Electronic Integration of a Clinical Trials Management System (CTMS) and an Inexpensive Accounting Software Program

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Problem

Most CTOs rely on excel spreadsheets to determine and track what sponsors owe for patient visits, resulting in a cumbersome and inaccurate accounting system.

The crux of the challenge is that the CTMS (Velos, Oncore) contain the information needed to invoice and reconcile Sponsor payments, but were not designed to be accounting systems.

A method to electronically integrate the CTMS with an accounting software program is needed.

Methods Implemented

1. Upon contract execution, creates calendar by taking individual visits from the schedule of events and enters into the CTMS with dollar values (creates 2 calendars if there are 2 study arms).
2. Study coordinator assigns patient to calendar. Every time patient completes visit, Study Coordinator checks off "visit complete". If there is a deviation from the schedule of events (e.g. no drug administered, EKG not done, etc.), Study Coordinator enters deviation into "Notes" section.
3. At month end, Finance runs a Visit Report from the CTMS detailing all visits for the month. If sponsor pays by CRF, invoice # is assigned (i.e. HSC#-043014). If field is left blank, accounting program will assign a 4-digit number.
4. Finance imports Visit Report into accounting program, prints all invoices with 4-digit numbers, and mails/emails to sponsor.
5. Accounts Receivable (AR) Aging Report is generated detailing receivables $\leq$ 30 days, 31-60, 61-90, 91-120, and $\geq$ 121.
6. Prior to scheduling closeout visits with Monitors, AR Aging Report is checked to ensure all outstanding charges have been paid.

VELOS: Coordinator marks visit as complete, and enters brief note if there is a visit deviation

Finance runs Visit Report from VELOS and imports into accounting program

Patient Study ID	Study Number	Event	Date	Amount	Notes	Inv #
10002004	13540	Cycle 1 Day 8	9/4/2013	$ 1,256.00	Study drug not given	13540-093013
10002001	13540	Cycle 4 Day 1	9/5/2013	$ 945.00	Pt had RTC and labs but did not receive study drug.	13540-093013
10002001	13540	Disease Evaluation – Approx 12 Weeks (+/-7Days)	9/6/2013	$ 5,202.00		13540-093013
10002001	13540	Cycle 4 Day 2	9/6/2013	$ 614.00	lab drawn day prior on 9-5-13	13540-093013
10002002	13540	Cycle 3 Day 1	9/10/2013	$ 945.00		13540-093013
10002004	13540	Cycle 1 Day 15	9/10/2013	$ 1,460.00		13540-093013
10002005	13540	Screening	9/10/2013	$ 5,602.00		13540-093013
10002002	13540	Cycle 3 Day 2	9/11/2013	$ 614.00		13540-093013
10002001	13540	Cycle 4 Day 15	9/19/2013	$ 646.00		13540-093013
10002001	13540	Disease Evaluation – Approx 12 Weeks (+/-7Days)	9/19/2013	$ 5,540.00		13540-093013
10002002	13540	Cycle 3 Day 15	9/24/2013	$ 646.00		13540-093013

Invoices are printed

The University of Kansas Cancer Center
3901 Rainbow Boulevard
Mail Stop 1039
Kansas City, KS 66160

Voice: 913.945.7505
Fax: 913.945.8111
FEIN: 48-1108830

INVOICE
Invoice Number: 13540-093013
Invoice Date: Sep 30, 2013
Customer ID: 13540
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Bill To:

Attn. Accounts Payable
Pharmaceutical Corp.
PO Box 5450
Portland, OR 97228-5450

Protocol #	Reference #	CID #	Principal Investigator
I20F2202	Study Drug: BKM120	Site 5009	Qamar Khan, MD

Quantity	Description	Unit Price	Amount
	Pat.# 10002004 - Cycle 1 Day 8 - 9/4/2013		1,256.00
	Pat.# 10002004 - Cycle 1 Day 8 - 9/4/2013 (Drug not given)		-216.00
	Pat.# 10002001 - Cycle 4 Day 1 - 9/5/2013		945.00

Accounts Receivables Report is Generated

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Aged Receivables
As of 12/31/2013

	Invoice/CM #	0 – 30	31 – 60	61 – 90	91 – 120	121 – 150	Over 151 Days	Total
AGICC 11PAN01 12924 Inc. Joaquina Baranda, MD	1118		$2,100.00				$3,000.00	$2,100.00
	1157		$4,389.00					$4,389.00
		$0.00	$6,489.00	$0.00	$0.00	$0.00	$0.00	$6,489.00
9785-CL-0222 12968 Jeffrey Holzbeierlein, MD	12968-093013			$1,722.00				$1,722.00
	12968-123113	$2,745.00						$2,745.00
		$2,745.00	$0.00	$1,722.00	$0.00	$0.00	$0.00	$4,467.00