

2016 BLACK BOOK OF REVENUE CYCLE MANAGEMENT

RANKINGS EXECUTIVE SUMMARY

END-TO-END RCM TECHNOLOGY & SOFTWARE APPLICATIONS



2016 Rank	Hospitals Under 100 Beds	Hospitals 101 -200 Beds	Hospitals 200+ Beds	Healthcare Chains, Systems, IDNs, Corporations	Physician Practices & Organizations
1	Navicare	Advisory Board	ZirMed	Optum	NaviCure
2	nThrive	Optum	Advisory Board	nThrive	CareCloud
3	Advisory Board	ZirMed	McKesson RelayHealth	Advisory Board	Allscripts
4	ZirMed	nThrive	Optum	ZirMed	ZirMed
5	Optum	Navicare	Cerner/Siemens	Navicare	Optum
6	Conifer Health	Cerner/Siemens	nThrive	Apex	Cerner/Siemens
7	Edgemed	Conifer Health	Navicare	Conifer Health	Conifer
8	Craneware	Availity	Connance	Recondo Technology	McKesson RelayHealth
9	Rycan	Experian Passport	Accretive	Adreima	NextGen
10	Change Healthcare	Craneware	Recondo	Change Healthcare	Craneware
11	Connance	Harris Quadramed	Craneware	McKesson RelayHealth	Experian Passport
12	McKesson RelayHealth	GE	Adreima	VHC	Orion
13	HCS Interactant	Change Healthcare	Change Healthcare	GE	Change Healthcare
14	Accretive	Epic Systems	GE	Hyland Onbase	Transunion
15	Adreima	Adreima	Harris Quadramed	Availity	athenahealth
16	GE	McKesson RelayHealth	Experian Passport	Transunion	PatientCo
17	RevClaims	Convergent	TransUnion	Accretive	Epic Systems
18	Navigant Cymetrix	The SSI Group	Epic Systems	Experian Passport	ChartLogic
19	Harris Quadramed	Navigant Cymetrix	InstaMed	Craneware	Greenway
20	Anthelio	Accretive	Infor	The SSI Group	eClinicalWorks

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END-TO-END RCM OUTSOURCING SERVICES



2016 Rank	Hospitals Under 100 Beds	Hospitals 101 -200 Beds	Hospitals 200+ Beds	Healthcare Chains, Systems, IDNs, Corporations	Physician Practices & Organizations
1	nThrive (MedAssets)	nThrive (MedAssets)	Conifer Health	Optum360	Cerner/Siemens
2	Rycan	Optum360	Optum360	nThrive (MedAssts)	NextGen
3	Parallon Business	Cardon Outreach	Cerner/Siemens	Conifer Health	Allscripts
4	Optum360	Cerner/Siemens	McKesson RelayHealth	Parallon Business	Intermedix Navigant
5	Conifer Health	Conifer Health	nThrive (MedAssets)	Availity	Convergent
6	Change Healthcare	Parallon Business	Availity	McKesson RelayHealth	Conifer Health
7	Xtend	McKesson RelayHealth	Change Healthcare	Experian Passport	AmazingCharts
8	Cerner/Siemens	MediRevv	Parallon Business	GE	Kareo
9	Apex	GE	Adreima	Apex	MiraMed
10	McKesson RelayHealth	Avadyne	The SSI Group	Change Healthcare	The SSI Group
11	Avadyne	Experian Passport	GE	Avadyne	Transunion
12	Adreima	Change Healthcare	Recondo Technology	Adreima	GE
13	The SSI Group	Xtend	Avadyne	The SSI Group	McKesson RelayHealth
14	ProClaim	Connance	Transunion	Connance	Experian Passport
15	Citadel Outsource Group	GeBBs	MedAssist FirstSource	GeBBs	Change Health
16	Experian Passport	Transunion	GeBBs	MedAssist FirstSource	Xerox
17	Salurco	Navigant Cymetrix	Xerox	Sutherland	AdvantEdge
18	Transunion	The SSI Group	Accretive	Transunion	athenaCollect
19	EOS Healthcare	Xerox	Experian Passport	Navigant Cymetrix	BancTec
20	BOSS Healthcare	MedAssist Firstsource	Sutherland	Xerox	Aprima

END-TO-END RCM TRANSFORMATIONS EXCEEDING EXPECTATIONS IN ALL FUNCTIONS MEASURED

PROCESS AND SYSTEMS IMPROVEMENTS Q2 2014 – Q3 2016

CHANGES REPORTED COMPARING 2014 SYSTEM/PROCESS VERSUS 2016 SYSTEM/PROCESS	END-TO-END PHYSICIAN PRACTICE RCM OUTSOURCING	END-TO-END PHYSICIAN PRACTICE RCM SOFTWARE TECH	END-TO-END HOSPITAL RCM OUTSOURCING	END-TO-END HOSPITAL RCM SOFTWARE TECH
Revenues Increase	+8.1%	+5.5%	+8.4%	+14.4%
Days in A/R Reduced	-29.4%	-37.1%	-17.6%	-30.2%
No Show Rate Reduced	-13.0%	-9.5%	-6.7% *	-9.0% *
Patient Visits Increased	+3.7%	+3.5%	+3.6% *	+5.9% *
Denials Decreased	-10.9%	-11.3%	-8.7%	-7.9%
Point of Service Collections Improved	+12.8%	+19.4%	+15.9%	+18.7%

Source: Black Book RCM Surveys Q1-Q2 2014, Q1-Q3 2016

* Applies to Hospital Outpatient Services Only

STATE OF HOSPITAL REVENUE CYCLE TRANSFORMATION

Revenue cycle management (RCM) is the life force of any hospital, private or nonprofit. Effective patient registration, insurance and benefit verification, charge capture, coding, and claims processing are essential to maintaining viability.

In a marketplace of several hundred core and niche Revenue cycle management (RCM) vendors, Black Book survey respondent's evaluated 129 technology services /solutions. Many vendors offer both software and outsourced business services, while some only focus on one specialty. This report's vendor results center on software, technology and SaaS solutions only.

RCM software applications are usually characterized in two segments

- **Core, Platform and/or Point Solutions**
- **Bolt-on Solutions (providing added functionality to core solutions)**

The current penetration of RCM solutions for inpatient medical/surgical hospital environment varies by type of application. Software applications and outsourcing services needed for the core functions of patient registration, scheduling, billing, coding, and claims processing are adopted in 100% of hospitals today, while other RCM applications are less penetrated or significantly vary in penetration across various types of hospitals. The following represent aggregate findings from the five month polling process:

Difficulty in Finding Skilled RCM Human Resources for New RCM Software/Reimbursement Challenges

HOSPITAL SIZE	CFO/Finance Director/ Business Office Management Experiencing Recruitment and Trained Staffing Issues with new RCM implementation
Small/Rural Hospitals under 100 Beds	89%
Community Hospitals 101-200Beds	69%
Large Hospitals & Academic Medical Centers over 200Beds	42%
Hospital Chain, Systems, Shared Services, Networks and ACOs	37%

Staffing Concerns make Outsourcing core or bolt-on RCM services a better short term alternative to Software Implementations

HOSPITAL SIZE	CFO/Business Office Manager Agrees/ YES
Small/Rural Hospitals under 100 Beds	82%
Community Hospitals 101-200Beds	35%
Large Hospitals & Academic Medical Centers over 200Beds	59%
Hospital Chain, Systems, Shared Services, Networks and ACOs	47%

What is your facilities top-related technology issue impacting total organizational revenue?

HOSPITAL SIZE	ICD-10 Coding	EHR & Clinical Integrations	Billing & Claims	Contractual Analysis	Interoperability
Small/Rural Hospitals	44%	11%	21%	8%	16%
Community Hospitals	28%	9%	38%	14%	11%
Large Hospitals	13%	33%	14%	18%	22%
Hospital Chain, Systems	15%	11%	24%	20%	30%

Which scenario best describes your hospital's 2016-2018 RCM strategy for software and outsourcing services

HOSPITAL SIZE	One Core Legacy RCM Vendor Software Solution	Seamless Array of Core and Bolt-on RCM Software Solutions	Outsourcing RCM End-to-End	Outsourcing One or More Functions or Divisions with Software
Small/Rural Hospitals	3%	25%	27%	45%
Community Hospitals	4%	43%	17%	36%
Large Hospitals	6%	51%	4%	39%

Which scenario best describes your hospital's plan for maintaining an outsourced revenue cycle management solution or set of managed services solutions?

HOSPITAL SIZE	Short Term (12-18 Months)	On Going Solution (18-36 Months)	Long Term (36-60 Months)
Small/Rural Hospitals	7%	60%	33%
Community Hospitals	10%	70%	20%
Large Hospitals	11%	61%	28%

Roughly one-third (1,800 of all US hospitals) predicting in 2012 that they would replace their core RCM solution have still failed to initiate a comprehensible, sustainable RCM plan as of January 2016. Of the 1,800 RCM-delinquent hospitals, 84% anticipate making value-based reimbursement decisions without an advanced software implementation.

More than 1,400 hospitals confirmed the activation of a new or renegotiated RCM solution/services agreement between January 2015 and July 2016, 91% selected outsourcing vendors and consultants as stop gap measures to implementing an in-house solution.

Myopic task forces on ICD-10 coding, physician practice EHR integration, siloed EHRs, lack of connectivity, poor interfaces and insurance verification/eligibility issues had taken priority over comprehensive RCM solution strategies, claimed 44% of those 1,800 hospital CFOs represented in the survey. Once functioning well among small hospitals and community facilities, the now under-optimal core legacy systems needed to be bolstered bolt on RCM solutions and coding systems. Then the EHR marketplace additionally complicated some clinical information integrations and offered very limited financial decision support.

Small and community hospitals under 200 beds particularly braced for the impact of operating at a fiscal loss with inpatient revenues decreasing and costs rising, including the implementation costs of ICD-10 impacts and electronic health record implementations.

Technologically advanced academic medical centers, larger inpatient facilities, hospital systems and chains, ACO organizations, and affiliated provider networks are also supporting and growing the bolt on market products, particularly eligibility and analytics, as they have adapted RCM strategies to value based reimbursement and complex contractual agreements with payers. The selection of outsourced solutions increased nearly two-fold between January 2015 and August 2016 for claims processing, coding and collections.

Of the 40% of hospitals under 200 beds that delayed making an RCM transformation program functional until after coding transitions are complete and meaningful use checks are cashed, more than three quarters are now in the decision making stages of an RCM vendor selection. 95% of large hospitals over 200 beds considering RCM transformation initiatives expect to execute their plans before January 2017.

94% of hospital financial executives in hospitals under 200 beds are concerned that neglected RCM transformations by Q1 2017 will likely cease to operate, as insurers move to pay for quality not services from a system that thrived on sickness to one that rewards wellness and health.

43% of CFOs in hospitals under 100 beds expect their RCM strategy will be selected solely on their CIS vendor relationship, compared to 10% of CFOs in larger facilities, from 56% last year.

Hospital CFOs and CIOs are at odds with the prioritization of RCM above all other technology spends in 2016, as was the case in all Black Book surveys since 2013. Although 70% of CIOs and 92% of CFOs agree current RCM strategy needs to be assessed, updated, outsourced or replaced, the project implementation acquisition, timing and urgency differ.

CFOs and CIOs also are polarizing on the organizational preference to manage fewer vendors and favor single-source clinical and financial software vendors. In a boomerang shift starting from a 2010 Black Book survey, 85% of CFOs were amenable to implementing a single source software vendor following the direction of the hospital's clinical information system selection committee.

In 2016, the general sentiment of 13% of CFOs was they could make any RCM solution work if the hospital's clinical staff was satisfied with the health care delivery element of the system. In 2013, 77% of hospital CFOs held that opinion. The significant drop in CFO conciliation on this viewpoint is reflective of the implementation of functional (and replacement) EHRs.

92% of Chief Financial Officer's agree their strategic leadership to drive revenue cycle management technology and vendor selection is now taking priority in their hospitals and systems. The focus on EHR implementations and clinical analytics has shifted to the financial health of organizations, empowering CFOs to make technology and services decisions that are not encumbered or influenced by the status of EHRs or maintaining outdated systems waiting for available capital.

In this Black Book survey ending in August 2016 of the same topic, barely 2% of CFOs want their RCM system or services decisions driven by other hospital leaders including CIOs and/or clinicians. Even in small hospitals under 100 beds, 96% of CFOs have strong preference for a best in breed RCM vendor, regardless of the hospital's single-source enterprise strategy, which is overwhelmingly driven by the established or new choice of the clinical system vendor.

CFOs (80%) in a pre-purchase mode of RCM claim to be biased towards bolt-on functionalities that have a higher probability of delivering high results to hospital and its bottom line.

93% are demanding evidence of financial functionality that encompass population health, coding, analytics, forecasting, budgeting, and alternative payment reforms.

Enterprise integration with an incumbent clinical system is no longer the biggest motivator when making an RCM vendor selection, except in hospitals under 100 beds, according to 77% of CFOs. Narrowing margins and escalating costs, drops in Medicare, Medicaid and commercial reimbursements are forcing executives to collaborate across agendas to increase efficiencies and automate to save the bottom line. Hospital budgets are already struggling with decreased reimbursements have the demand of purchasing or upgrading integrated RCM and clinical software.

OTHER KEY CFO FINDINGS Q1-Q3 2016

63% of hospital (under 200 beds) CFOs do not intend to let the facility's legacy clinical system have bearing on their RCM decision, compared to 97% of large hospital CFOs.

81% feel the pressure to make a RCM decision by calendar year end 2016, that have not already selected an RCM strategy for products or services. 93% in Q4 see the lack of a decision is actually a threat to their job stability.

49% feel they will lose their jobs in 2017 regardless of the RCM choices they made in 2015 or more recently.

80% of small and community hospitals anticipate declining-to-negative profitability in 2017 due to diminishing reimbursements, unrecovered collections, and underutilized or inefficient billing and records technology.

75% of CFOs fear that the ramifications of their outdated and/or auto-piloted revenue cycle management systems, particularly those not integrated to other systems will force the hospital to outsource the entire business office function, end-to-end, or purchase a new "next generation" RCM solution by year end 2017.

77% of small and community hospitals integrating recently acquired (independent) physician practices find the RCM systems in those medical offices obsolete or dysfunction for current patient financial processes with the hospital. In 2014, that figure was 94%.

77% of Hospital CFOs consider outsourcing to be the best stop gap measure until new RCM software is afforded and installed. More than 70% seek new outsourcing agreements extending at least 18-36 months.

79% of Hospital CFOs of hospitals under 200 beds consider end-to-end RCM outsourcing to be the best solution until after value-based payment models are better established and coding challenges are worked through.

74% of Hospital CFOs in large hospitals and academic medical centers over 200 beds see outsourcing at least two revenue cycle management functions, up from 58% a year prior.

84% of small and community hospitals are considering using a Consultant to assist in integrations, vendor selections, outsourcing determinations, and total transformations or new RCM product implementations, up from 66% in 2015.

However, 73% of hospital CFOs considering RCM consulting advice report delays and/or difficulty in securing RCM consulting engagements with the top rated firms based on current demand, down from 91% during the rush for consultants in Q3 2015. 53% of CFOs contracting consultants in the RCM transformation process complain that many of the consultants assigned their organizations were entry level and/or inexperienced staff.

83% of hospitals under 200 beds are considering a combination of new software and outsourcing services to improve their RCM systems under ICD 10 and accountable care. 95% of hospitals with more than 200 beds anticipate supplementing their existing RCM software with outsourcing services

in Q1 2017, as the ICD-10 repercussions begin to affect their cash flows and more value-based reimbursement opportunities are presented.

HOSPITALS CONFIRMING RCM SYSTEM REPLACEMENT ACTIVITIES

(CHANGE WITHIN NEXT 24 MONTHS) SELECT 2 MOST RELEVANT IN ORDER OF PREFERENCE

Primary Goals of Hospital acquiring new RCM Software and/or Outsourcing Services	2013-2014 Strongly Prefer	2014-2015 Strongly Prefer	2016-2017 Strongly Prefer	2016-2017 Strongly Prefer
Upgrade RCM Software Solution only End-to-end and/or Bolt-on solutions	55%	35%	33%	25%
Upgrade RCM/EHR Collectively	8%	10%	4%	6%
Outsource RCM (Full Enterprise)	16%	46%	69%	20%
Part RCM Software Upgrades/Replacements with Some Outsourced Functions/Services	80%	82%	80%	91%
Seamless RCM/Clinical Information System	79%	40%	12%	11%
Prefer One Vendor for RCM/CIS-HIS Solution	4%	1%	2%	5%

Vetting a RCM solution is extremely complex as many hospitals have discovered that after purchasing a solution set, they are unable to do much of what was promised and even less has been delivered. The lagging legacy vendors are mainly built to compliance specifications and providers are finding these are completely unusable for a hospital with variable census and payer mix.

NEW RCM SOFTWARE ACQUISITIONS (IMPLEMENTED IN LAST 12-18 MONTHS)

Situation/Insight	After 6 months	After 12 Months	After 18 Months
Still in New User Survival Mode	36%	10%	10%
Cannot customize due to staffing issues/turnover	87%	14%	12%
Will not maximize RCM software (ever)	66%	52%	14%
Cannot integrate network practice technologies	62%	60%	46%
Limited data building and underutilized features	90%	79%	76%
Mastered basic and intermediate tasks so that return on investment is being realized	35%	50%	60%
Capabilities and expertise of system and staff have made tangible financial impacts	15%	39%	52%

IMMEDIATE IMPROVEMENTS TO HOSPITAL REALIZED AFTER RCM IMPLEMENTATION & TRANSFORMATION INITIATIVES

Select Six or Less of the Top Improvements Noted after RCM Transformation Activities		
	NEW RCM SOFTWARE IMPLEMENTED	NEW RCM OUTSOURCING SERVICES
Productivity & Re-balanced Workflows	80%	65%
EHR Charge Sweeps & Reconciliation	95%	74%
Accurate and Actionable Daily Reports	88%	77%
Payment Resolution	89%	93%
Filing Insurance Claims (Primary & Secondary)	89%	96%
Resolve Rejections	71%	84%
Post Payments	87%	97%
Perform Collections	61%	96%
Follow up on Appeals and Denials	73%	93%
Perform Audits A/R & Charge Logs	91%	91%
Review payer denials and rejections	52%	80%
Improve Coding and Compliance	79%	89%

END-TO-END RCM SOFTWARE/TECHNOLOGY VENDOR SATISFACTION BY HOSPITAL SIZE

VALUE-BASED TRANSFORMATION ACTIVITIES

Hospitals over 200 beds but less than 400 beds report highest satisfaction and ROI from legacy system RCM software implementations within the past twelve months. Small hospitals under 100 beds are the least satisfied with recent RCM software implementations. Complex system vendors, typically in use at large hospitals and academic medical centers over 400 beds, hospital systems, IDNs, CINs, chains, clinics and groups use more bolt-on RCM vendors with greatest satisfaction than comprehensive end-to-end software solutions. Five RCM technology vendors consistently scored best for all hospital sizes: Optum, Advisory Board, ZirMed, Navicure and nThrive (Medassets/Precyse).

INDUSTRY EVOLUTION TO END-TO-END RCM VENDORS

TOP TEN OFFERINGS TO ALL HOSPITAL GROUPS/SYSTEMS/NETWORKS RESPONDING

2016 RCM TECHNOLOGY VENDOR ON VALUE-BASED TRANSFORMATION INITIATIVES & UPGRADES	GRADING VALUE-BASED REIMBURSEMENT TRANSFORMATION CAPABILITIES			
	Small & Rural Hospitals (100 Beds or Less)	Community Hospitals (101-200Beds)	Large Hospitals & Academic Medical Centers (200+ Beds)	Hospital Systems & Proprietary Chains, IDNs and ACOs
ADVISIORY BOARD	A	A	A	A
OPTUM360	A	A	A	A
ZIRMED	A	A	A	A
NAVICURE	A	A	A	B
NTHRIVE MEDASSETS	A	A	A	A
CONIFER HEALTH	B	A	B	A
CRANEWARE	B	B	B	C
CHANGE HEALTHCARE	C	B	C	B
RECONDO	B	C	B	C
MCKESSON RELAYHEALTH	C	C	B	B

KEY

A = 90%+ SATISFACTION RATING | B = 80%-90% SATISFACTION | C = 70%-80% SATISFACTION

RCM OUTSOURCING VENDOR SATISFACTION BY HOSPITAL (BED) SIZE

VALUE BASED TRANSFORMATION ACTIVITIES

Hospitals over 175 beds but less than 550 beds report highest satisfaction and ROI from legacy system RCM implementations within the past twelve months. Academic medical centers are the least satisfied with recent RCM software implementations. Complex system vendors, typically in use at large hospitals and academic medical centers over 400 beds, hospital systems, IDNs, CINs, chains, clinics and groups use more bolt-on RCM vendors with greatest satisfaction. End-to-end outsourcers nThrive, Conifer, and Optum360 ranked as the top three service vendors across all inpatient settings.

INDUSTRY EVOLUTION TO END-TO-END RCM OUTSOURCING VENDORS				
TOP TEN OFFERINGS TO ALL HOSPITAL GROUPS/SYSTEMS/NETWORKS RESPONDING				
2016 RCM OUTSOURCER	GRADING VALUE-BASED REIMBURSEMENT TRANSFORMATION CAPABILITIES			
	Small & Rural Hospitals (100 Beds or Less)	Community Hospitals (101-200Beds)	Large Hospitals & Academic Medical Centers (200+ Beds)	Hospital Systems & Proprietary Chains, IDNs and ACOs
NTHRIVE (MEDASSETS + PRECYSE)	A	A	A	A
OPTUM	A	A	A	A
CONIFER HEALTH	A	A	A	A
PARALLON BUSINESS	B	A	B	B
AVAILITY	B	A	B	A
MCKESSON RELAYHEALTH	C	A	B	A
CHANGE HEALTHCARE	B	B	C	B
ADREIMA	C	B	C	C
EXPERIAN PASSPORT	C	C	C	C
THE SSI GROUP	C	C	C	C

KEY
A = 90%+ SATISFACTION RATING | B = 80%-90% SATISFACTION | C = 70%-80% SATISFACTION

SOURCE: BLACK BOOK Q3 2016