



OnCloud Summary

Introduction

OnCloud is a new informatics and quality management system designed for clinical perfusionists. OnCloud manages and creates an entirely electronic record for all of the procedures commonly performed by perfusionists including Cardiopulmonary Bypass, Standby, Autotransfusion, Platelet Therapy, ECMO and more. As its name implies, OnCloud is a “cloud based” system that never requires software to be installed or updated. Your data is encrypted and stored in a secure data center with a provider renowned for its safeguards and reliability. OnCloud works on any computer with a web browser and Internet connection including tablet systems like the iPad, and it is the only comprehensive perfusion-centric data management option currently on the market.

Why do we need OnCloud?

If you are a hospital administrator, perfusionist or IT director, you are probably transitioning to or have already transitioned to an EMR system, like Epic. Epic does many things very well, but perfusion is absolutely NOT one of them. The only functionality that Epic offers for perfusion is a very basic, labor intensive electronic charting for cardiopulmonary bypass that is essentially just a modified anesthesia record. Epic has no ability to chart, capture or report data for other procedure types, like Autotransfusion (cell savers), Platelet Therapy, ECMO and others. These are requirements of the American Society of Extracorporeal Technology’s [Standards of Practice](#) (Standard 13) for Clinical Perfusionists. In addition, EPIC offers no mechanism for capturing and reporting quality control parameters. Furthermore, EPIC is entirely unusable for a contract service group that works at multiple hospitals, as there is no platform that would allow centralized data for performance tracking, inventory management, billing and reporting.

OnCloud addresses all of the deficiencies previously mentioned and does so in a very elegant, simple way that allows clinicians to focus on the surgery and not be distracted by the charting process.

Are there other options available?

Currently, there are several other choices on the market mostly developed by manufacturers of the heart-lung systems commonly used. While many of these options do a nice job capturing data from the heart lung machines, they do not address some of the other necessities for a well-rounded perfusion EMR platform. A summary table is provided below.



Name	Manufacturer	System Specific	Cost per System	Quality Control	Equip QC	Inventory Mgmt.	Procedure Options	Multiple Facility Capable
Viper	Spectrum Medical	No	\$75,000 +	Yes	No	Limited**	CPB, ECMO	Yes
T-Link	Terumo	Yes	Not Available	No	No	Limited**	CPB	No
Connect / DMS	Sorin Group	Yes	\$35,000 +	Yes	No	RFID, Sorin Only	CPB, ATS	No
Perfusion Pro	PDS Medical Solutions	No	\$5000.00	Yes	No	Limited**	CPB, ATS	No
OnCloud	Perfusion.com	No	\$800-1100.00 per user annually	Yes	Yes	Complete Inventory	ALL and Custom	Yes
JOCAP XL	MAQUET	Yes	Unknown	No	No	Limited**	CPB	No
Epic	Epic	No	Unknown	No	No	Limited**	CPB	N/A
*Please contact us if you think we need to update anything on this table. **Limited means that you have the ability to add items to a procedure, but there is no full inventory management with PO, PAR levels, etc.								

OnCloud Security











If you are a hospital IT director, security is probably your main concern, and it should be. At least 50% of hospitals in the United States have no EMR system for perfusion currently and 80% are still using a hand written paper chart. At these facilities, paper records are stored in the perfusion office where they probably collect for years. If you have a contract service group, records containing PHI might be faxed or emailed back to the company office for billing purposes. OnCloud solves all of the problems associated with sharing data, as everything is in one location. The storing, faxing and emailing of paper records is rendered totally unnecessary. A detailed OnCloud [security summary document](#) is available upon request.

As you can see in the table below, the mostly commonly used application is OnCourse which was developed in 1998 by Avecor Cardiovascular (purchased by Medtronic) and last updated in 2000. OnCourse runs on an unencrypted Microsoft Access database, so anyone with access to the file system has direct access to PHI. This is unacceptable in today's healthcare environment and could potentially lead to severe penalties if an audit were initiated.

Survey

In order to determine what software is currently in use by perfusionists, we conducted a survey of the perfusion community in March of 2012. The results of this survey are provided in a table below.



Application	% Adoption	DB Platform
OnCourse	 (15.92%)	Access
Sorin DataBahn	 (9.45%)	SQL
Terumo T-Link	 (3.98%)	Unknown
MAQUET JOCAP	 (3.48%)	SQL
Perfusion Pro	 (1.49%)	Access
Spectrum Viper	 (2.49%)	SQL
OnCloud	 (4.98%)	SQL Enterprise
Excel	 (3.48%)	N/A
Other	 (8.96%)	Unknown
None	 (45.77%)	N/A

*Results from March 2013 survey on Perfusion.com

Why is Everyone Talking Cloud?

Cloud architecture conveys many benefits when it comes to software applications. Some of these benefits include: automatic application updates, faster time to market, lower support costs, reduced infrastructure costs and improved accessibility with mobile devices. OnCloud leverages these assets to deliver scheduled email reports, text messaging, multiple hospital support, multiple hospital inventory management and benchmarking capability.

On the cloud security front, OnCloud has adopted all of the HIPPA/HITECH standards that are recommended by federal agencies. SSL encryption (256bit) is employed and all PHI is natively encrypted in SQL Enterprise, so even if a database breach were to occur, the PHI would remain secure. All OnCloud data is encrypted and backed up daily to secure geo-redundant server. In addition, we have also contracted with security firm Qualys to run monthly security scans on the application, code and server platforms we use Microsoft Azure.

Summary

If you are in the process of looking at systems for electronic charting and quality control, we believe OnCloud offers the most complete solution presently on the market. Please give us a call, and we will be happy to schedule a personalized demonstration for you.