scope.

Go Live: Clinical End-User Support

A Clinical Product Specialists (CPS) and a Project Manager will provide remote support for Go Live for up to 5 days to include:
- Guidance with system basic and advanced user-functionality.
- Collect and mitigate any critical issues that require customer attention and/or intervention and collaborate with project team.
- Work with the project team to document any issues closed or open, during the coverage period

Technical Go Live Support and Technical Training

A Medtronic Engineer will be remotely support install activities and support for system go live per the agreed upon times to include:
- Provide guidance to IT/BioMed Resource for device assembly of monitoring devices for use in areas of care.
- System technical training instruction for up to two (2) members of Customer's Systems Operations

Customer Responsibilities and Expectations

Customer is responsible for providing specific requirements and components required for the deployment and functionality of a successful system.

TECHNICAL SUPPORT REQUIRED	RESOURCES REQUIRED
- Network connectivity, Servers, cabling, power, and equipment following Medtronic minimum specifications - Appropriate remote access and service accounts - Network connectivity via Lantronix with Medtronic minimum specifications - Facilities IT will make any required configuration changes such as auto login, power and sleep settings for Central Workstations - Facilities will be responsible for hardware mounts and cabling in hallways for workstations. - Assembly of Serial to Network bridges to patient monitor devices. - Assemble devices for use in the areas of care; including mounting brackets, configure, and enable device Wi-Fi settings - Providing any contracting or services for 3rd party connectivity vendors connecting to Vital Sync™.	**Customer Project Manager:** Responsible for coordination of Customer tasks **Biomed/Clinical engineering:** Equipment receipt and system ownership. **IT/Network/Security:** Responsible for completing technical planning pre-requisites and go live activities. **Facilities:** Responsible for hardware mounting or storage needs.

Proposed Products and Pricing

<div align="center">WIRELESS OPTION</div>

Line	Catalog #	Product Description	Price BDT	QTY	Total Price BDT
1	CAPNO	CS08651-03 x 100 units (without printer)	2,35,000	100	2,35,00,000
2	CAPNO	CS08657-03 x 300 units (with printer)	2,58,000	300	7,74,00,000
3	SGX5150123US-Cap20 Wireless	Lantronix SGX (device cable, power cable)	53,750	400	2,15,00,000
4	500-242-R	Cable RJ45 to DB9M 500mm	2838	400	1,13,5200
5	011892 Wireless	Bridge Adaptor	35,002	400	1,40,00,800
6	MAXA	Adult Digit Sensor CASE (18" Cable) (24 per case)	15,050	1100	1,65,55,500
7	010625	Microstream nasal/oral filterline (long term) for non-intubated patients (100 per case)	1,37,170	250	3,42,92,500
8	VSIMPLEMENTATION	Vital Sync base package implementation	86,00,000	1	86,00,000
9	VSLICENSEIND02	Vital Sync License for Individual Device	43,000	400	1,72,00,000
10	10099068	Services & Maintenance - annual	1,00,00,000	1	1,00,00,000
			TOTAL		**22,41,83,500**

(BDT Twenty Two Crore Forty One Lacs and Eighty Three Thousand Five Hundred Only)

The above price include delivery up to Dhaka airport and does not include any Tax , Statutory deduction and applicable customs duty.

Customer will have to buy the local Work Station, Hospital Servers and do the necessary networking.