# Mid Valley Independent Physician Association

**Electronic Medical Records Systems Selection** 

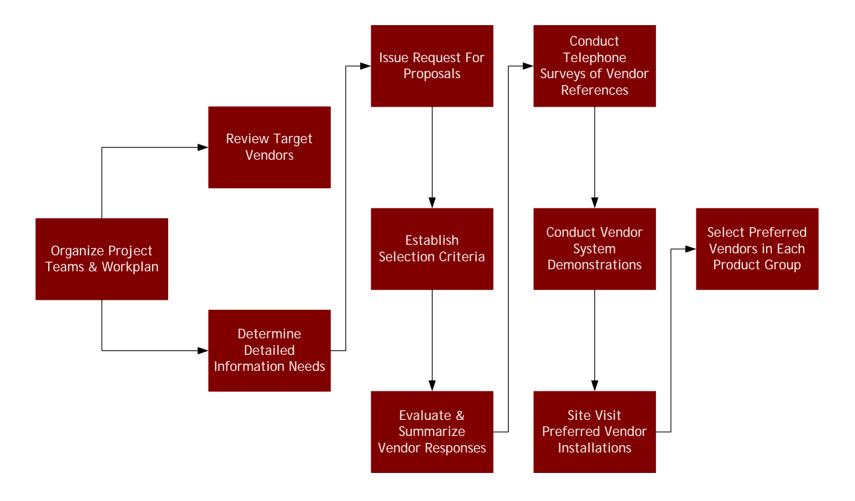
**Vendor Proposal Analysis** 

May 2004

Key Guidelines for MVIPA System Selection & Evaluation:

- Evaluate vendors' ambulatory Electronic Medical Records (EMR) systems along with other Practice Management products
- Evaluate and select three vendors on an IPA-wide basis to facilitate I/T integration and management
- Review both local and centralized systems' deployment options
- Evaluate vendors' system capabilities even though they may be acquired and installed at a later time

# Multi-phased Approach to Complete the System Selection Process



## Key Guidelines for System Selection & Evaluation:

- Minimum number of current clients (e.g., 25)
- Proposed products must have been installed a minimum of 18 months in marketplace
- Full EMR product integration (single hardware/software platforms)
- Industry standard technology architecture (Graphical User Interface, Web enabled, relational and non-proprietary data base)
- Adequate firm size and financial resources (e.g., \$50 million in annual revenue)
- Ability to support IPA-wide EMR and other functions

The RFP was sent to twelve (12) Electronic Medical Records vendors. The results of the vendor proposal evaluations are presented in this document.

- Alteer (declined to bid)
- A4
- Cerner
- Eclipsys
- Epic
- GE Medical Systems

The RFP was sent to twelve (12) Electronic Medical Records vendors. The results of the vendor proposal evaluations are presented in this document.

• IDX

- McKesson
- NextGen
- PMSI
- Siemens
- WebMD

# Vendor Proposal Evaluation Areas

Vendor Support	Technical
Capacity	Environment
Product Functional Criteria	Vendor Costs

#### Vendor Support Capacity

#### Vendor Support Capacity Vendor Organization Training **Implementation Support** Technical Maintenance/On-going **Environment** Support Product Functional **Vendor Costs** Criteria

#### Vendor Evaluation (Corporate Information)

	A4	ECLIPSYS			
CORPORATE & PRODUCT INFORMATION					
PRODUCT PROPOSED W/ VERSION	HealthMatics EMR 4.7.1	PowerChart Office 2003.02	Sunrise XA Clinical Solutions M01 Sunrise XA Ambulatory TBD		
Years on Market	8 <sup>th</sup> year, since 1996	6 <sup>th</sup> year, since 1998	Sunrise XA, 2002 Sunrise XA Ambulatory to be released 2004		
IF PRODUCT ACQUIRED, COMPANY & PRODUCT	GlaxoWelcome HealthPoint	Internally Developed	HealthVISION 1998, CareVISION		
Number of Clients (similar to MVIPA) Number of Users Provide a List of Clients (similar to MVIPA)	375. 3 reference sites listed, practices sizes not specific	97 clients installed @ 239 sites Reference sites coordinated through company	Would not provide number of clients in the proposal. Listed 4 similar sites for suggested references		
SITES INSTALLED LAST YEAR	107	"Do not track requested metric"	No Response		
Number of MD's Using System	4,814 using HeathMatics products, non specific for EMR	Do not track	No Response		
NUMBER YEARS IN BUSINESS	34 years ago as Management Systems Assoc.	24 years	7 <sup>th</sup> year as Eclipsys since 1997		
Ownership	Independently owned & operated Privately held	Publicly held	Publicly held		
IS EMR MAIN PRODUCT? (IF NO, WHAT IS?)	No. Offers a suite of software solutions for Ambulatory, a Practice Management environments	No, Offers a suite of software solutions for Acute, Ambulatory, a Practice Management environments	No. Offers the EMR as an integral part of Clinical, Financial, MIS< Access, HIM, Access Mngmnt, Pt. Financial Mgmnt, DSS		
LIST PARTNERSHIPS	Lab Corp, Quest - Labs Millbrook & Misys - PM Midmark Corp - medical devices Primetime, Clinical Ref System - Software contend	IBM, Hewlett Packard, Oracle, Cap Gemini Ernst & Young, First Consulting Group, SchlumbergerSema, Superior, Perot Systems, Ajilon Consulting, Wipro Limited, Just Associates	MicroSoft, IBM, EMC Oracle, Citirx, Sentillion, WebMD Transactions, SIS, Inc, eScription, Multum, Healthlink, VHA, Apelon, Premier		
REGIONAL OFFICE & MVIPA CONTACT	Janelle Thompson, Austin, TX	Mary Kay Beltramini, Kansas City, MO	John Burg, Sammamish, WA		
CORPORATE OFFICE	A4 Health Systems, Cary, NC	Cerner, Kansas City, MO	Eclipsys, Boca Raton, FL		
TOTAL NUMBER OF EMPLOYEES	275	4,939	1,850		
NUMBER DEDICATED TO PRODUCT PROPOSED					
FOR:	15	604	156		
Support	19	63	324		
IMPLEMENTATION & TRAINING DEVELOPMENT	13	823	415		
TOTAL REVENUES FOR COMPANY LAST YEAR TOTAL REVENUES FOR PRODUCT PROPOSED		\$809, 144,000 Not product specific	\$254,700,000 Not product specific		

#### Vendor Evaluation (Corporate Information)

	EPIC	GE MEDICAL SYSTEMS	IDX	McKESSON	
CORPORATE & PRODUCT INFORMATION					
PRODUCT PROPOSED W/ VERSION	EpicCare Ambulatory EMR 2000 MyChart Patient Web 2000 EpicWeb 2000	Centricity Physician Office EMR (Centricity EMR) 5.6	Carecast Foundation Applications 5.1	Horizon Ambulatory Care 7.5	
Years on Market	14 <sup>th</sup> year, since 1992, 5 <sup>th</sup> year, since 1999, 6 <sup>th</sup> year, since 1998	9 <sup>th</sup> year, since 1995	1981	1999	
IF PRODUCT ACQUIRED, COMPANY & PRODUCT	Internally Developed	MedicaLogic, Centricity EMR	Internally Developed	Abaton.com, Abaton	
Number of Clients (similar to MVIPA) Number of Users Provide a List of Clients (similar to MVIPA)	EpicCare >1300 sites/38 clients MyChart 8 clients, EpicWeb >1000sites/27 clients. List TBD	11,000, 750 locations, non specific to Salem & list not provided at this time	51 Clients	7 customers live, 3 in process, 1,731 contracted providers, 1,210 providers live. 5 sites listed	
SITES INSTALLED LAST YEAR	95 sites @ 6 organizations, Epic Ambulatory 49 sites @ 2 organizations MyChart 20 sites @ 1organization, EpicWeb	Approximately 65 implementations	5 clients with multiple sites. Currently 11 clients @ multiple sites in process	5	
NUMBER OF MD'S USING SYSTEM	Approx 10,000 live, expected 31,000 w/ completion of roll outs	Non specific, 20,500 clinicians	Does not maintain use information	1.2110 providers	
NUMBER YEARS IN BUSINESS	25 years	MedicaLogic, developer of Centricity, formed in 1985. GE, 110 years	Over 30 years	HIT business founded in 1969, McKesson pharmaceutical for 170 years	
Ownership	Independent	Subsidiary of GE. Public traded	Wholly owned subsidiary of IDX Corp, Publicly held	Wholly owned subsidiary of McKesson Corp, Publicly held	
IS EMR MAIN PRODUCT? (IF NO, WHAT IS?)	No, includes a wide range of enterprise software, including the EMR	No, GE Medical is leader in medical imaging, interventional procedures, healthcare services & IT	No, healthcare information systems.	No, healthcare information systems.	
LIST PARTNERSHIPS	Not Specific	Dynacare, Unilab, Quest,LavCorp, Path Labs, AthenaHealth, CASI, Cerner Compusense, Healtquest, IDX, Horizon, Med. Mgr., McKesson, Medquest, Softmed, Sunquest.	eMedicine, Menon Group, LOGICARE, SCC SoftComputer, Sentillion, LanVision,	Weblogic, Scriptx, IsoFax, AFHS Drug Monographs, First Data Bank, InfoScan Formulary DB, Clinical Ref System	
REGIONAL OFFICE & MVIPA CONTACT	Ellen White, Madison WI	Brian Bonn, Hillsboro, OR Ric Jackson, Hillsboro OR	Phil Eucker, Seattle, WA	Linda Williams, Scottsdale, AZ	
CORPORATE OFFICE IF DIFFERENT	Epic Systems, Madison, WI	GE Medical Systems, Milwaukee, WI	IDX, Burlington, VT	McKesson, San Francisco, CA	
TOTAL NUMBER OF EMPLOYEES	1,232	32,000 worldwide	2,179	25,000	
NUMBER DEDICATED TO PRODUCT PROPOSED FOR: SUPPORT, IMPLEMENTATION & TRAINING, DEVELOPMENT	104 FOR EPICCARE SYSTEM 122 266	34 24 76	604 246 217	Does not report by product, 3,327 Implementation, 1,370 Development	
TOTAL REVENUES FOR COMPANY LAST YEAR TOTAL REVENUES FOR PRODUCT PROPOSED	\$162,200,000 \$80,750,000	Non specific	\$399.2 million IDX does not report revenues by Operating Unit	Did not answer directly, referenced Annual Report	

#### Vendor Evaluation (Corporate Information)

	NEXTGEN	PMSI	SIEMANS	WEBMD		
CORPORATE& PRODUCT INFORMATION						
Product Proposed w/ Version	NextGen EMR, v3.9 NextGen EPM v3.4	Practice Partner Pt. Rec. 8.0 Practice Partner Med Billing 8.0 Practice Partner Appt Sch 8.0	Clinical Manager 2.55	Intergy		
Years on Market	Nex Gen EMR, 10 years, since 1994 Next Gen EPM, 10 years, since 1994	PP Pt. Rec, 17 <sup>th</sup> year, since 1987 PP Med Billing, 19 <sup>th</sup> year, since 1985 PP Appt Sch, 19 <sup>th</sup> year, since 1985	6 <sup>th</sup> year, since 1998	Not Provided		
IF Company Acquired, Company & Product	MicroMed, Clinitec (NextGen EPM)	N/A	NOVIUS NOVIUS Physician Enterprise Manager	Medical Manager		
NUMBER OF CLIENTS (SIMILAR TO MVIPA) NUMBER OF USERS PROVIDE A LIST OF CLIENTS (SIMILAR TO MVIPA)	EMR approx 289 EPM approx 376 List can be provided	4 sites were listed similar to MVIPA Pt. Rec 833, Med Billing - 507 Appt Sch - 744	6	List not provided, 5 ref sites listed		
Sites Installed Last Year	89	Pt. Records, Med Billing, Scheduler in various combinations, 141	2	Policy does not allow reporting statistic		
NUMBER OF MD'S USING SYSTEM	~11,000 user, MD not specific	5,000+	Does not track user information	Not specific "thousands of users"		
NUMBER YEARS IN BUSINESS	Micro Med, Clinitec, since 1993. QSI parent company, since 1976	20 (since 1983)	Siemens Medical Solutions Health Services since 1969	Since 1982		
Ownership	An operating subsidiary of Quality Systems, Inc. Publicly traded	Independently owned & operated	Publicly traded	Wholly owned subsidiary of WebMD Corporation, Publicly held		
Is EMR Main Product? (If No, What Is?)	Yes, with the EPM	No, part of a set of integrated clinical & admin tools for the medical office.	No did not answer directly, gave a global statement of company	<mark>No</mark> , Practice Management and transactions		
LIST PARTNERSHIPS	IBM, MircrSoft, Dr.Frist.com, First Data Bank, Clinical Reference     PP Research Netwk, AAFP, HL7, Brentwood MedI, WebMD Envoy, First Data Bank, MediMedia, Clinical     AT&T, Hewlett-Packard, Cisco		Systems, Computer Associates,	NCS Pearson Docuscan, Acer, Seneca Data Systems, Jones Business Systems, UnicorMed, IBM, HP, Dell, MicroSoft Gold Partner, Sonicwall, Gold Partner, Okidata, Intel, Premier Provider		
REGIONAL OFFICE & MVIPA CONTACT	Kevin Wood, Colbert, WA	Don Sickle Seattle, WA	Cheryl Oosthuizen, Bellevue, WA	Scott Sharp, Federal Way, WA		
Corporate Office if Different	NextGen HIS, Inc, Horsham, PA	Physician Micro Systems, Seattle, WA	, , , , , , , , , , , , , , , , , , ,			
TOTAL NUMBER OF EMPLOYEES	197	Approx 100	3,538 in Malvern, PA	2,200		

	A4	CERNER	ECLIPSYS		
PRODUCT & IMPLEMENTATION SUPPORT					
Is Scheduling integrated w/ the EMR on Same Platform	Yes. Part of the Practice Management Solution.	Yes	Yes		
IS BILLING INTEGRATED W/ THE EMR ON SAME PLATFORM	Yes	Yes	No		
Can Lab Results be Accessed via the EMR on Same Platform	LabCorp, Quest	Yes, Misys, SCC, Triple G, McKesson, Psyche, Meditech, Mediward Blood Bank	Yes		
Can the EMR interface w/ Practice Management Systems? If so, which ones?	Yes, but non specific which ones	Yes, Siemens Signature, IDX, GPMS, Misys, McKesson Practicare	Yes. Not specific		
NUMBER OF HOURS ALLOTTED FOR TECH SUPPORT	Non Specific	24/7, 365 days per year	24/7 for critical issues & non-critical is 8am - 8pm.		
IS TECH SUPPORT 24/7	Yes	Yes	Yes for critical issues. Non critical support is 8 am - 8 pm weekdays, except holidays		
SIZE OF SUPPORT ORG	50, w/ 15 dedicated to EMR	515	156		
ON-LINE DOCUMENTATION AVAILABLE?	Yes, imbedded & accessed from any area of program	Yes	Yes		
Implementation Support Provided as Base Acquisition Cost: # days System Implementation # days System Testing # days User Training # days Follow Up Support	ROVIDED AS BASE ST: ? Not answered as requested: 90 days   ENTATION 20 hrs/10 - 20 users 60 days   STING \$1500 30 days   NING 80 hrs/10 - 20 user 30 days		Unclear (?) 87.5 man days w/ Salem hosting / 284 man days standalone. System testing & Customer Service provided in subscription fees. Approx \$500,000 for implementation for community model. Imp. Pricing assumes Core CPR is already installed @ Salem Hospital		
Cost / Day for: User Training Implementation Support Enhancements	2 ½ day class/\$1500 per seat \$135/hour Included as part of annual Maintenance & Support	Train the Trainer & Implementation Support included as part of imp. Cost of \$525,000. Enhancement req eval by Prod. Mgmnt @ additional cost. Cost not included.	Classes range from \$500 - \$700/day per student. \$220/hr implementation support \$220/hr custom enhancements		

#### Vendor Evaluation (Implementation Support)

	EPIC	GE MEDICAL SYSTEMS	IDX	McKESSON
PRODUCT & IMPLEMENTATION SUPPORT				
IS SCHEDULING INTEGRATED W/ THE EMR	Yes, the Cadence Enterprise Scheduling application	Yes, the Centricity Physician Office Practice Management System	Yes. Carecast Scheduling is integrated in the Carecast HIS proposed	No, interfaced to Horizon Practice Plus
IS BILLING INTEGRATED W/ THE EMR	Yes, the Resolute Professional Billing application	Yes, the Centricity Physician Office Practice Management System	Yes, Groupcast	No, interfaced to Horizon Practice Plus
Can Lab Results be Accessed via the EMR	Yes, EpicLab and outside Labs	Yes, most major vendors	Yes	Yes, Cerner, CoPath, Sunquest, ADAC, Lanier, SCC Orchard, Ultra Triple G
Can the EMR I/F w/ Practice Management Systems? If so, which ones?	Yes, other that Epic's own, certain requirements exist	Yes, most major vendors	Yes, SMS Invision, Groupcast, Flowcast, APS systems, others	Yes, DISC, KMS, Med Mgr, QuadRIS, Lanier
Number of Hours allotted for Tech Support	Unlimited phone support for urgent application issues		6 - 5 PT and via phone for Critical issues	24/7 for critical issues
Is Tech Support 24/7	Yes	No, M-F, 5 am - 6 pm PST. 24/7 not without additional fees	For critical issues	Yes, Louisville, CO Ambulatory Care Support center
Size of Support Org	265	34	44	Does not publicly disclose by product, 3,327 in Imp & Support org
ON-LINE DOCUMENTATION AVAILABLE?	Yes	Yes	Yes	Yes
IMPLEMENTATION SUPPORT PROVIDED AS BASE ACQUISITION COST: # DAYS SYSTEM IMPLEMENTATION # DAYS SYSTEM TESTING # DAYS USER TRAINING # DAYS FOLLOW UP SUPPORT	Approx 442 Epic person days 21 Epic person days for testing 5 Epic person days for training 65 Epic person days for follow up support	2 1 2 1 Unclear answer, 2 <sup>nd</sup> request for clarification.	2,250 man-days Testing included in estimate above ? 90 days	Did not complete
Cost / Day for: User Training Implementation Support Enhancements	Billed per person per day @ standard rate, but did not give rate.	\$165 \$165 Part of annual support	ls not applicable to proposed solution. Does not cost on hourly basis.	Incomplete answer: Fixed fee @ \$800/person/day, \$500/person/half day Fixed fee \$174/hour implementation. Support not addressed

	NEXTGEN	PMSI	SIEMANS	WEBMD
PRODUCT & IMPLEMENTATION SUPPORT				
Is Scheduling integrated w/ the EMR on Same Platform	Yes	Part of the Product	No	Yes, with the base Intergy system
IS BILLING INTEGRATED W/ THE EMR ON SAME Platform	Yes	Part of the Product	No	Yes, with the base Intergy system
Can Lab Results be Accessed via the EMR	Yes, Cerner, Quest, SmithKline, most major	Yes, I/F to major labs	Yes	Yes, bi directional to Quest, LabCorp & others
Can the EMR I/F w/ Practice Management Systems? If so, which ones?	Yes	Yes, w/ ICX, HBOC, Med Mgr, PDS, MicroMD, others	Yes, but not specific which ones	Yes, would not list
Number of Hours allotted for Tech Support	8:30 - 5:30, Additional hours available at additional cost	M-F 6am - 5 pm PST	Not specific	8 - 5 EST & CST w/ toll free number 24/7
IS TECH SUPPORT 24/7	Not without additional charges	No. 24/7 is additional fee	Yes	Yes
Size of Support Org	25	19	131	(1540) 70% of 2,200
ON-LINE DOCUMENTATION AVAILABLE?	No. Hard copy provided. Electronic version available at extra cost	Yes, w/ online help	Yes, online help provided	For most windows in the system
Implementation Support Provided as Base Acquisition Cost: # days System Implementation # days System Testing # days User Training # days Follow Up Support	OST: 2 - 10 days 10 days   MENTATION 1 - 5 days 16 days   ESTING 5 - 35+ days 45 days   AINING 1 - 5 days 19 days		16 days 45 days	Did not complete. Approximately 4- 6 months installation time is estimated with a project manager onsite several days/week
Cost / Day for: User Training Implementation Support Enhancements	Did not complete	Onsite Training @ \$1500/day Onsite Imp Support \$1500/day Part of Support costs @ 18% of retail system costs for 24 x 7	Classroom training at customer facility is \$1500 per day.	Did not complete: "Integrity software sold w/ annual software maintenance including costs for future version releases & annual support."

#### Vendor Product Functional Evaluation



# **EMR Functional and Technical Requirements**

			A4		Cerner		Eclipsys			EPIC			GE Medical			
	Total	A	NA	ID	Α	NA	ID	Α	NA	ID	А	NA	ID	Α	NA	ID
Functional Requirement																
General (reliable,scalable,ease of use,cost)	4	0	4		4			4			4			4		
Chart Organization	36	36			32	4		35		1	36			35	1	
Documentation	24	22	2		18	4	2	21	3		21	2	1	24		
Workflow Tools	9	9			8	1		5	4		9			9		
Reporting	11	11			11			10	1		9	2		10	1	
TOTAL	84	78	6		73	9	2	75	8	1	79	4	1	82	2	
Technical Requirement																
Data Base Management	7	5	2		7			7			4	3		7		
Systems Operating & Network Communications	21	15	6		18	3		21			19	2		18	3	
Systems Customization Tools	9	5	4		8	1		9			8	1		9		
Ad-Hoc Reporting	23	20	3		22	1		23			23			15	8	
Security	25	12	13		25			24	1		24	1		24	1	
Other System Requirements	22	11	11		21	1		21	1		22			13	9	
Disaster Recovery	2	2			2			2			2			1	1	
TOTAL	109	70	39		103	6		107	2		102	7		87	22	

#### <u>LEGEND</u>

A = AVAILABLE, NA = NOT AVAILABLE, ID = IN DEVELOPMENT

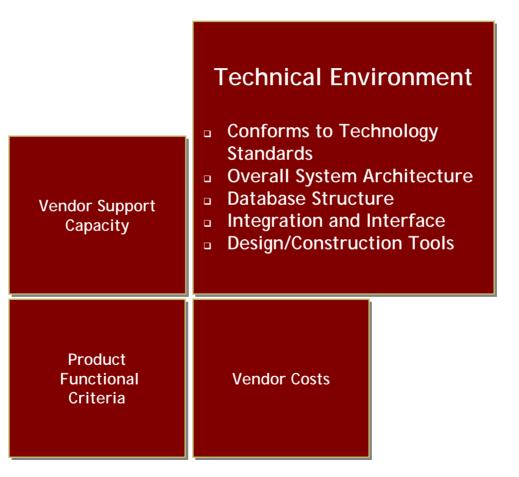
# **EMR Functional and Technical Requirements**

			IDX		Mc	Kes	son	Ne	extG	en		PMS	I	Si	eme	ns	w	ebM	D
	Total	Α	NA	ID	Α	NA	ID	Α	NA	ID	Α	NA	ID	Α	NA	ID	Α	NA	ID
Functional Requirement																			
General (reliable,scalable,ease of use,cost)	4	4			4			0	4		4			4			4		
Chart Organization	36	35	1		33	1	2	36			35	1		29	7		32	4	
Documentation	24	16	8		15	2	7	24			24			18	6		17	7	
Workflow Tools	9	8	1		7		2	9			9			8	1		9		
Reporting	11	9	2		8	3		11			11			3	8		9	2	
TOTAL	84	72	12		67	6	11	80	4		83	1		62	22		71	13	
Technical Requirements																			
Data Base Management	7	7			5	2		7			7			4	3		6	1	
Systems Operating & Network Comm	21	20	1		15	6		21			19	2		18	3		18	3	
Systems Customization Tools	9	9			5	4		9			7	2		8	1		9		
Ad-Hoc Reporting	23	22	1		22			23			14	9		18	5		21	2	
Security	25	23	2		18	7		25			22	3		25			21	4	
Other System Requirements	22	15	5	2	11	11		22			13	9		22			9	13	
Disaster Recovery	2	2			1	1		2			2	0		2			2		
TOTAL	109	98	9	2	78	31		109			84	25		97	12		86	23	

#### LEGEND

A = AVAILABLE, NA = NOT AVAILABLE, ID = IN DEVELOPMENT

#### Vendor Technical Environment



**Technical Environment** 

	Α4	CERNER	ECLIPSYS	EPIC
TECHNOLOGY				
Hardware Platform	Dell Poweredge 1600 SC Server	Compaq or IBM servers	Intel Pentium servers	IBM pSeries, Sun, HP 9000, HP Integrity, & HP AlphaServer
Database vendor for proposed products. More than one DBMS for other Practice Mgmt Applications?	Oracle, Clinical & Financial App's reside on one DBMS	Oracle, Clinical & Financial App's reside on one DBMS.	SQL Server 2000 Practice Mgmt DBMS Unknown.	Cache-based RDMS, Clinical & Financial App's reside on one DBMS.
Network Protocol	TCP/IP	TCP/IP	TCP/IP	TCP/IP preferred, FTP, LU6.2, MQ Series supported
Server Operating System	Windows 2000 for Server	IBM AIX for Server	Microsoft 2000 Server for EMR IBM AIX for Scheduling & Billing applications.	Unix based, HP-UX, AIX, Tru64, Solaris, RedHat, Win2003.
Programming Language	Delphi, C+ & XML	Visual Basic& C++	Visual Studio .Net & C++	Visual Basic, C++ & Cache's ObjectScript
Client Server Architecture	Yes	Yes	Yes	Yes
LAN/WAN requirements - vendors supported	Any config compatible with Windows and Oracle. LAN to WAN support over wired/wireless Ethernet using TCP/IP protocol.	Any LAN/WAN solution that supports TCP/IP protocol.	Servers must have a 100- Mbps or faster NIC Clients must have a 10- Mbps or faster NIC WAN supported	Standard Ethernet LANs switched 100Mb or 1GB Ethernet. Requires use of TCP/IP protocol.
Capabilities & Restrictions - level of data integration inherent to the system & to other applications.	Full integration of systems, which communicate w/out interfaces.	Full integration of systems, which communicate w/out interfaces.	EMR is not integrated with Eclipsys Practice Mgmt products.	Full integration of systems, which communicate w/out interfaces.
Client PC requirements - recommended for quick response time - not minimum configuration	Unclear – future assessment needed.	Minimum: PIII 600 128MB 1GB free HD 1024x768res Winsock 1.1 TCP/IP protocol stack	Minimum: PIII 1-GHz 256MB RAM 1.5GB free HD 10Mbps for wired 802.11b for wireless WIN2000 SP2 or later	Minimum: PIII 733 128MB Recommend: P4 2.4 512MB

	A4	CERNER	ECLIPSYS	EPIC
Internet Browser requirements -if a web based application	IE 6.0+	IIS, IE 6+	IE 6.0+	IIS Web server, IE 6+ for clients
User defined report capabilities - Report Writer used	Reporting Module generates reports based on user-defined criteria. No ability for users to customize layout of screens & reports.	Customized reports using proprietary Discern Explorer product, created by user, or by Cerner at additional cost.	SunriseXA bundled with Crystal Reports.	Clarity/Analyst Enterprise Reporting System, and SQL Report Writer/ODBC Access Data queried on separate server at any time.
Encryption / Security	Typical Windows Server level security.	Typical Windows Data field level security.	SunriseXA: SSL encryption capable.	Typical Windows Server level security.
Proposed hardware/ system/ concurrent user configuration Scalability or limitations	User limit based on hardware config.	Oracle provides concurrency control. Proposed system assumes a 3% growth over 5 years for both hardware and data retention.	No limits, depending on hardware config. Implemented Sizing is based on concurrent users for 3 years and allows for growth at a rate of 15% per year.	Unlimited online data retention capabilities. Scalability depends on hardware config.
Data import and export tools	Out-of-the-box Reporting Module exports only to various file formats.	s Import/export via HL7 interface. Via supported HL7 interface. SunriseXA incorporates Crystal Reports for all report writing capability.		Wide range of import/export options and interfacing using SQL, Analyst Transport Data, Excel, etc.
Fail-Safe data Storage method supported by tech infrastructure i.e. redundancy, mirroring	VPN-based backups to off-site location w/ ASP to provide remote access to your data and application in event of local failure.	Competent/Proactive DBA, Mirrored disk farm, Clustering, Oracle Parallel Server, Oracle Hot Standby.	Use Microsoft Cluster services for failover/redundancy on the master database.	Disk mirroring, redundant network controllers/power supplies, 24x7 availability.
Screen customization capabilities and products used	Limited direct user system customization support tools.	Screen customization is available using Cerner's Discern Explorer.	SunriseXA's GUI is stationary, but allows user customization.	Variety of methods that do not require custom programming.

	GE	IDX	MCKESSON	NEXTGEN
TECHNOLOGY				
Hardware Platform	Intel Pentium Based Servers	HP NonStop S7600 parallel servers (formerly Tandem). Assumes Salem Hospital hosted using Carecast product).	Horizon Ambulatory Care supports both IBM and HP Unix servers for Oracle. The Web applications servers operate on IBM servers running Linux.	IBM Xseries 4 Processor CPU
Database vendor for proposed products. More than one DBMS for other Practice Mgmt Applications?	Oracle for EMR, Practice Mgmt DBMS Unknown.	HP NonStop SQL DBMS	Oracle	MS SQL Server
Network Protocol	TCP/IP	TCP/IP	TCP/IP	TCP/IP
Server Operating System	Win2000 Server or NT	HP Non-Stop Kernel OS	HP-UX version 11.0 or IBM AIX Version 4.3.2	MS Win 2000 or XP
Programming Language	No Response	Cobol	Java	No Response
Client Server Architecture	Yes	Yes	Yes	Yes
LAN/WAN requirements - vendors supported (	LAN to WAN supported	Recommend: Ethernet 100Mbps	802.3, 802.5, 802.11 (LAN) or a high speed WAN connection	Ethernet or other
Capabilities & Restrictions - level of data integration inherent to the system & to other applications.	EMR is not integrated with GE's Practice Mgmt or Hospital IT products.	Assumes use of Carecast Hospital based products. Did not propose Ambulatory EMR. IDX offers Practice Mgmt systems (Groupcast and Flowcast, on separate HW/SW platforms.	EMR is not integrated with McKesson's Practice Mgmt ( Practice Plus) or Hospital IT products.	Clinical and financial modules appear to be fully integrated. NextGen does not offer an HIS product.
Client PC requirements - recommended for quick response time - not minimum configuration	PII 233+ MHz 128MB RAM 4GB+ HD NT/2000/XP IE 5.5 (SP2)	Recommend: 1 GHz + 256MB Win2000/XP Winsock 1.1	PIII 700+ 256MB RAM Win 2000/XP .Net 1.1 IE 6 WMPlayer 9	Thin or fat PC client configurableDid not specify workstation requirements.

	GE	IDX	MCKESSON	NEXTGEN
Internet Browser requirements -if a web based application	Unclear	Carecast is Web-based Recommend: I.E. 6.0	MS .Net Framework and IE 6	Can operate as "web- enabled" application utilizing IE 4.X+ and/or Netscape 4.X
User defined report capabilities - Report Writer used	Crystal Reports or other SQL product	Carecast Reporting Engine	Proprietary ad hoc reporting tool, Clinical Query.	Reports are user-definable via Crystal Reports
Encryption / Security	Windows server level security.	Windows server level security	Windows server level security. 128bit over public Internet	Windows server level security
Proposed hardware/ system/ concurrent user configuration Scalability or limitations	No limit to concurrent users.	No restriction to Carecast database size. Very scaleable system.	Config. of multiple CPUs.	No concurrent user limit.
Data import and export tools	LinkLogic a proprietary data exchange engine, supports HL7 and ASTM.	Carecast: extracts data from Carecast into Windows SQL Server database.	Data Imported into Horizon Ambulatory Care.	Import/export to any system that accepts a direct interface or defined data using a national standard protocol.
Fail-Safe data Storage method supported by tech infrastructure i.e. redundancy, mirroring	Recommend the use of RAID0+1 disk subsystems	NonStop Kernel OS and Carecast apps provide full backup and recovery with no scheduled downtime.	Multiple CPU web- arrays provide redundancy.	Recommended hardware supports hot swapping of drives.
Screen customization capabilities and products used	End-user's may customize encounter forms, letter templates, protocols, patient handouts, and user preferences (screen views).	Screen Builder utility: tailor screens to contain desired data items, specify required fields, display only fields and screen input edits.	Does not allow customization of front end screens by user.	NextGen's tool kit permit a high degree of configurability.

	PMSI	SIEMENS	WEBMD
Technology			
Server Hardware Platform	Intel Dual Pentium based Servers.	IBM Netfinity 5100 (2) for DB server, and Training server. IBM xSeries 330 Server for Terminal server.	Intel Dual PC Servers for less than 150 users IBM 6000 mid frame Server for greater than 150 users
Database vendor for proposed products. More than one database? (Q 3)	MS SQL Server or Oracle, Clinical & Financial App's reside on one DBMS.	MS SQL Server for EMR, Practice Mgmt DBMS Unknown.	Intergy- is WebMD's proprietary database. However, it is ODBC and SQL compliant.
Network Protocol	TCP/IP	TCP/IP	TCP/IP
Server Operating System	Windows 2000 or 2003 Server or Advanced Server	Windows NT or 2000 Server	IBM 6000 based server operates under AIX for large configuration. Smaller environment requires 2000 Server.
Programming Language	C/C++ & Visual Basic	C, C++ & Visual Basic	No Response
Client Server Architecture	Yes	Yes	Yes
LAN/WAN requirements - vendors supported	LAN extends to WAN over Ethernet 802.11b/802.11g only Switches not hubs	LAN extends to WAN	LAN/WAN is through standard protocols and utilizes the Network OS
Capabilities & Restrictions - level of data integration inherent to the system & to other applications.	Clinical and financial modules appear to be fully integrated. PMSI does not offer an HIS product.	EMR is not integrated with Siemens' Practice Mgmt (Signature) or Hospital IT products. Do not offer a Patient Scheduling system.	Clinical and financial modules appear to be fully integrated. WebMD does not offer an HIS product.
Client PC requirements - recommended for quick response time - not minimum configuration	Supports thin client configurations with Citrix MetaFrame or PC workstation with Windows XP or 2000 Pro	Supports thin client with Citrix or PC workstation with Windows XP or 2000 Pro.	PIII 600+ fat PC workstations or Thin clients workstations using Citrix

	PMSI	SIEMENS	WEBMD
Internet Browser requirements -if a web based application	IE 5.5+=	Windows 2000 on workstation	Web browser access not available.
User defined report capabilities - Report Writer used	Practice Partner is ODBC compliant, allows IT staff and end users to directly query the database to create custom reports using third-party tools.	Crystal Reports and/or MS Access utilizing SQL Data-Dictionary	Proprietary InfoPOINT ad hoc Report Writer is available. Capabilities unknown.
Encryption / Security	Typical Windows Server level security.	All but field level security.	Unclear, role based security controls.
Proposed hardware/ system/ concurrent user configuration Scalability or limitations	No concurrent user access limit.	Servers fully scaleable/expandable.	Servers fully scaleable/expandable.
Data import and export tools	Generic data loader for importing data. Exporting data: internal report writer can export virtually any aspect of the EMR.	Data can be exported to Excel or other MS based applications.	Medical Manager® software for outbound and inbound data exchange (HL7 interface).
Fail-Safe data Storage method supported by tech infrastructure i.e. redundancy, mirroring	Redundant disk storage (RAID 5), tape backup, and a hot spare fileserver.	Hot-swap or backup server, drive redundancy in RAID configuration.	Hot-swap or backup server, drive redundancy in RAID configuration.
Screen customization capabilities and products used	End user system customization is done within Practice Partner Patient Records using proprietary tools.	End users can not modify screens or database but can customize reports and output forms.	Highly end user customizable.

#### Vendor Costs



#### EMR Vendor One-time Costs - Un-normalized

EMR One-Time Costs	A 4	Cerner	Eclipsys	Epic	GE	McKesson	NextGen	PMSI	Siemens	WebMD
Single User Unit Price	\$8,000	NP	\$1,200	NP	\$8,931	\$6,149	\$8,312	\$1,800	\$2,500	\$22,000
5 Physician EMR - All SW	\$40,000				\$44,655	\$30,746	\$41,564	\$9,000		\$64,375
Installation/training	\$25,000				NP	\$39,544	\$56,810	\$13,500		\$15,000
HW/OS/DBMS	NP				NP	\$48,615	\$73,683	NP		\$15,152
5U Total	\$65,000				\$44,655	\$118,905	\$172,057	\$22,500		\$94,527
10 Physician EMR - All SW	\$80,000				\$89,310	\$61,490	\$83,120	\$18,000		\$115,875
Installation/training	\$30,000				NP	NP	NP	NP		\$18,000
HW/OS/DBMS	NP				NP	NP	NP	NP		\$17,357
10U Total	\$110,000				\$89,310	\$61,490	\$83,120	\$18,000		\$151,232
20 Physician EMR - All SW	\$160,000				\$178,620	\$132,360	\$166,240	\$36,000		\$223,875
Installation/training	\$40,000				NP	NP	NP	NP		\$28,000
HW/OS/DBMS	NP				NP	NP	NP	NP		\$19,399
20U EMR	\$200,000				\$178,620	\$132,360	\$166,240	\$36,000		\$271,274
30 Physician EMR - All SW	\$240,000				\$242,731	\$185,480	\$249,360	\$54,000	\$75,000	\$316,675
Installation/training	\$47,000				NP	\$63,560	NP	NP	NP	\$33,000
HW/OS/DBMS	NP				NP	\$71,268	NP	NP	NP	\$24,742
30U Total	\$287,000				\$242,731	\$320,308	\$249,360	\$54,000	\$75,000	\$374,417
100 Physician EMR - All SW	\$800,000		\$120,000		\$762,892	NP	\$831,200	\$180,000	\$150,000	\$1,045,750
Installation/training	\$50,000		\$154,000		NP	NP	NP	NP	NP	\$88,000
HW/OS/DBMS	NP		NP		NP	NP	NP	NP	NP	NP
100U Total	\$850,000		\$274,000		\$762,892		\$831,200	\$180,000	\$150,000	\$1,133,750
482 MVIPA Hosted EMR - SW	\$3,947,580	\$2,330,085	\$396,000	\$1,482,900	\$3,804,942	\$1,279,826	\$4,006,800	\$867,600	\$723,000	\$5,040,756
Installation/training	\$240,000	\$691,507	\$500,000	\$635,000	NP	\$254,241	\$623,960	NP	NP	\$424,160
HW/OS/DBMS	\$115,500	\$919,162	\$882,613	\$822,757	NP	\$353,826	\$1,471,232	NP	NP	NP
482U MVIPA Hosted Total	\$4,303,080	\$3,940,754	\$1,778,613	\$2,940,657	\$3,804,942	\$1,887,893	\$6,101,992	\$867,600	\$723,000	\$5,464,916

#### EMR Vendor Recurring Costs - Un-normalized

EMR Recurring Costs	A 4	Cerner	Eclipsys	Epic	GE	McKesson	NextGen	PMSI	Siemens	WebMD
5 -SW Maint or Subscript Fees	\$19,340				\$16,883		\$7,481	\$5,060		\$14,165
5 - HW & System SW Maint.	\$375				NP		\$11,592	NP		\$3,422
5U Total	\$19,715				\$16,883		\$19,073	\$5,060		\$17,587
10 -SW Maint or Subscript Fees	\$38,680				\$33,766		\$14,961	\$10,120		\$25,490
10 - HW & System SW Maint.	\$3,750				NP		NP	NP		\$3,918
10U Total	\$42,430				\$33,766		\$14,961	\$10,120		\$29,408
20 -SW Maint or Subscript Fees	\$32,000				\$67,533		\$29,923	\$20,240		\$49,260
20 - HW & System SW Maint.	\$7,500				NP		NP	NP		\$4,339
20U Total	\$39,500				\$67,533		\$29,923	\$20,240		\$53,599
30 -SW Maint or Subscript Fees	\$77,360				\$101,280	\$41,508	\$44,884	\$30,360	\$16,500	\$69,720
30 -HW & System SW Maint.	\$11,250				NP	\$22,147	NP	NP	NP	\$5,855
30U Total	\$88,610				\$101,280	\$63,655	\$44,884	\$30,360	\$16,500	\$75,575
100 -SW Maint or Subscript	\$386,800		\$120,000		\$337,888	NP	\$149,616	\$101,200	\$55,000	\$230,100
100 -HW & System SW Maint.	\$37,500		NP		NP	NP	NP	NP	NP	NP
100U Total	\$424,300		\$120,000		\$337,888	\$0	\$149,616	\$101,200	\$55,000	\$230,100
482U SW Maint. &/or Subscript	\$757,700	\$496,980	\$396,000	\$354,996	\$1,627,232	\$210,211	\$721,224	\$487,784	\$265,100	\$1,109,082
482U HW & System SW Maint.	\$180,750	\$133,932	NP	\$131,103	NP	\$158,230	\$250,452	NP	NP	NP
MVIPA ASP Model 482U Total	\$938,450	\$630,912	\$396,000	\$486,099	\$1,627,232	\$368,441	\$971,676	\$487,784	\$265,100	\$1,109,082

#### EMR Vendor One-time Costs - Normalized

EMR One-Time Costs	A 4	Cerner	Eclipsys	Epic	GE	McKesson	NextGen	PMSI	Siemens	WebMD
Unit Price Single User	\$8,000	NB	\$1,200	NP	\$8,931	\$6,149	\$8,000	\$1,800	\$3,000	\$22,000
5 Physician EMR - All SW	\$40,000				\$44,655	\$30,746	\$41,564	\$9,000		\$64,375
Installation/training	\$25,000				\$40,000	\$39,544	\$56,810	\$13,500		\$15,000
HW/OS/DBMS	\$30,000				\$30,000	\$48,615	\$73,683	\$30,000		\$15,152
5U Total	\$95,000				\$114,655	\$118,905	\$172,057	\$52,500		\$94,527
10 Physician EMR - All SW	\$80,000				\$89,310	\$61,490	\$83,120	\$18,000		\$115,875
Installation/training	\$30,000				\$50,000	\$50,000	\$50,000	\$50,000		\$18,000
HW/OS/DBMS	\$40,000				\$40,000	\$35,634	\$80,000	\$40,000		\$17,357
10U Total	\$150,000				\$179,310		\$213,120	\$108,000		\$151,232
20 Physician EMR - All SW	\$160,000				\$178,620	\$122,980	\$166,240	\$36,000		\$223,875
Installation/training	\$40,000				\$70,000	\$70,000	\$70,000	\$70,000		\$28,000
HW/OS/DBMS	\$60,000				\$60,000	\$60,000	\$80,000	\$60,000		\$19,399
20U EMR	\$260,000				\$308,620	\$252,980	\$316,240	\$166,000		\$271,274
30 Physician EMR - All SW	\$240,000				\$242,731	\$185,480	\$249,360	\$54,000	\$75,000	\$316,675
Installation/training	\$47,000				\$80,000	\$63,560	\$80,000	\$80,000	\$80,000	\$33,000
HW/OS/DBMS	\$80,000				\$80,000	\$71,268	\$100,000	\$80,000	\$80,000	\$24,742
30U Total	\$367,000				\$402,731	\$320,308	\$429,360	\$214,000	\$235,000	\$374,417
100 Physician EMR - All SW	\$800,000		\$120,000		\$762,892	\$661,802	\$831,200	\$180,000	\$150,000	\$1,045,750
Installation/training	\$50,000		\$154,000		\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$88,000
HW/OS/DBMS	\$200,000		\$200,000		\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
100U Total	\$1,050,000		\$474,000		\$1,112,892	\$1,011,802	\$1,181,200	\$530,000	\$500,000	\$1,333,750
482 MVIPA Hosted EMR - SW	\$3,947,580	\$2,330,085	\$396,000	\$1,482,900	\$3,804,942	\$1,246,041	\$4,006,800	\$737,460	\$723,000	\$5,040,756
Installation/training	\$240,000	\$691,507	\$500,000	\$635,000	\$500,000	\$254,241	\$623,960	\$500,000	\$500,000	\$424,160
HW/OS/DBMS	\$691,298	\$919,162	\$882,613	\$822,757	\$800,000	\$285,070	\$1,471,232	\$800,000	\$800,000	\$800,000
482U MV IPA Hosted Total	\$4,878,878	\$3,940,754	\$1,778,613	\$2,940,657	\$5,104,942	\$1,785,352	\$6,101,992	\$2,037,460	\$2,023,000	\$6,264,916

#### **EMR Vendor Annual Recurring Costs - Normalized**

EMR Recurring Costs	A4	Cerner	Eclipsys	Epic	GE	McKesson	NextGen	PMSI	Siemens	WebMD
5 -SW Maint or Subscript Fees	\$19,340				\$16,883	\$10,000	\$12,470	\$5,060		\$14,165
5 - HW & Sys SW Maint.	\$375				\$10,000	\$10,000	\$11,592	\$10,000		\$3,422
5U Total	\$19,715				\$26,883	\$20,000	\$24,062	\$15,060		\$17,587
10 -SW Maint or Subscript Fees	\$38,680				\$33,766	\$20,000	\$31,340	\$10,120		\$25,490
10 - HW & Sys SW Maint.	\$3,750				\$10,000	\$10,000	\$12,351	\$10,000		\$3,918
10U Total	\$42,430				\$43,766	\$30,000	\$43,691	\$20,120		\$29,408
20 -SW Maint or Subscript Fees	\$77,360				\$67,533	\$60,000	\$39,080	\$20,240		\$49,260
20 - HW & Sys SW Maint.	\$7,500				\$15,000	\$15,000	\$14,676	\$15,000		\$4,339
20U Total	\$84,860				\$82,533	\$75,000	\$53,756	\$35,240		\$53,599
30 -SW Maint or Subscript Fees	\$116,040				\$101,280	\$73,355	\$56,820	\$30,360	\$16,500	\$69,720
30 -HW & System SW Maint.	\$11,250				\$20,000	\$19,508	\$26,717	\$20,000	\$20,000	\$5,855
30U Total	\$127,290				\$121,280	\$92,863	\$83,537	\$50,360	\$36,500	\$75,575
100 -SW Maint or Subscript	\$386,800		\$120,000		\$337,888	\$200,000	\$181,600	\$101,200	\$55,000	\$230,100
100 -HW & Sys SW Maint.	\$37,500		\$50,000		\$50,000	\$50,000	\$48,988	\$50,000	\$50,000	\$50,000
100U Total	\$424,300		\$170,000		\$387,888	\$250,000	\$230,588	\$151,200	\$105,000	\$280,100
482U SW Maint.	\$757,700	\$496,980	\$396,000	\$354,996	\$1,627,232	\$210,211	\$1,214,648	\$487,784	\$265,100	\$230,066
482U HW & System SW Maint.	\$180,750	\$133,932	\$100,000	\$131,103	\$100,000	\$158,230	\$228,041	\$100,000	\$100,000	\$100,000
MVIPA ASP Model 482U Total	\$938,450	\$630,912	\$496,000	\$486,099	\$1,727,232	\$368,441	\$1,442,689	\$587,784	\$365,100	\$330,066

## EMR Vendor Five (5) Year Total Investment

Five (5) Yr Total Investment	A 4	Cerner	Eclipsys	Epic	GE	McKesson	NextGen	PMSI	Siemens	WebMD
5 - One-time Costs	\$95,000				\$131,131	\$118,905	\$172,057	\$52,500		\$94,527
5 - Annual Recurring Fees	\$19,340				\$26,883	\$20,000	\$24,062	\$15,060		\$17,587
5U Total 5 Yr Investment	\$191,700				\$265,546	\$218,905	\$292,367	\$127,800		\$182,462
10 - One-time Costs	\$150,000				\$162,655	\$147,124	\$213,120	\$108,000		\$151,232
10 - Annual Recurring Fees	\$42,430				\$43,766	\$30,000	\$43,691	\$20,120		\$29,408
10U Total 5 Yr Investment	\$362,150				\$381,485	\$297,124	\$431,575	\$208,600		\$298,272
20 - One-time Costs	\$260,000				\$295,189	\$252,980	\$316,240	\$166,000		\$271,274
20 - Annual Recurring Fees	\$84,860				\$82,533	\$75,000	\$53,756	\$35,240		\$53,599
20U Total 5 Yr Investment	\$684,300				\$707,854	\$627,980	\$585,020	\$342,200		\$539,269
30 - One-time Costs	\$367,000				\$397,819	\$330,308	\$429,360	\$214,000	\$235,000	\$374,417
30 - Annual Recurring Fees	\$127,290				\$121,280	\$92,863	\$83,537	\$50,360	\$36,500	\$75,575
30U Total 5 Yr Investment	\$1,003,450				\$1,004,219	\$794,623	\$847,045	\$465,800	\$417,500	\$752,292
100 - One-time Costs	\$1,050,000		\$416,535		\$1,156,887	\$1,011,802	\$1,181,200	\$530,000	\$500,000	\$1,333,750
100 - Annual Recurring Fees	\$424,300		\$168,988		\$387,888	\$250,000	\$230,588	\$151,200	\$105,000	\$280,100
100U Total 5 Yr Investment	\$3,171,500				\$3,096,327	\$2,261,802	\$2,334,140	\$1,286,000	\$1,025,000	\$2,734,250
482 - One-time Costs	\$4,878,878	\$3,940,754	\$1,778,613	\$2,940,657	\$4,844,392	\$1,785,352	\$6,101,992	\$2,037,460	\$2,023,000	\$6,264,916
482 - Annual Recurring Fees	\$873,800	\$630,912	\$496,000	\$486,099	\$1,727,232	\$368,441	\$1,442,689	\$587,784	\$365,100	\$330,066
482U Total 5 Yr Investment	\$9,247,878	\$7,095,314	\$4,258,613	\$5,371,152	\$13,480,552	\$3,627,557	\$13,315,437	\$4,976,380	\$3,848,500	\$7,915,246

Annual Recurring fees include SW,/HW maintenance & Subscription fees.

Fees are paid within the same year that the product is purchased and then every year there after.

#### **EMR Vendor Costs -Assumptions and Notes**

>Alteer retracted bid - no longer selling in Oregon

- ► IDX No Pricing Provided. Assumes use of HIS
- >Application Interface price per installation average one-time cost: \$42000
- Conversion price per installation average reported cost: \$20750

>Other software modules were not included - very few reported

- ➢Practice Management SW included in GE only
- >Medispan (3P) per user one-time price average cost: \$195
- >Document Imaging SW per user average one-time cost: \$3300
- ≻Cerner bid MVIPA site license only
- ≻Eclipsys does not sell local office solution
- >Eclipsys assumes CPR running at Salem and this is adjunct
- ≻Epic SW price does not include "Per Use" Fees
- ≻Epic server HW maintenance TBD
- ≻GE No HW costs provided
- >McKesson not a fit under 25 physician practice
- >NextGen 482 EMR \$ includes a \$150K site license 18% maintenance fee applies
- >NextGen local EMR \$ includes \$20K site license 18% maintenance fee applies
- ▶ PMSI did not provide server hardware price
- ▶ PMSI assume SQL not B tree DBMS
- >Siemens HW quoted for ASP only not local install, no conversion quoted
- Siemens SW pricing includes dashboard
- >WebMD RISC 6000 server > 150 users; <150 Win 2000 server
- >All maintenance and subscription fees start year one. In first 5 yrs maintenance/sub fees paid 5 x

# SYSTEM SELECTION NEXT STEPS

- Select Finalist Vendors
- Notify Vendors of Finalist Decisions
- Send Completed Test Scripts
- Conduct On-Site System Demonstrations with Finalists
- Select Final Vendors
- Perform Reference Checks on Finalist Vendors
- Visit Client Sites (Finalist Vendors)
- Finalize Negotiations with Preferred Vendor
- Begin Implementation Planning