



Product Profile

Healthscreen Solutions Inc.	
Component	Name & Version
CMS Application	HS Practice
User Interface	Microsoft Windows
Database Management System	Advantage Database by Extended Systems
Server Operating System	Microsoft Windows Server/Professional
Other Required Software Components	First DataBank drug database
Other Required Environment and Support Components	Scanner
	Health Card reader
	Training
	Support

for CMS Local Solution Specification Version 1

Version Date: October 30, 2003

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1. PURPOSE OF THIS DOCUMENT

The purpose of this document is to provide physicians with a profile of this vendor's offering which has been certified against a set of baseline requirements documented as the CMS Local Solution Specification Version 1. The vendor's offering is a combination of their Clinical Management System application(s), server operating system, user interface and database management system.

To receive certification, a vendor must have:

1. Signed the Vendor Representations and Warranties
2. Demonstrated that its offering contains all mandatory requirements and a minimum percent of the weighted requirements of the CMS Local Solution Specification, including a minimum of one interface to a community laboratory and an EDT interface to MOHLTC.

This profile describes this vendor's offering at the point of time of certification and:

- should only be used to understand if specific functionality requested in the Specification does or does not exist in the offering
- refers only to the specified version numbers of the various components of the offering
- does not measure or evaluate overall quality, performance or usability

Physicians are encouraged to contact the vendor directly for any clarifications.

2. DISCLAIMER

Certification of a CMS Local Solution does not constitute a warranty or other assurance that the offering is suitable for all physician groups, that it will perform in all physicians' offices, or that it is considered usable (works in a way as to be effective for an individual) by all physicians. In addition, the offerings have not been system tested (tested to confirm that there are no system errors) by the Validation Authority; it is a vendor's responsibility to ensure their offering contains no system bugs. Neither the OMAeS nor any of its affiliates are responsible for any damages or other losses suffered from the use of a CMS Local Solution.

3. HOW TO READ THIS DOCUMENT

Vendors were requested to respond to the CMS Local Solution baseline requirements in a variety of formats depending on what best suited the requirement. These formats are explained in this section.

3.1. Profile Format

Column Heading	Explanation
Profile Question	This question forms part of the Product Profile for physician information, but was not used by the Validation Authority for certification.
Vendor's Response	The Vendor's Authorized Representative was required to certify that the answer is accurate by signing the Representations and Warranties document. The Validation Authority did not validate the response. The response was published "as is".

3.2. Requirement Format

Column Heading	Explanation	
Requirement	This question forms part of the Product Profile for physician information, AND was also used by the Validation Authority for certification.	
Guidelines	These provide examples of ways in which a requirement can be met or conditions under which the requirement would not be met and have been included to assist in understanding the requirement.	
Weight	M	This was a mandatory requirement for certification.
	W	This was a weighted requirement. Each requirement was either met or failed. Partial points were not awarded for a requirement.
Y/N	<p>A 'Y' (Yes) indicates that the Vendor's product meets the stated requirement.</p> <p>A 'N' (No) indicates that the stated requirement was not met or demonstrated to the Validation Authority.</p> <p>To be certified, a vendor was required to meet all mandatories and a minimum percentage of 'weighted' requirements.</p>	

3.3. Service Level and Implementation Format

Column Heading	Explanation
Profile Question	This question forms part of the Product Profile for physician information, but was not used by the Validation Authority for certification.
Included Or Optional / For a Fee Or Not Available	An "X" in one of the three columns indicates if this support item is standard, optional or unavailable.
Vendor's Response	<p>An additional response was not required in this section. The vendor was given the option to add additional explanation to assist physicians in understanding their service level and implementation support.</p> <p>The Validation Authority did not validate the response. The response was published "as is".</p>

4. TERMINOLOGY

CDR	Core Data Repository
CDS/EmHR	Core Data Set/ Emergency Health Record
CML	Canadian Medical Laboratories
CMS	Clinical Management System
CPP	Cumulative Patient Profile
CPSO	College of Physicians and Surgeons of Ontario
DBMS	Database Management System
DOB	Date of Birth
EMR	Electronic Medical Record
FFS	Fee For Service
FHN	Family Health Network
HVAC	Heating, Ventilation and Air-conditioning
MOHLTC	Ministry of Health and Long-Term Care
OBEC	Overnight Batch Eligibility Checking
OHIP	Ontario Health Insurance Plan
OHN	Ontario Health Number
OLIS	Ontario Laboratory Information System
PCRG	Primary Care Reform Group
PDA	Personal Digital Assistant
PMS	Practice Management System
SSHA	Smart Systems for Health Agency
UPS	Uninterrupted Power Supply
VPN	Virtual Private Network
WEP	Wired Equivalent Privacy
WSIB	Workplace Safety and Insurance Board

5. PROFILE

5.1. GENERAL INFORMATION

Each mandatory and weighted requirement in the CMS Local Solution Specification was evaluated separately.

5.2. VENDOR AND PRODUCT REQUIREMENTS

5.2.1. Vendor Information

Profile Requirements	Vendor's Response
a) What type of business are you? (e.g. public company, sole proprietorship, partnership, etc.)	Healthscreen Solutions Inc is a publicly traded company on the TSX venture exchange (MDU).
b) In what year did you start business in the Health Information Technology industry?	1990
c) In what year did you start to sell the Practice Management (PMS) component of your CMS offering? In what year did you start to sell the Electronic Medical Record (EMR) component of your CMS offering?	Practice Management component- 1995 Electronic Medical Record- 1995
d) How many full time equivalent staff do you currently employ?	16
e) How many full time equivalent staff currently sell your product?	6
f) How many full time equivalent staff are currently dedicated to supporting (e.g. contact centre, training, maintenance) your product?	5
g) How many full time equivalent staff are currently dedicated to product development or enhancement?	3

Profile Requirements	Vendor's Response
h) How many physicians worldwide currently use (e.g. chartless office or a majority of encounters recorded electronically) your electronic medical record product?	1000 approx.
i) How many physicians in Ontario currently use (e.g. chartless office or a majority of encounters recorded electronically) your electronic medical record product?	1000 approx.
j) How many physician offices/clinics worldwide currently use (e.g. chartless office or a majority of encounters recorded electronically) your electronic medical record product?	250 approx.
k) How many physician offices/clinics in Ontario currently use (e.g. chartless office or a majority of encounters recorded electronically) your electronic medical record product?	250 approx.
l) Do you organize and host regular User Groups so that your customers may provide you with input into your product development?	Yes
m) Describe how you prioritize user enhancement requests and incorporate them into future product releases	User requests are categorized as Fixes, Enhancements or Customization. Fixes are completed and released as patches as soon as possible. Enhancements are shipped with the next major release or upgrade. Customization is slotted into our development schedule depending on customer urgency. Customization requests that will be generally helpful to the product might be categorized as Enhancements and completed at no charge to the client.

5.2.2. Product Software Information

Replaced by Section 6 Pricing Scenarios Spreadsheet

5.2.3. Product Maintenance and Upgrade Information

Profile Requirements	Vendor's Response
a) How often have you made a major software upgrade to your product?	Approximately every 6 months a significant upgrade with enhanced functionality is completed.
b) Are major software upgrades to your product distributed to your existing customers?	Yes. Customers can download upgrades themselves, install from a CD or have Healthscreen staff complete the install, either on site or remotely.
c) Is there an additional charge to customers to receive a major change to your software?	No. Upgrades are covered by the annual support and service agreement.
d) Will you supply release notes to existing customers for major software upgrades?	Yes. Notes regarding general enhancements and features are provided and the Help files are modified accordingly and made available on our website.
e) Will you supply free training to existing customers for major software upgrades?	Yes generally. Most features are easily understood. Detailed training to take advantage of functionality that was not previously used by the clinic staff is extra.
f) Do you provide software updates remotely to clients?	Yes
g) If a major software upgrade requires data to be unloaded and reloaded into the database, will you do this free of charge for clients?	Yes generally. Upgrades are covered by the annual service and support agreement. Typically we have a utility that runs at the clinic to convert the database if required.
h) Do you intend to issue routine maintenance changes or small fixes to your product in between major product upgrades?	We provide patches when necessary between upgrades. Many maintenance items, such as Schedule of Benefits updates, can be processed by clients without having to call Healthscreen.
i) Are routine maintenance changes or small fixes to your product distributed to existing customers?	Yes if required. Patches are generally distributed only to customers who use the particular functionality.
j) Is there an additional charge to customers to receive routine maintenance changes or small fixes?	No

5.2.4. Support Requirements

Requirement	Weight	Y/N
a) Provides CMS support from 8AM – 8PM Monday through Thursday, 8AM – 5PM Friday, and 9AM – 2PM Saturday (Eastern Time Zone)	M	Y
b) Provides CMS support 7 x 24 x 365	W	Y

Profile Requirements	Vendor's Response
c) In which areas of Ontario will you offer support for your product?	Across the entire province. We have customers in all corners of the province.
d) Do you take support requests via email?	Yes. info@healthscreen.com

5.2.5. Implementation Information

Requirement	Weight	Y/N
a) Offers CMS training	M	Y

Profile Requirements	Vendor's Response
b) List the products from whom you have successfully converted demographic data in the past	ABEL, AMCS, Centaur, CSL, Full Payment, Helpmed, MD4000, MD5000, Medeasy, Medhelp, Medtex, MedZ, MacMedical, Medas, Online, OZIP, P&P, Promed, RJN, YorkMed
c) Describe the standard implementation plan used for implementing the CMS	Yes. Healthscreen has a process for CMS implementation that includes: Determination of specific clinic requirements based on practice type and physical configuration of the clinic environment, such as exam room size, administrative layout, staff deployment, etc.; Data conversion from previous system with a check process to ensure that data has been accurately converted; a Training Plan that suits the clinic; Hardware analysis (Healthscreen can either supply hardware or work with the clinic's chosen vendor); Network setup and testing (Healthscreen can setup the network or work with the clinic's network manager); and Initial startup (we assign a staff person to check closely with the clinic during the first few days to flatten any startup problems).
d) How many hours of physician training do you recommend?	2 – 4 depending on level of familiarity with computers
e) How many hours of support staff training do you recommend?	2 – 4 depending on role and level of familiarity with computers

5.2.6. Service Level and Implementation Requirements Matrix

Profile Requirements				Vendor's Response
	Included	Optional / For a Fee	Not available	
a) Provides CMS support on your product from 8AM – 8PM Monday through Thursday, 8AM – 5PM Friday, and 9AM – 2PM Saturday (Eastern Time Zone)	X			Healthscreen's help desk is available 24/7/365.
b) Provides CMS support 24 hours/day, 7 days/week, 365 days/year	X			Healthscreen's help desk is available 24/7/365.

Profile Requirements	Included	Optional / For a Fee	Not available	Vendor's Response
c) Provides remote support	X			Most of our support is provided remotely to reduce delay and downtime. Help is never further away than a 1-800 phone call.
d) In the future, will you offer support for SSHA products and services?		X		Depending on the products and services, probably.
e) In the event of a disagreement between you and your customer, will you support the notion of a dispute resolution process involving an independent mediator?	X			
f) Will you offer training to customers who acquire your CMS application?	X			Training is included in our price.
g) Will you offer other (non-CMS application) training to your customers?		X		We will provide training for the operating system, network and for certain 3rd party products such as Dragon Voice.
h) Will you assist physicians in preparing a disaster recovery plan, in the event of the loss of the system?		X		As a part of our general installation, we provide assistance regarding backup and recovery, but not for disaster planning (sabotage, etc.).
i) Will you assist physicians in preparing a business continuity plan, in the event of a system disruption?		X		We have a number of contingency options to ensure continuity and can assist clients.
j) Will you offer customers any assurance or commitment to continuity of business in the event of a system disruption?			X	With proper planning this should not be an issue, however, a guarantee is not possible.
k) Will you offer data conversion services to customers who already have patient demographic data stored electronically?		X		For a nominal fee.
l) Will you offer data conversion services to customers who already have both patient demographic and clinical data stored electronically?		X		We have converted a number of systems with clinical data. Depending on the design of the system, most data can be converted to Healthscreen.
m) Will you have a formal process for managing customer-reported incidents?	X			All calls to the help-desk are logged and reported. The management team reviews calls on a monthly basis. The Development team is made aware of this report.

Profile Requirements	Included	Optional / For a Fee	Not available	Vendor's Response
n) If you already have a formal process for managing customer-reported incidents, what is the average age of incidents on your problem log before they are closed?				Our guaranteed call-back time is 1 hour. Support is provided immediately. Over 90% of problems are solved within 1 hour. The remaining issues are broken into client requests, training issues, bugs, and program issues. Times for these vary due to nature and complexity.

5.3. FUNCTIONAL REQUIREMENTS

5.3.1. Demographics Requirements

Requirement	Guidelines	Weight	Y/N
a) Maintains all Mandatory patient demographic data defined in sections 5.4.1.1.1 and 5.4.1.1.2		M	Y
b) Maintains status of Enrolled Patients rostered to each FHN Physician <ul style="list-style-type: none"> • Patients are rostered to a specific FHN physician, not to the FHN as a whole • FHN physicians will have both rostered and non-rostered patients 	<p>The definitive roster used for payment is kept by the Ministry Claims system in Kingston, not by the CMS. However, the CMS must keep a roster for reconciliation purposes and FHN Preventive Care bonus purposes.</p> <p>This version of the CMS Local Specification does not require:</p> <ul style="list-style-type: none"> • A historical roster of Enrolled Patients • The CMS to maintain an enrolment or termination date (i.e. a flag for current status meets the baseline requirement) 	M	Y
c) Maintains alternate patient contact information <ul style="list-style-type: none"> • Must have distinct field(s) designated for storing contact information 	<p>e.g. guardian, spouse, relative, friend</p> <p>Can store contact name, nature of contact, means of contact – could be in a single text field</p>	W	Y
d) Supports loading of patient master list demographics from text file including all Mandatory patient demographic data defined in sections 5.4.1.1.1 and 5.4.1.1.2		W	Y
e) Supports merging of duplicate patient records or provides an automated method of identifying duplicate patient records	<p>Merging of patients can be a manual process</p> <p>No requirement to “undo” merge</p>	W	Y

5.3.2. Electronic Medical Record Requirements

Requirement	Guidelines	Weight	Y/N
a) Maintains Medical and Surgical data (at least one data element described in 5.4.1.2.2 - Past Medical and Surgical History)		M	Y
b) Maintains Allergy data (i.e. allergen, dates and/or age at onset, reactions and severity)		M	Y
c) Maintains Adverse Reaction data (at least one data element described in 5.4.1.2.6 - Adverse Reaction History)	Offending Drug Code can be DIN, Drug Database Identifier, etc.	M	Y
d) Maintains Problem List (at least one data element described in 5.4.1.2.1 – Ongoing Health Conditions)		M	Y
e) Maintains Diagnosis List (at least one data element described in 5.4.1.2.1 – Ongoing Health Conditions)		M	Y
f) Maintains Family Medical History (at least one data element described in 5.4.1.2.9 - Family History of Disease)		M	Y
g) Maintains Medical Alerts and Special Needs (at least one data element described in 5.4.1.2.8 – Alerts and Special Needs)		M	Y
h) Maintains Immunizations/Screening data (all mandatory data elements described in 5.4.1.2.3 – Immunization History)		M	Y
i) Maintains record of Preventive Care activities (i.e. procedures and dates performed)	Additional fields (such as due dates, notes, etc.) are allowed	M	Y
j) Supports free form text notes as part of Patient Medical Record	Can appear anywhere on EMR	M	Y
k) Preventive Care activities on the Patient Medical Record automatically become visually distinct when past due	Cannot be a work queue item. Must be visible within the chart Can be for any health maintenance activity	W	Y

5.3.3. Encounter Documentation

Requirement	Guidelines	Weight	Y/N
a) Provides user-modifiable pre-built forms or templates for common encounters		W	Y
b) The system automatically includes a user identifier in each part of the encounter note to support shared creation of encounter documentation	e.g. started by nurse, completed by physician Manual entry of initials would not meet the requirement	W	Y
c) Supports the integration of transcription systems with CMS entry	e.g. encounter notes allow placeholder for inserting transcription later	W	Y
d) Supports free form text notes that are tied to each encounter		W	Y

Profile Requirements	Vendor's Response
e) Provides ability to highlight information in referral letters (e.g. to avoid having to re-read entire document)	Healthscreen's word processor (HS Editor) has advanced capabilities, which permit users to customize their reports and letters. Specific sections can be highlighted by bolding, italics, or color.

5.3.4. Medication Management

Requirement	Guidelines	Weight	Y/N
a) Supports online prescription creation (including all mandatory data elements in Section 5.4.1.2.4 - Medication History) and printing Printed prescription must be able to include: name of medication, form, dosage, frequency, repeats, quantity, duration, start date, notes, physician name, physician address, physician phone number, and patient name	It is acceptable that prescriptions are printed to a standard 8.5x11 sheet of paper	M	Y
b) Performs drug-to-drug interaction checking: <ul style="list-style-type: none"> • Indicating severity • Allowing override • Using an interaction database with Canadian drug codes • Must be included in Section 6- Pricing Scenarios Spreadsheet 		M	Y

Requirement	Guidelines	Weight	Y/N
c) Maintains complete list of patient medications including: <ul style="list-style-type: none"> Externally ordered drugs (entered manually) Over-the-counter medications including herbal and nutritional supplements Past and current prescriptions 	Shows active and inactive status, drug name, Rx date, etc.	M	Y
d) Performs drug-to-allergy interaction checking: <ul style="list-style-type: none"> Indicating severity Allowing override Using an interaction database with Canadian drug codes Must be included in Section 6 Pricing Scenarios Spreadsheet 		M	Y
e) Supports creation of limited lists of "favourite" drugs	e.g. based on physician or condition	W	Y
f) Performs expanded Drug Interaction Review (i.e. one or more of: drug / condition interactions, best dosing, therapeutic alternatives, contraindications)		W	Y
g) Supports free form text notes that are tied to each prescription		W	Y

5.3.5. Lab Test Management

Requirement	Guidelines	Weight	Y/N
a) Provides a visually distinct method of alerting the ordering physician (or delegate) to new lab reports through an in-basket or task list		M	Y
b) Sorts or highlights abnormal lab reports to bring them to the physician's attention	Need to see the 'abnormal' flag without opening the actual result	M	Y
c) Clearly identifies which lab result(s) within a lab report are abnormal		M	Y
d) Records lab result values and normative range values as separate data fields (refer to Section 5.4.1.2.5)		W	Y

Requirement	Guidelines	Weight	Y/N
<p>e) Graphically presents lab results and normal reference ranges over time from a user-selected test code. Graph must show: Test code(s), Test results, Normal reference ranges, Test Dates</p> <ul style="list-style-type: none"> • Scales must be appropriate to the data 		W	Y
<p>f) In a table format, presents lab results over time from a user-selected test code. Table must show: Test code(s), Test results, Test Dates</p>		W	Y
<p>g) Displays, as data points, user-selected patient medications or other interventions directly on the graph identified in requirement e) in this section</p>	<p>The use of mouse hovering or tool tips does not meet the requirement</p>	W	N
<p>h) Prints lab summaries and explanations for patients in language appropriate for patients</p>	<p>A lab summary is a printed summary of lab results in tabular or graphical format, grouped by test code.</p> <p>An explanation can be provided via the physician appending notes through the system, or via templates that are specific to the test codes on the lab summary</p>	W	Y
<p>i) Prints the demographic information for patient and physician in the appropriate fields on the multi-part Ontario Lab Requisition form</p> <ul style="list-style-type: none"> • If supported, a Lab Requisition (i.e. impact) printer must be included in the pricing scenarios in Section 6 Pricing Scenarios Spreadsheet 	<p>Not required to fill check boxes for test requests before printing</p>	W	Y
<p>j) Supports scanning of lab reports into the EMR with the ability to indicate the lab reports with abnormal results</p>	<p>Needed until all lab reports are available electronically</p> <p>Does not need to populate 5.4.1.2.5 data table</p>	W	Y
<p>k) Supports free form text notes that are tied to each lab report or lab result</p>		W	Y

Requirement	Guidelines	Weight	Y/N
l) Capable of reconciling lab results with orders so that outstanding results can be identified	<p>Could go to a specific window to see which results are not reconciled</p> <p>User comparison of requested and received lists on 2 different screens does not meet the requirement</p>	W	N

5.3.6. External Document Management

Requirement	Guidelines	Weight	Y/N
a) Supports referral letter templates which integrate patient demographics (i.e. name, age/DOB, sex, OHN) from the CMS. The letters can be edited to provide letter specific content	e.g. different referral templates for different specialties	W	Y
b) Templates can be modified to include physician "letterhead"	e.g., clinic name, physician name, contact information	W	Y
c) Can integrate clinical data from the patient record into letter templates. Must be able to include at least one of: Lab results, Progress note (encounter notes), CPP, Consultation notes (received)		W	Y
d) Can integrate referral physician name and address into referral letter templates		W	Y
<p>e) Able to import external documents (e.g. consult reports, discharge summaries, and other correspondence) in electronic text format to become part of the EMR. Imported documents must be identified as to:</p> <ul style="list-style-type: none"> • Source - who created the report • Type - Classification (e.g. consultation report, MSWord, RTF) • Receipt date - Date report received • Creation date – Date document created 	<p>Source, type and one date must be stored as discrete fields to satisfy requirements in 5.4.1.2.10 - Attached Files</p> <p>'Date imported' into EMR does not meet either of the date requirements</p>	W	Y

Requirement	Guidelines	Weight	Y/N
f) Able to import external documents (e.g. consult reports, discharge summaries, and other correspondence) in scanned format to become part of the EMR. Imported documents must be identified as to: <ul style="list-style-type: none"> • Source - who created the report • Type - Classification (e.g. consultation report, tif, jpg) • Receipt date - Date report received • Creation date – Date document created 	Source, type and one date must be stored as discrete fields to satisfy requirements in 5.4.1.2.10 - Attached Files 'Date imported' into EMR does not meet either of the date requirements	W	Y
g) Supports free form text notes that are tied to each document		W	Y
h) CMS tracks referrals and provides a reminder if outstanding. Reminders must: <ul style="list-style-type: none"> • Be visually distinct • Be in patient record, not work queue • Identify referral physician • Be able to be turned off at user discretion 	Reminder does not have to be on CPP. Can be elsewhere on medical record Cannot be only on task list	W	Y

5.3.7. Cumulative Patient Profile (CPP) Requirements

Requirement	Guidelines	Weight	Y/N
a) Displays Cumulative Patient Profile, clearly identifying the patient with data from requirements b) through f)		M	Y
b) Displays problem list		M	Y
c) Displays family history		M	Y
d) Displays allergies and adverse reactions		M	Y
e) Displays medication summary	Can show original or last renewal for frequent medications	M	Y
f) Displays risk factors (e.g. smoking, alcohol, lifestyle)	"Risks" can appear under "problems" or "social history", but need to be visually distinct	M	Y

Requirement	Guidelines	Weight	Y/N
g) CPP summary information can be automatically updated from encounter data at physician discretion • Must be able to manage one or more sections of the CPP to reduce clutter	Physician can select which medications show in CPP Medication renewals do not add to CPP Physician can select which problems are added to the problem list Physician can choose which data from encounter notes are shown on the CPP	M	Y
h) Shows status for each problem	e.g. active, resolved, chronic, inactive, etc. – can be communicated via notes “Resolved” problems may be removed from CPP	W	Y
i) Displays medical alerts and special needs		W	Y
j) Summary screen customizable by user (e.g. by specialty, or user preference)		W	Y
k) Supports free form text notes which are tied to each of sections b) through f) and i) (above) of the CPP	Notes can be for the section or individual entries within the section	W	Y
l) CPP can be printed to a single sheet as a single operation	Can exceed one sheet for a fully populated CPP	W	Y

5.3.8. Reporting, Query and Communications Requirements

Requirement	Guidelines	Weight	Y/N
a) All CMS data must be able to be produced in a hardcopy format so that individual patient records as well as practice management records can be properly filed as per CPSO guidelines. This function must be able to be invoked at the user’s control	Does not have to be printed in a single function	M	Y
b) Generates patient recall list for Pap Smears as per FHN agreements (see Appendix 1 and 7.1.1.1 specifically). Must contain rostering physician, patient name and patient ID, age, sex and contact information (phone number for phone calls, address for letters)		M	Y

Requirement	Guidelines	Weight	Y/N
c) Generates patient recall list for Mammograms as per FHN agreements (see Appendix 1 and 7.1.1.2 specifically). Must contain rostering physician, patient name and patient ID, age, sex and contact information (phone number for phone calls, address for letters)		M	Y
d) Generates patient recall list for Influenza Vaccines as per FHN agreements (see Appendix 1 and specifically 7.1.1.3). Must contain rostering physician, patient name and patient ID, age and contact information (phone number for phone calls, address for letters)		M	Y
e) Generates patient recall list for Immunizations as per FHN agreements (see Appendix 1 and specifically 7.1.1.4). Must contain rostering physician, patient name and patient ID, age and contact information (guardian name and phone number for phone calls, guardian name and address for letters)	Guardian name can be part of address information (e.g. "care of...") Do not need to maintain a separate address for guardian.	M	Y
f) Generates report(s) which determine the percentages needed to submit billings for Cumulative Preventive Care Management Service Enhancement Codes as detailed in 7.1.3.1, 7.1.3.2, 7.1.3.3 and 7.1.3.4. <ul style="list-style-type: none"> • Shows rostering physician and only targeted patients • Shows percentage compliant, or numbers to calculate percentage • Contains supporting audit information including: compliance status, patient name or patient ID 	Ineligible patients (i.e. history of clinical breast disease, mastectomy or hysterectomy) are optional on audit report	M	Y
g) Ad hoc query and report writer provided.		W	Y
h) Ad hoc query facility supports Boolean Search capabilities (e.g. find all patient records where sex is female AND age is greater than 50)		W	Y

Requirement	Guidelines	Weight	Y/N
i) Assists physicians in consistent data entry to facilitate effective data extraction (e.g. coding schemes, drop-down lists)	Spell checker is not sufficient	W	Y
j) Able to search and report on ALL text fields in EMR • Able to search within text fields for partial matches	Text fields include any free-form text or notes fields.	W	Y
k) Able to search and report on ALL data fields in EMR	Does not include image data.	W	Y
l) Able to search and report on ALL text fields in PMS • Able to search within text fields for partial matches	Text fields include any free-form text or notes fields	W	Y
m) Able to search and report on ALL data fields in PMS	Does not include image data	W	Y
n) Able to search and report on ALL text fields in PMS and EMR concurrently – i.e. in a single report • Able to search within text fields for partial matches	Text fields include any free-form text or notes fields	W	Y
o) Able to search and report on ALL data fields in PMS and EMR concurrently – i.e. in a single report	Does not include image data	W	Y
p) Able to search and report on ALL data and text fields in PMS and EMR concurrently – i.e. in a single report • Able to search within text fields for partial matches	Does not include image data	W	Y
q) Can send documents (e.g. referral letters) via email directly from CMS	Cannot use separate email system to send files saved from CMS, must be integrated	W	N
r) User-modifiable report templates for Practice Management (PMS data) are provided	User-modifiable can be satisfied by a data filter (row selection) or adding/removing a field (column selection)	W	Y
s) User-modifiable report templates for Clinical Management (EMR data) are provided	User-modifiable can be satisfied by a data filter (row selection) or adding/removing a field (column selection)	W	Y

Requirement	Guidelines	Weight	Y/N
t) User-modifiable report templates for concurrent Clinical and Practice Management are provided	User-modifiable can be satisfied by a data filter (row selection) or adding/removing a field (column selection)	W	Y
u) Creates patient letters directly from recall lists described in b) to e) in this section, without another patient lookup • Letters must meet requirements shown in 7.1.2.1 i), ii) and iii).	Letters can be produced in a batch, or individually	W	Y

Profile Requirements	Vendor's Response
v) Describe your support for a computer fax interface	Healthscreen has developed a sophisticated HS Fax Server with capabilities to receive and send faxes automatically. Inbound faxes can be quickly sorted, reviewed, approved, and attached to the relevant portion of the patient's chart. This capability relieves an enormous amount of staff time and adds greatly to office efficiency.
w) Describe other predefined reports that come with your system	Healthscreen has an extensive set of pre-defined reports that cover all aspects of clinical records, health maintenance/preventive care, practice management, billing and practice analysis.

5.3.9. Work Queue Requirements

Requirement	Guidelines	Weight	Y/N
a) Supports creation of new ad hoc tasks and their assignment to other users		W	Y
b) Supports creation of new ad hoc tasks and their assignment to others by role	e.g. any nurse, any receptionist, etc.	W	Y
c) Task assignments are fully integrated across Practice Management and Clinical Management functions (i.e. can create a task anywhere in the product, and view it anywhere in the product)		W	Y
d) Tasks can be linked to patient record (i.e., can open patient record from task without having to perform another search for the patient)	May go through intermediate steps to get to patient record	W	Y
e) Can store selected work queue tasks and status as part of a patient's medical record		W	Y

Requirement	Guidelines	Weight	Y/N
f) Work queue screens can be customized for different roles	e.g. nursing, physicians, medical records, etc.	W	N
g) Supports automated generation of recall tasks and patient follow-up tasks to a work queue	The requirement can be met by recall tasks other than preventive care, such as outstanding lab requests, outstanding referrals, etc. The requirement is not met if a user must access the medical chart in order to see the task The due date may be scheduled by a physician or system process	W	N
h) Supports classification of task priority	Priority can be indicated by Urgent, Low, etc, or a priority checkbox	W	Y
i) Automatically creates a task for past due targeted health maintenance activities (see 7.1.1) and assigns it to a work queue. The tasks must be generated by the system, not created by a user	Running a query to generate tasks on all applicable records is acceptable.	W	Y
j) Supports free form text notes that are tied to each task		W	Y

5.3.10. Scheduling Requirements

Requirement	Guidelines	Weight	Y/N
a) Integrates with billing component to avoid duplicate patient data entry • Must transfer at least two of the elements required to complete a billing	The two elements will typically be patient ID and service date	M	Y
b) Able to open a patient medical record directly from a scheduled appointment without having to perform another search for the patient		M	Y
c) Allows reason for visit to be recorded on appointment		W	Y

Requirement	Guidelines	Weight	Y/N
<p>d) Supports view of multi-doctor schedule</p> <ul style="list-style-type: none"> • Must display two or more physicians per screen • Appointment dates and times are synchronized on screen when scrolling 		W	Y
<p>e) Provides ability to flag appointments as critical (visually distinct)</p>	Colour coding is acceptable	W	Y
<p>f) Supports searching for next available appointment by all of the following: physician, day of week, time of day, and appointment type</p> <ul style="list-style-type: none"> • Must be an online function, not a report 		W	Y
<p>g) Schedule is printable as day-sheet sorted alphabetically by patient name</p>		W	Y
<p>h) Schedule is printable as day-sheet sorted chronologically</p>		W	Y
<p>i) Schedule is printable as day-sheet sorted by chart number</p>		W	Y
<p>j) Supports pre-configuration of schedule slots by physician</p>	e.g. larger blocks for full physicals, block times for drop-ins, etc.	W	Y
<p>k) Supports “wave booking” – i.e. planned periods of multiple appointments to a single start time</p> <ul style="list-style-type: none"> • Visually distinct • Must be preplanned and configured • Must be able to search for next available slot OR overbooking occurs only after the “wave” is full 	Ad hoc double booking does not meet the requirement	W	Y
<p>l) Supports ad hoc double booking</p> <ul style="list-style-type: none"> • Visually distinct • Show on printed schedule 	Ability to book an appointment with the same starting time as another appointment, without needing to ‘configure’ the schedule	W	Y
<p>m) Supports schedule viewing both with and without personal patient data showing</p> <ul style="list-style-type: none"> • User must be able to switch views dynamically 	<p>Acceptable to show patient name on “without” screen</p> <p>Cannot display patient data when hovering over appointments</p>	W	Y

Requirement	Guidelines	Weight	Y/N
n) Supports drag and drop rescheduling	Can be cut and paste or any other means of rescheduling without a delete and add process	W	Y
o) Supports free form text notes that are tied to each appointment		W	Y
• Separate from the "Reason" field			

Profile Requirements	Vendor's Response
p) Supports classification of appointments as cancelled, no-show or rescheduled, and retains in the CMS	Yes, by status. The table of statuses can be modified by users. Reports can be generated to display cancelled, no shows, rescheduled, etc. appointments.
q) Supports daily, weekly, and monthly (summary) views	Yes. Healthscreen's Calendar can be configured to display day, week, or monthly views of the schedule, for 1 or more users.
r) Can view patient demographics directly from schedule	Yes. All the user has to do is Right click on the patient's name in the schedule and they can go directly to the patient's demographics screen.
s) Supports pre-configuration of schedule slots, which vary by month (e.g. different configuration through summer months)	Scheduling Templates can be quickly created and repeated across a day, a week, or several months.
t) Supports recurring appointments, i.e. booking a series of appointments through a single action	Yes. Recurring appointments can be set up across weeks or months into predetermined time slots.
u) Stores appointment preferences by patient	Patient appointment preferences can be stored in the patient's demographic notes. Every time an appointment for that person is booked, any notes, including patient preferences, will be displayed to the person booking the appointment.
v) Provides short-cut keys for moving in schedule by day, week and month	A jump ahead arrow is available to move forward in user defined intervals. Cursor keys will move ahead a day or a user at a time. The Home and End keys will move ahead a user determined interval. The mouse will also provide simple navigation forward or backward.
w) Supports patient flow tracking from the schedule (e.g. in-waiting room, assigned examination room number, visit billed, etc.)	Yes. The Status of every patient can be tracked. User defined statuses support a great deal of flexibility for tracking through special rooms or treatments. Once billed, the encounter status is upgraded and becomes visually distinctive.
x) When booking, warns if patient already has an existing appointment close to the new appointment	No

5.3.11. Billing Requirements

Requirement	Guidelines	Weight	Y/N
a) Processes concurrent Ontario billings models of FFS, "shadow" partial payment billings, and FHN bonus codes		M	Y
b) Provides basic error checking (i.e. Ontario Health Number in place, edits for check digit, edits for all mandatory billing fields (date of service, provider number, Health Number, Name, DOB, Sex, Fee code, fee claimed, - see interface specification)) checks all dates are valid dates and in the past <ul style="list-style-type: none"> Must warn if duplicate Health Number entered when registering patients 	Error checking can occur at the field level or on a 'Save' operation, or by limiting data entry only to valid values (e.g. Sex = M or F)	M	Y
c) Provides automated reconciliation and claim re-submission and prints reconciliation reports <ul style="list-style-type: none"> Automatic reconciliation includes the following: All "paid" claims and all \$0.00 "I2" claims must be reconciled and removed from the A/R without user intervention Supports resubmission of rejected claims without the need to re-enter data 	The reconciliation reports can be either the entire MRO data file or include the following data fields from each MRO record type: HR1: Total Amount Payable HR2: Not Required HR3: Not Required HR4: Accounting Number; Health Number, Claim Number HR5: Service Date; Service Code; Amount Paid; Explanatory code; HR6: Amount Brought Forward (ABF) Claims Adjustment; Advances; Reductions; Other Deductions HR7: Transaction code; Date; Amount; Message HR8: Message The corresponding "sign" fields must accompany their respective "amount" or ABF fields.	M	Y
d) System is pre-loaded with current OHIP fee schedule including FHN codes		M	Y
e) Supports reading a Health Card through a card reader device, and looking up this patient in the application database <ul style="list-style-type: none"> Must notify of version code discrepancies or automatically update patient record 	CMS can update other demographic data from the Health Card such as: Name, Sex, DOB	M	Y
f) Supports WSIB billing through MRI files		M	Y

Requirement	Guidelines	Weight	Y/N
<p>g) Can produce a patient billing record directly from visit information in patient medical record</p> <ul style="list-style-type: none"> • Must transfer patient, and at least two other data points 	<p>Can create a claim directly from a patient encounter</p> <p>Other data points could be: physician information, service date, procedure code, diagnosis, location, hospital number, etc.</p>	W	Y
<p>h) Can transfer and translate diagnostic codes for billing purposes from the EMR component</p>		W	Y
<p>i) Supports direct manual entry of billing transactions</p>		W	Y
<p>j) Provides aged receivable listing:</p> <ul style="list-style-type: none"> • Patient ID, service date, outstanding amount • Includes all billing types (not just OHIP) 	<p>Any aging buckets acceptable</p> <p>Can be any report to manage outstanding claims</p>	W	Y
<p>k) System maintains and uses historical OHIP fee schedule for the prior year</p>		W	N
<p>l) Provides lookup of services and diagnoses by their codes and their descriptions</p>		W	Y
<p>m) Forces reconcilable disposition of all scheduled appointments (i.e. provides a screen or report that lists patient appointments which have no billings). User must take some action to remove unbilled appointments from the list</p>	<p>Deleting appointments does not meet the requirement</p>	W	Y
<p>n) Supports direct third party billings with invoices, which include at a minimum:</p> <ul style="list-style-type: none"> • Physician name, patient name or ID, payor address, service date, service, itemized amount(s) and total amount billed • Able to be generated on demand 		W	Y

Requirement	Guidelines	Weight	Y/N
<p>o) Supports direct third party billings with statements</p> <ul style="list-style-type: none"> Physician name, patient name or ID, payor address, service date, service, itemized amount(s) amount paid, balance Able to be generated on demand 	Receipts are not sufficient	W	Y
<p>p) Supports billing lookup by each of the following:</p> <ul style="list-style-type: none"> Patient Health Number Patient name OHIP claim # or Accounting # 	<p>OHIP claim # is assigned by the OHIP claims payment system.</p> <p>Accounting # is id assigned by CMS or user to a claim</p>	W	Y

Profile Requirements	Vendor's Response
q) Supports recurring billings (e.g. physician sees same group of patients for weekly visits at nursing home)	Yes, Healthscreen can do this can be done as a batch billing function.
r) Describe any other advanced error checking your system provides	Items such as expiry date prior to submission, DOB, and OHIP number are checked.
s) Supports inter-provincial billing	Yes

5.3.12. System Access Management

Requirement	Guidelines	Weight	Y/N
a) CMS must store passwords in an encrypted format. CMS must transfer passwords over a WAN in an encrypted format	This only applies to password managed by applications. Passwords stored and managed by the operating system is already considered encrypted and secure.	M	Y
<p>b) CMS must allow for passwords that include:</p> <ul style="list-style-type: none"> Mixed case passwords Passwords of 8 characters Alphanumerics Special characters 		M	Y

Requirement	Guidelines	Weight	Y/N
<p>c) CMS must have the following password management capabilities that can be deployed based on User discretion:</p> <ul style="list-style-type: none"> • Ability to set parameters for number of failed login attempts within a certain time period • Ability to set time parameters for password expiry 	<p>This applies to all passwords used by the CMS, including the operating system and all applications</p>	<p>M</p>	<p>Y</p>
<p>d) CMS must be able to share patient data among physicians who share the same database</p> <ul style="list-style-type: none"> • Must maintain proper physician identification 	<p>Don't need to share data between physically distinct servers/offices</p>	<p>M</p>	<p>Y</p>
<p>e) The CMS provides the capability to create roles. A role is an abstract method for assigning and managing permissions for a group of one or more users independently of individual user security permissions</p> <ul style="list-style-type: none"> • Need to be able to create new roles • Capable of applying changes to a role to all members of that role 	<p>If CMS provides only predefined roles, this requirement is not met.</p>	<p>W</p>	<p>N</p>
<p>f) Users can be assigned to roles</p>	<p>This is met, if a CMS provides/allows 2 or more roles</p>	<p>W</p>	<p>N</p>
<p>g) The CMS provides different views to data for roles (e.g. physician, nurse practitioners, administrative assistants)</p>	<p>Screen layout, organization, or contents can be customized for different roles</p>	<p>W</p>	<p>N</p>
<p>h) There are access controls to functions based on roles</p>	<p>This means that members of a role cannot use certain screens or capabilities of the CMS. Some simple examples are:</p> <ul style="list-style-type: none"> - Receptionists who can process billing but not run financial reports - Nurses have read-only access to Medications 	<p>W</p>	<p>N</p>
<p>i) There are access controls to data based on roles</p>	<p>This means that members of a role cannot access certain data, even though that role can access a function that uses the data. It gives control over what the role can access at the physical or logical record level. Some simple examples are:</p> <ul style="list-style-type: none"> - Nurse Practitioners are not permitted to view psychiatric encounter notes for any patients - Physicians can only update patient records where they are the principal physician 	<p>W</p>	<p>N</p>

Requirement	Guidelines	Weight	Y/N
j) There are access controls to functions based on user	This means that a user cannot use certain screens or capabilities of the CMS. Some simple examples are: <ul style="list-style-type: none"> - A receptionist who can process billing but not run financial reports - A nurse who can browse encounter data but not update it 	W	Y
k) There are access controls to data based on user	This means that a user cannot access certain data, even though that user can access a function that uses the data. It gives control over what the user can access at the physical or logical record level. Some simple examples are: <ul style="list-style-type: none"> - A nurse who cannot see his ex-wife's medical records - A physician who can only update her own patients 	W	Y
l) The system supports a "sign off" function to indicate data that becomes part of the permanent patient medical record <ul style="list-style-type: none"> • Sign-off date and reviewer identity must be visible on the patient medical record 	e.g. once an encounter is complete, once a lab report has been reviewed Sign-off time is not required to be visible	W	Y
m) Clerical staff who have no permission to view clinical details can enter notes into the EMR	e.g. records of phone calls, transcriptions, etc. Notes entered against PMS data (e.g. appointments) would not meet the requirement	W	Y

5.3.13. Online Services for Patients

Not applicable in CMS Local Solution Specification Version 1.

5.3.14. Support for languages other than English

Profile Requirements	Vendor's Response
a) Does your CMS operate in both official Ontario languages (e.g. screens, online help, reports)?	No
b) Describe your approach to supporting patients with multiple different language needs	Healthscreen can store patient language preference.
c) Describe your approach to supporting physicians with multiple different language needs	We have support staff who speak both official languages fluently. We also have other language capabilities within our organization.

5.4. DATA REQUIREMENTS

5.4.1. Discrete Data Elements

A discrete data element is a separate data element included in the offering for storing the specified data. A general-purpose notes field does not fulfill the requirement.

5.4.1.1. Patient Demographic Data

5.4.1.1.1. Identification

Data Required	Weight	Y/N
a) Health Number (The Ontario Health Number (OHN))	M	Y
b) Version Code (Part of OHN)	M	Y
c) Last Name	M	Y
d) First Name	M	Y
e) Second Name	W	Y
f) Title	W	Y
g) Sex	M	Y
h) Birth Date	M	Y
i) Language Preference Code	W	Y
j) Substitute Decision Maker	W	N
k) Emergency Contact	W	Y

5.4.1.1.2. Address

Data Required	Weight	Y/N
a) Address Type (e.g. Business home etc.)	W	Y
b) Street Address	M	Y
c) Municipality	M	Y
d) Province/State	M	Y
e) Country	W	Y
f) Canadian Postal Code (i.e. A9A 9A9)	M	Y
g) Telephone Type (e.g. Business, Mobile, Pager, Fax etc.)	M	Y
h) Telephone Number	M	Y

Data Required	Weight	Y/N
i) Extension	M	Y
j) E-Mail Address	W	Y

5.4.1.2. Patient Medical Data

5.4.1.2.1. Ongoing Health Conditions

Data Required	Weight	Y/N
a) Date of Onset	W	Y
b) Diagnosis	W	Y
c) Problem	W	Y
d) Notes	W	Y

5.4.1.2.2. Past Medical and Surgical History

Data Required	Weight	Y/N
a) Date of Onset /Occurrence /Incident	W	Y
b) Date Resolved/Controlled	W	Y
c) Diagnosis / problem	W	Y
d) Procedure Date	W	Y
e) Procedure / Intervention	W	Y
f) Notes	W	Y

5.4.1.2.3. Immunization History

Data Required	Weight	Y/N
a) Date Immunized	M	Y
b) Date Refused	M	Y
c) Immunization Type	M	Y
d) Notes	M	Y

5.4.1.2.4. Medication History

Data Required	Weight	Y/N
a) Start Date	M	Y
b) End Date	W	Y
c) Prescription Written Date	M	Y

Data Required	Weight	Y/N
d) Medication	M	Y
e) Dosage	M	Y
f) Frequency	M	Y
g) Repeats	M	Y
h) Quantity	M	Y
i) Route	W	Y
j) Duration	W	Y
k) Long Term Medication Indicator	W	Y
l) Notes	W	Y
m) Patient Compliance	W	N

5.4.1.2.5. Laboratory Results History

Data Required	Weight	Y/N
a) Date / Time of Test (if provided by lab)	M	Y
b) Laboratory Test Description	M	Y
c) Test Result	M	Y
d) Unit of measure	M	Y
e) Reference Range (Normal)	M	Y
f) Abnormal Indicator	M	Y
g) Physician's Notes	W	Y

5.4.1.2.6. Adverse Reaction History

Data Required	Weight	Y/N
a) Offending Agent	W	Y
b) Offending Drug Code	W	Y
c) Start Date	W	Y
d) Severity	W	Y
e) Adverse Reaction Type	W	Y
f) Notes	W	Y

5.4.1.2.7. Risk Factors

Data Required	Weight	Y/N
a) Risk factor	W	Y
b) Exposure	W	Y
c) Age at Onset	W	Y
d) Start Date	W	Y
e) End Date	W	Y
f) Notes	W	Y

5.4.1.2.8. Alerts and Special Needs

Data Required	Weight	Y/N
a) Date Active	W	Y
b) End Date	W	Y
c) Alert Type	W	Y
d) Notes	W	Y

5.4.1.2.9. Family History of Disease

Data Required	Weight	Y/N
a) Start Date	W	Y
b) Age at Onset	W	Y
c) Diagnosis / problem	W	Y
d) Treatment	W	N
e) Relationship	W	Y
f) Notes	W	Y

5.4.1.2.10. Attached Files

Data Required	Weight	Y/N
a) File type	W	Y
b) Date	W	Y
c) Note	W	Y

5.4.1.2.11. Attending Physicians

Data Required	Weight	Y/N
a) Physician Name	W	Y
b) Role	W	Y

5.4.1.2.12. Principal Physician (one)

Data Required	Weight	Y/N
a) Physician Name	W	Y
b) Role	W	Y

5.4.2. Data Management

Requirement	Guidelines	Weight	Y/N
a) Patient Medical Record data need to be retained due to legislative requirements, and retrieved on an as required basis. If an offering does archive or purge data, the system must be able to retain data as per requirements at CPSO website: www.cpso.on.ca/policies/medicalrec.htm	An offering does not need to archive or purge data to meet this requirement	M	Y
b) Each record in the EMR will include a date/time stamp and userid for the update of that record	Can be visible either on the chart or through an audit trail	M	Y
c) Exports electronically the CMS data elements as specified in the above Data Requirements section to a portable open text file (i.e. no proprietary data format) <ul style="list-style-type: none"> User initiated, no vendor intervention required Must export all mandatory data elements from Section 5.4.1 Discrete Data Elements as discrete fields 	Data do not need to be stored as discrete fields; data may be derived into discrete fields on export This version of the CMS Local Solution specification does not specify a field layout Export can be a batch process for all patients, or on a patient-by-patient basis	W	Y
d) CMS must retain billing transaction details for at least 7 years		W	Y

Requirement	Guidelines	Weight	Y/N
<p>e) CMS maintains a complete audit trail of all activity (i.e. data viewed, updated, deleted) against health records (i.e. EMR data) maintained by the CMS</p> <ul style="list-style-type: none"> Data must not be deleted, just marked as deleted Audit trail includes who and when viewed / updated / deleted Updated information retains original data entry as well 		W	N
<p>f) The CMS application must have audit trail capability for all add/change/delete operations on all CMS data, including permission metadata.</p> <ul style="list-style-type: none"> Data must not be deleted, just marked as deleted. Audit trail includes who and when updated / deleted. Updated information retains original data entry as well 		W	N

Profile Requirements	Vendor's Response
<p>g) A physician in a FHN may want to define particular data fields to meet that FHN's specific needs. Please describe your solution's support for User-defined data fields – i.e. a capability that allows Users to define, update and query their own data fields</p>	<p>Healthscreen has additional fields in many of its datalists and records. These fields, including note fields, can store customized information or be modified for user defined use. For example: Patients can be assigned to categories for research purposes; Allergists use a user definable field to define particular reactions.</p>

5.4.3. Drug Reference Data

Profile Requirements	Vendor's Response
<p>a) What is the name of the data supplier to support prescription writing and drug interactions?</p>	<p>First Data Bank, which is the same supplier that the pharmacists use.</p>
<p>b) What is the frequency of updates to the data provided to your clients?</p>	<p>This depends on the plan chosen by the client, usually quarterly.</p>
<p>c) Describe the process for applying updates to the data (e.g. CD-ROM, remote download, etc.)</p>	<p>CD-ROM is most commonly used although downloads are available.</p>

5.4.4. Data Coding Standards

Profile Requirements	Vendor's Response
a) Does your product support structured coding for diagnoses? If so, provide the name(s) and version(s) supported	YES. We supply ICD 9CA with our product. If a client wishes to use ICD 10, any version, we can install the codes. We support ICD 10, we do not provide it. We periodically update coding systems such as Limited Use (LU) codes for medications or DINs for drug interactions.
b) Does your product support structured coding for problems? If so, provide the name(s) and version(s) supported	YES. We provide ICD9 CA codes. Most clients use ICD for both Problems and Diagnoses. In addition, some clients use other proprietary systems that we support. Healthscreen allows customers to add items to create their own customized libraries of Problems. Finally, Healthscreen allows users to simply enter free text if a diagnosis or problem cannot be found in any list.
c) Does your product support structured coding for interventions? If so, provide the name(s) and version(s) supported	YES. Most users employ the codes used by the schedule of benefits, however any other coding system can be entered in the field provided.
d) Does your product support structured coding for symptoms? If so, provide the name(s) and version(s) supported	No
e) Does your product support structured coding for allergies? If so, provide the name(s) and version(s) supported	YES. We utilize DIN numbers to support matching with drug allergies.
f) Does your product support structured coding for adverse reactions? If so, provide the name(s) and version(s) supported	YES. We use DIN numbers for adverse drug reactions.
g) Does your product support structured coding for immunizations? If so, provide the name(s) and version(s) supported	YES. We have merged the ICD list with the Therapeutic classification list to have a comprehensive listing. We keep track of both the immunization description (e.g. Hepatitis A + B) and the Brand (Twinrix).
h) Identify other coded data elements and their schemes where appropriate in the response sheets	Encounter types, appointment types, locations, users, providers and alerts are presented to the user in coded tables. These items are modifiable by users.

5.5. INTERFACE REQUIREMENTS

5.5.1. Interface Summary

Validation of the Interface baseline requirements is the responsibility of the interface owner and the supplier of the service. The interface owners (e.g. Ministry of Health and Long-Term Care (MOHLTC)) acted as Validation Authorities for the baseline requirements under their jurisdiction.

Requirement	Weight	Y/N
a) Claims and Incentive Payments	M	Y
b) Health Card Validation (on-line)	Mandatory When Available	
c) Community Laboratories		
(i) Canadian Medical Laboratories (CML)	W	Y
(ii) Gamma-Dynacare Laboratories	W	Y
(iii) MDS Diagnostic Services	W	Y

Profile Requirements	Vendor's Response
d) Health Card Validation (OBEC)	Healthscreen provides this functionality.

5.6. INFORMATION TECHNOLOGY

5.6.1. Architecture

Requirement	Guidelines	Weight	Y/N
a) CMS supports multiple concurrent physicians through application, O/S and database	Single user systems not accepted	M	Y
b) CMS supports a minimum of 15,000 patient records <ul style="list-style-type: none"> Must allow for up to 10 years of data for 15,000 patients without the need to 'upgrade' DBMS, OS or other software components 	Vendor must provide substantiation that databases with inherent limitations, such as MSDE or MS Access, are capable of meeting this requirement.	M	Y
c) CMS provides a complete system (applications and data) backup and recovery process	Backup can be full or incremental, etc Recovery can be to last backup, point of failure, etc	M	Y

Profile Requirements	Vendor's Response
<p>d) Specify the server(s) on which the certified offering will operate. Need to indicate hardware platform (e.g. Intel Process, RAID Level 5), Electrical (voltage, watts), HVAC, Physical "footprint", Minimum UPS to ensure orderly shutdown in a power outage</p>	<ul style="list-style-type: none"> • Minimum requirements: Intel processor, ID controller, 128 meg RAM, 40 gig hard drive, tape drive. • 120V15AMP Isolated ground • standard HVAC • typical desktop or rack able physical footprint • 700VA/450Watt minimum UPS
<p>e) Specify which DBMS(s) are required for the certified version of the offering. Need to specify all DBMS versions such as:</p> <ul style="list-style-type: none"> • MS SQL Server – Standard Edition, • MS SQL Server – Enterprise Edition 	<p>Advantage Database by Extended Systems. Version depends on the OS. It could be version 5.6 – 6.2</p>
<p>f) What is the maximum number of concurrent users your system can support?</p>	<p>We have not yet reached a limit on our largest site with approximately 50 physicians. There is no theoretical limit imposed by the application or database.</p>
<p>g) What is the maximum number of patient records that your system can support?</p>	<p>We have not yet reached a limit on our largest site with approximately 50 physicians. There is no theoretical limit imposed by the application or database.</p>
<p>h) What are the limits to historical patient records in your system?</p>	<p>We have not yet reached a limit on our largest site with approximately 50 physicians. There is no theoretical limit imposed by the application or database.</p>
<p>i) Can your CMS support data mirroring?</p>	<p>Yes. We recommend this.</p>
<p>j) Can your CMS support database clustering?</p>	<p>Yes, Healthscreen will run on RAID type setup</p>
<p>k) Can your CMS support processor failover?</p>	<p>Yes, the Healthscreen product will run on this type of OS and hardware</p>
<p>l) Can your CMS support load-balancing of multiple processors?</p>	<p>Yes depending on the OS used. For example, Citrix offers load balancing and we have customers who use Citrix with Healthscreen. Raid drives and mirrored drives work with the application.</p>
<p>m) How much downtime is required for regular system maintenance and backups (hours per week)</p>	<p>System maintenance is generally not required on a routine, scheduled basis. Online Internet backup has not been used with our system.</p>
<p>n) Does your CMS archive patient files? Describe.</p> <ul style="list-style-type: none"> • Archiving is the removal of data from the production database to off-line media 	<p>No. We have a number of extremely large sites (i.e. 25 – 50 physicians) and over a number years there has been no reason to archive data.</p>

5.6.2. Hardware Information

Profile Requirements	Vendor's Response
<p>a) Describe the recommended hardware configuration required to run your solution for the following scenario:</p> <ul style="list-style-type: none"> - Single physician office - 2 support staff - 2 exam rooms <p>Include any assumptions that you are making</p>	<p>4 workstations, 1 exam room will act as server, assume no remote access during office hours. Internet router (NetGear*) will handle max 4 workstations. WinXP pro on all machines. 1 scanner, 1 laser printer, 1 label printer, tape backup, 2 modems (fax & edt).</p> <p>4- VT7500G P4 128MB, 40GB 4- Azuru 17" Crt Monitors 1- SG034037 Seagate 10/20GB Int Tape Drv 1- HP ScanJet 5550C Scanner 1- Lexmark E321 Laser Printer 1- Slp100 Seiko Smart Label 1" 2- U.S. Robotics 56K Fax/Modem card 1- 1MR814N NetGear Internet Router</p> <p>(Network wiring, patch cables and UPS not included)</p>
<p>b) Describe the recommended hardware configuration required to run your solution for the following scenario:</p> <ul style="list-style-type: none"> - 8 physician FHN - 4 different geographic locations (physician offices), each with 2 physicians - 3 support staff per physician office - 4 exam rooms per physician office <p>Include any assumptions that you are making</p>	<p>Required per each geographic location:</p> <p>7 workstations, 1 P4 server, assume multiply remote access during office hours. Internet router (NetGear*), 8 port switch. Win2000 server, WinXP pro on all WS. 1 scanner, 1 laser printer, 1 label printer, tape backup, 2 modems (fax & edt).</p> <p>1- G301-U-N2400 P4 256MB, NDRV 1- 256MB Upgrade 2- 60GB ATA4 7200rpm HD 1- Win2000 Svr cw CDs 10- Win2000 cal lic 5- Terminal Server Lic 1- STT220000N Seagate 20/40GB Int Tape Drv 7- VT7500G P4 128MB, 40GB 8- Azuru 17" Crt Monitors 1- HP ScanJet 5550C Scanner 1- Lexmark E321 Laser Printer 1- Slp100 Seiko Smart Label 1" 2- U.S. Robotics 56K Fax/Modem card 1- 1MR814N NetGear Internet Router 1- 1FS108N NetGear 8 port network switch</p> <p>(Network wiring, patch cables and UPS not included)</p>
<p>c) Describe the recommended hardware configuration required to run your solution for the following scenario:</p> <ul style="list-style-type: none"> - 10 physician FHN all located in 1 clinic (physician office) - 10 support staff - 20 exam rooms <p>Include any assumptions that you are making</p>	<p>30 workstations, 1 Dual Xeon server, assume 10 remote access during office hours. Internet router (Netgear*). Win2000 server, WinXP pro on all WS. 3 scanner, 5 laser printers, 1 label printer, tape backup, 2 modems (fax & edt).</p> <p>1- Acer G510s-U-P2600 Xeon 2.66Ghz 512MB 73GB SCSI Server Win2000 Server 5 lic 1- 512MB Upgrade Kit 1- 73GB SCSI Hard Drv Upgrade 1- Intel Xeon 2.66GHz Upgrade 1- STT220000N Seagate 20/40GB Int Tape Drv 35- Win2000 cal lic 10- Terminal Server Lic 30- VT7500G P4 128MB, 40GB</p>

Profile Requirements	Vendor's Response
	<p>31- Azuru 17" Crt Monitors 3- HP ScanJet 5550C Scanner 5- Lexmark E321 Laser Printer 1- Slp100 Seiko Smart Label 1" 2- U.S. Robotics 56K Fax/Modem card 1- 1MR814N NetGear Internet Router 1- 1FS524N NetGear 24 port network switch</p> <p>(Network wiring, patch cables and UPS not included)</p> <p>* NetGear router has limited VPN capabilities and max 4 simultaneous remote connections. SSH has promised to supply routers and firewalls.</p>
d) Removed: Refer to requirement 5.6.1d)	
e) Will you sell the hardware required to run your solution?	Yes. We can provide all hardware and software, including servers and peripherals.
f) As part of your CMS Local Solution, will you require customers to buy hardware from you?	No. Customers can purchase their own hardware and networks or they can have us supply the entire solution. We will assist them with specifications if they choose to purchase from another hardware supplier.
g) If you sell hardware yourself, will you provide manufacturer's warranty? Describe any additional service provided to support the hardware in a physician office	Yes. Healthscreen supports all the hardware that it sells. Manufacturer's warranty is handled by the manufacturer. The client can purchase additional service and support for hardware.
h) If you do not sell the hardware yourself, will you support the hardware your customer obtains?	No
i) Do you allow your product to be installed on client hardware that is not brand new, assuming that it meets your recommended hardware specification	Yes
j) Is your application designed to work over a wide area network?	Yes
k) Will you deploy your CMS in a "thin client" implementation within a physician office or clinic? Will you deploy your CMS in a "thin client" implementation when using a shared server environment? State the technology used in each case (e.g. Citrix, Web browsers, etc.)	Yes, within a physician office. We already do this at a few sites with excellent performance. Citrix and Terminal services are used. Not in a shared server environment due to security issues.

5.6.3. Server Software

Profile Requirements	Vendor's Response
<p>a) Specify the server operating system on which the certified offering will operate. Need to specify all Operating System versions such as: MS Windows 2000 Server – Standard Edition, MS Windows XP Professional</p>	<p>Windows 2000 server</p>
<p>b) Describe any recommended non-CMS software to be installed on the server.</p> <p>The following should not be entered in this response:</p> <ul style="list-style-type: none"> • DBMS, captured under requirement 5.6.1e) • Utilities and tools, captured under 5.6.3c) • Software required to meet CMS requirements such as 'Ad-hoc query', captured in 5.6.4b) 	<p>Terminal Services or Citrix for sites requiring remote access</p>
<p>c) What other tools and utilities (e.g. Systems Management, Monitoring, Backup, Audit Logging etc.) are required to implement the CMS on the server</p> <ul style="list-style-type: none"> • All software must be included in the pricing in Section 6- Pricing Scenarios Spreadsheet 	<p>pcAnywhere is required for additional training, support and maintenance. Tape backups are included in the hardware pricing scenarios as well as a modem. Fax server is part of the Healthscreen program. Labs provide their own communication software. No other server software required.</p>

5.6.4. Client-side Software

Profile Requirements	Vendor's Response
<p>a) Specify the client operating system on which the certified offering will operate. Need to specify all Operating System versions such as: MS Windows 98, MS Windows 2000 Professional, MS Windows XP Professional</p>	<p>Windows 98 or higher</p>

Profile Requirements	Vendor's Response
<p>b) Specify any non-CMS product software that is required to install or operate the client software of your certified offering (e.g. Crystal Reports, Office Automation, Lab Communication software, EDT Communication software, MS Access, etc.)</p> <ul style="list-style-type: none"> All software must be included in the pricing in Section 6- Pricing Scenarios Spreadsheet 	<p>Advantage Database Server is required. The OS server software has a built in backup program. pcAnywhere in our standard setups is required for support and some labs. Other labs require/provide different modem software. Healthscreen has its own fax server built in. EDT requires no other software than Healthscreen.</p>
<p>c) What other software products do you advise physicians to implement?</p>	<p>All sites that connect remotely should have anti-virus software. pcAnywhere is used for remote support. Other software is not required since Healthscreen has its own word processor and other features are integrated and available within the application.</p>
<p>d) What other software products are compatible with your CMS? (e.g. Office suites, accounting, research, analysis, etc.)</p>	<p>As far as we know, all Windows-based products will work on computers running Healthscreen. Some clients use Dragon's Naturally Speaking voice recognition product for program operation and data entry. Some clients utilize report writers for specialized functions.</p>
<p>e) What other software products do you sell that would be of additional benefit to a physician office? (e.g. Office suites, accounting, research, analysis, etc.)</p>	<p>Healthscreen resells pcAnywhere, ADS server software, Dragon Naturally speaking and server notification software. pcAnywhere version depends on OS and could be 9 or higher. ADS server, depending on OS is Version 5.6 – 6.2. Dragon Naturally speaking is version 6 professional.</p>
<p>f) What other software products do you support? (e.g. Office suites, accounting, research, analysis, etc.)</p>	<p>The Help Desk provides Tier 1, first call support for all software, hardware and networks in our clients' offices. If we determine that the problem lies in another company's software, Healthscreen will assist the client in obtaining appropriate assistance.</p>

5.6.5. Local Area Network (LAN)

Profile Requirements	Vendor's Response
<p>a) What are the minimum LAN requirements to install your CMS?</p>	<p>TCP/IP, Network Card running @ 10/100 Ethernet</p>
<p>b) Do you provide wireless LAN installations?</p>	<p>Yes, @ 802.11a, b or g</p>
<p>c) Does your wireless solution support WEP enabled 802.11b, at a minimum?</p>	<p>yes</p>

5.6.6. Pen Tablet and PDA Devices

Profile Requirements	Vendor's Response
a) Do you support the use of Pen tablets with your CMS? Describe the CMS features supported.	YES. Healthscreen has incorporated Pen tablet interfaces and a growing number of physicians use them. We continue to investigate new tablets as they become available and we are resellers of the leading products.
b) Does your CMS have a PDA-enabled component? (i) List PDA's supported (ii) Describe the CMS features supported.	YES. i) Any PDA capable of accessing the Internet via a browser can have access to the full Healthscreen product. To date we have used Compaq and Dell pocket PCs. ii) The entire Healthscreen product is available via the PDA in real time. Connectivity can be via wireless cell, WiFi, or cable.

5.6.7. Availability Management

Profile Requirements	Vendor's Response
a) Do you provide remote server management capabilities? Please list functions provided	Yes. Some functions performed: add users, groups, profiles, computers software, auditing reviews, maintenance and updates of the Healthscreen software
b) How is data recovered after a system (hard drive) failure? To point of failure, last backup, or other (describe)	Depending on hardware and O.S. configuration, point of failure is recovered.
c) Do you provide tools to manage the availability of CMS systems? Describe functions	No
d) Do you provide real-time server monitoring with alerts sent to yourselves or to clients?	Sonicwall is available to clients who wish to monitor and be paged with problems. It is an optional feature.

5.6.8. User Documentation

Profile Requirements	Vendor's Response
a) Provide a list of the documentation that will be provided to the CMS user at each installation and the media used	Help files and a User manual are provided with each installation. Help files are available online in the product and updates can be mailed or downloaded via the Internet. A printed manual is provided with each installation also. Other documentation, such as a data dictionary, may be available on request.

5.6.9. Security Policies and Standards

Profile Requirements	Vendor's Response
a) SSHA will provide guidelines for systems hardening. Will you provide a service to certify that implementations meet those guidelines?	YES depending on the guidelines.

5.6.10. Auditing and Logging

Requirement	Guidelines	Weight	Y/N
a) Audits and logs the following system events encountered at the CMS server: <ul style="list-style-type: none"> All local and remote logins – successful and failed The log must include: timestamp, user ID/application ID, originating IP address, port accessed or computer name 	Interactive logins	M	Y
b) Audits and logs traffic that indicates unauthorized activity encountered at the CMS server <ul style="list-style-type: none"> The log must include: timestamp, user ID/application ID, originating IP address, port accessed or computer name 	Anonymous access for services installed and running on the server (e.g. FTP, Telnet, Web) is not allowed If the CMS does not require any additional services, this requirement is then met	W	Y
c) Audits and logs access to components of the medical record from outside the CMS, including: <ul style="list-style-type: none"> External ODBC connections used to execute SQL queries CMS data stored external to the database such as attachments All data files used to meet other CMS Local requirements (e.g. reporting requirements) The log must include: timestamp, user ID/application ID and data base operation 	Files created for the deliberate export of data (e.g. 5.4.2c) do not need to be audited If the database is encrypted when viewed by any user (including administrator) using any external tool, this would meet the requirement	W	N

5.6.11. Encryption

Profile Requirements	Vendor's Response
a) Does your system encrypt backup and archive files?	No

5.6.12. Workstation Security

Requirement	Guidelines	Weight	Y/N
<p>a) Provides a way to quickly “lock” a user workstation if left unattended</p> <ul style="list-style-type: none"> • Must be quick – for example a screen saver after 30 minutes is not acceptable • CMS data must not be accessible • Must preserve context when unlocked 	<p>Entire workstation does not need to be locked</p> <p>Acceptable solutions are:</p> <ul style="list-style-type: none"> • User initiated lock • Screen lock with a timeout period 	W	Y
<p>b) Ensures security when one User is logged on at multiple workstations</p> <ul style="list-style-type: none"> • Must be able to log on to CMS through a second workstation with the same user credentials without logging out of the first workstation 		W	Y
<p>c) Ensures security when several Users use the same workstation in quick succession to access a) a single patient record or b) multiple patient records</p> <ul style="list-style-type: none"> • Must be able to log on to CMS with a second set of user credentials without logging out the first user • Second user cannot see first user’s data and vice versa 	<p>If offering uses operating system features (e.g. Windows XP fast user switching) to meet this requirement, only versions of OS that provide this feature can be specified in requirement 5.6.4a)</p>	W	Y

Profile Requirements	Vendor's Response
<p>d) Workstation should disconnect or challenge Users when a timeout period is exceeded.</p> <p>Describe how you support this?</p>	<p>Healthscreen enforces a defined timeout that will challenge users to show workstation activity or the system will automatically exit Healthscreen on that workstation. The workstation remains available.</p>

5.6.13. Security Services

Profile Requirements	Vendor's Response
<p>a) Do you provide anti-virus software</p> <p>List vendor(s), product(s) supported</p>	<p>Healthscreen sells and installs anti-virus software. We also provide advice regarding proper maintenance and upgrading of this important feature. Customers typically use Norton or McAfee which function well with Healthscreen.</p>

5.6.14. Media Security

Profile Requirements	Vendor's Response
<p>a) Please describe your approach to securing computer hard drives to prevent unauthorized access to confidential data (e.g. stolen laptop, desktop, server)</p>	<p>Computer passwords are setup on the system. One would need to get through the password section before the data can be accessed through the O.S. The application is further protected by passwords. Healthscreen can enforce stringent password controls, such as password length, expiration, timeouts and special characters.</p>

5.6.15. Remote Access

Requirement	Guidelines	Weight	Y/N
<p>a) Supports Remote Access through internet connections using VPN</p> <ul style="list-style-type: none"> • Must be able to use all CMS functions when connected remotely • Pricing for any components needed to support remote access over a VPN must be included in Section 6- Pricing Scenarios Spreadsheet • Pricing for establishing the VPN (e.g. firewall, routers, VPN software) does not need to be included in Section 6- Pricing Scenarios Spreadsheet • Pricing for 'home office' setup/configuration does not need to be included in Section 6- Pricing Scenarios Spreadsheet 	<p>If offering does not support VPN connections, then you will not be able to offer Remote connections (e.g. access from home). A shared server approach for the 4-2 physician office is allowed as all connections will be within the SSHA secure eWAN.</p>	<p>W</p>	<p>Y</p>

6. PRICING SCENARIOS SPREADSHEET

6.1. HOW TO READ THIS SECTION

The pricing scenarios and configurations are intended to allow physicians to easily compare pricing for different aspects of the CMS. The intent of the pricing scenarios supplied is not to in any way limit a vendor's offering. Vendors completed all sections of the three worksheets in full during the week of Oct 15-21, 2003.

Note: If a vendor does not supply specific components (such as hardware, cabling), they provided an 'estimated' price and removed the check mark from the 'Vendor Supplied' column.

Please read the 'instructions' column as well as the Assumptions and Pricing Notes section for each worksheet to ensure that you understand the complete response. In addition, please note the following:

- 1) Prices should be read as "list prices". Physicians will negotiate their actual price based on individual needs; these prices could be lower than the list prices.
- 2) The scenarios use a 'fixed workstation in each exam room' model. Therefore the pricing for a specific office will vary depending on the technology ultimately selected by the customer.
- 3) Prices for the CMS Software include all components required by the offering to meet the "Mandatory" and "Weighted" requirements for the certified solution.
- 4) Products and Services referenced in the "Profile Responses" may not be included in the pricing.
- 5) Support costs for the CMS Software reflect the Mandatory minimum number of hours to be provided to eligible physicians. Other aspects of what is or is not included in the support costs should be clarified directly with the vendor.
- 6) Vendors have the right to change pricing and pricing models without notice.
- 7) Detailed specifications for hardware is not required, however the vendor should include 'recommended' speed, memory, and disk capacity.

6.2. SOLO PHYSICIAN

Healthscreen - HS Practice v2						
CMS Local Solution Pricing Matrix - solo physician (single physician office, 2 support staff, 2 exam rooms)						Instructions/Explanatory Notes
CMS Software	Qty (FTE)	Named Users	One-time Capital Costs	Monthly Support Costs	Description	Extended pricing for all components for 'mandatory' and 'rated' requirements must be included
Site (physician office)	1		\$5,545	\$140	software and software installation	Includes all site licensed software included in your CMS Requires full access to all components of the CMS, includes licensing for drug databases Requires full access to all components of the CMS, includes licensing for drug databases Requires access to all CMS components, including the ability to 'document prescription refills', but not create new prescriptions Requires full access to PMS components (registration, billing, scheduling) only One of the lab interfaces from req. 5.5.1c Specify all third party software required for the CMS, such as MS Access, Crystal Reports, Lab/EDT communications software, Backup software
Physician	1	1	\$300	\$8	Data Bank drug interaction module	
Nurse-Practitioner	0	0	included	included		
Nurse	1	1	included	included		
Receptionist	1	2	included	included		
Lab Interface	1	N/A	included	included		
Additional Software		N/A	\$175		pcAnywhere	
Subtotal			\$6,020	\$148		
CMS Server & LAN Components	Qty	Supplied by Vendor	One-time Capital Costs	Monthly Support Costs	Description & Support Offered	List specifications for equipment as needed to support your offering. List specific versions of software (e.g. SQL Server 2000 - Standard Edition)
Server Software/Operating System(s)		✓	included		xp pro on Server handles up to 10 clients	As stated in section 5.6.3, include all client access licenses as needed
DBMS - Database Management System(s)	1	✓	\$1,725		Advantage Database Server software for 10 licence user	As stated in Profile Question 5.6.1e, include all client access licenses as needed
Remote Connections (e.g. Home Office) over VPN	1	✓	\$150			Req 5.6.15a is required to allow remote office connections. If your offering does not support VPN, then enter N/A in the pricing columns.
Anti-Virus Software		✓	\$90	\$4	Norton	Req. 5.6.13a - Provide Anti-virus for all servers
Server(s) Hardware		✓	\$2,202		WinXP Pro, Vt7600G P4, 512MB, 80 GB, Seagate tape drive	Server cannot be used as a workstation as per 5.6.2 Server includes a backup device
UPS		✓	\$170			UPS is only required for Server(s), Router/VPN Appliance, and DSL Modems
Modems (Fax, Lab, EDT)		✓	\$162		U.S. Robotics	
Lan drops/Patch Cables	7	✓	\$770		lan drops and patch cables (7 of each)	
Hub/Switch/Patch Panels	1	✓	\$208		Netgear 8 port switch and NetGear Internet Router	
Subtotal			\$5,477	\$4		

Client-Side Components					Monthly Support Costs	Description & Support Offered	List specifications for equipment as needed to support your offering. List specific versions of software (e.g. Windows XP - Professional)
Qty	Supplied by Vendor	One-time Capital Costs	Monthly Support Costs				
Workstations + 17" Monitors + Operating System	5	✓	\$5,768		17 " Zauru Crt monitors, VT7500G, P4, 128MB, 40 GB	Include all components from Req 5.6.4 a & B 2 exam rooms, 1 physician office, 1 reception, 1 nursing station Note: If your offering uses 'Windows XP' user switching to meet req. 5.6.12c you must quote only Windows XP.	
Anti-Virus Software	5	✓	\$450	\$18	Norton	Req 5.6.13a - Provide Anti-virus for all workstations	
Health Card Readers	2	✓	\$300		Posh MX32 - hcv upgradable	Req. 5.3.11e	
Scanner	1	✓	\$540		HP ScanJet 5550C	If req 5.3.5j or 5.3.6f is "Yes"	
Network Printers							
Standard Laser Printer	1	✓	\$870		Lexmark Laser Network printer		
Prescription Printer	1	✓	\$100		Lexmark inkjet	Req. 5.3.4a	
Lab Requisition Printer	1	✓	\$383		Epson LQ570E 24 pin dot matrix	If Req 5.3.5i is "Yes"	
Local Printers							
Inkjet	1	✓	\$100		Lexmark Inkjet		
Label Printer	1	✓	\$199		Seiko Smart Label 1"	Support for 'label on demand'	
Subtotal			\$8,710	\$18			
Recommended Software					Monthly Support Costs	Description & Support Offered	List all 'recommended' software that an office should purchase which is not included with your CMS offering. Refer to Req 5.6.4 c-e, Req 5.6.7
Qty	Supplied by Vendor	One-time Capital Costs	Monthly Support Costs				
Office Productivity Software						State which version of the office suite is recommended	
Accounting Software							
Real-time Server Monitoring	1	✓	\$160		Ether detect monitor software		
		✓					
		✓					
		✓					
		✓					
		✓					
Subtotal			\$160	\$0			

Implementation		Qty	Supplied by Vendor	One-time Capital Costs	Monthly Support Costs	Description & Support Offered
Hardware delivery and setup			✓	\$420		Delivery, unpacking and setup of all equipment at physician site
System Configuration	1	✓		\$250		All configuration required to implement the CMS as demonstrated during execution week (e.g. creating User accounts, security configuration, a single lab connection, printer setup, audit logging, etc.)
Demographics Conversion	1	✓		\$250		
Training	5 hours	✓		\$670		See assumptions below
Subtotal				\$1,590	\$0	
Total (certified offering)				\$21,797	\$170	
Total (with recommended S/W)				\$21,957	\$170	
Policies:						
Travel Charges	\$.35 per km.					Provide details relating to all potential travel charges
Expense Policy	Charged to customer based on actual amount paid out, payable on receipt					Provide details relating to expenses (hotel, meals, etc.)
Payment Policy	1. Terms - 15 % deposit, balance over 12 months 2. Cash - Payment prior to installation					Provide details relating to payments (i.e. deposits required, terms, etc.)
Assumptions:						
Demographics Conversion is from one of the software packages/vendors listed in Profile Question 5.2.5b, and includes all data from requirement 5.3.1d						
Training costs are based on profile questions 5.2.5d and 5.2.5e						
Customer needs to purchase all software/hardware						
DSL circuits, DSL Modems, and Router/VPN appliance will be supplied by others						
Vendor is required to connect 'CMS' to router						
Server is scaled to provide for a minimum of 5 years storage of 15,000 patient records						
Setup for a locum is not required						
Phone lines required for lab, fax etc. are excluded						
Pricing Notes:						
All pricing must include concurrent connections for all 'client-side' workstations (i.e. at all times a user will be logged into the workstation and CMS on all workstations).						
All prices exclude taxes						
n/a = CMS offering does not support the requirement that would require this component/service						
incl = Price is included in another component/service provided by the vendor						
Monthly Support costs for the CMS Software as per CMS Local Specification (i.e. 8AM – 8PM Monday through Thursday, 8AM – 5PM Friday, and 9AM – 2PM Saturdays (Eastern Time Zone). All other support costs are subject to Vendor conditions and limitations.						

6.3. FOUR X TWO PHYSICIAN OFFICES

Healthscreen - HS Practice v2						
CMS Local Solution Pricing Matrix - 4x2 physician offices						Instructions/Explanatory Notes
(8 physician FHN, 4 different geographic locations, each with 2 physicians, 3 support staff per physician office, 4 exam rooms per physician office)						
CMS Software	Qty (FTE)	Named Users	One-time Capital Costs	Monthly Support Costs	Description	
Site (physician office)	4		\$30,400	\$960	software and software installation	Extended pricing for all components for 'mandatory' and 'rated' requirements must be included Includes all site licensed software included in your CMS Requires full access to all components of the CMS, includes licensing for drug databases Requires full access to all components of the CMS, includes licensing for drug databases Requires access to all CMS components, including the ability to 'document prescription refills', but not create new prescriptions Requires full access to PMS components (registration, billing, scheduling) only One of the lab interfaces from req. 5.5.1c Specify all third party software required for the CMS, such as MS Access, Crystal Reports, Lab/EDT communications software, Backup software
Physician	8	8	\$1,200	\$67		
Nurse-Practitioner	0	0	included	included		
Nurse	4	8	included	included		
Receptionist	8	16	included	included		
Lab Interface	1	N/A	included	included		
Additional Software		N/A	\$175		pcAnywhere	
Subtotal			\$31,775	\$1,027		
CMS Server & LAN Components	Qty	Supplied by Vendor	One-time Capital Costs	Monthly Support Costs	Description & Support Offered	
Server Software/Operating System(s)	4	✓	\$7,394		Win2000 Server software, lic. For win2000	List specifications for equipment as needed to support your offering. List specific versions of software (e.g. SQL Server 2000 - Standard Edition) As stated in section 5.6.3, include all client access licenses as needed As stated in Profile Question 5.6.1e, include all client access licenses as needed Req 5.6.15a is required to allow remote office connections. If your offering does not support VPN, then enter N/A in the pricing columns. Req. 5.6.13a - Provide Anti-virus for all servers Server cannot be used as a workstation as per 5.6.2 Server includes a backup device UPS is only required for Server(s), Router/VPN Appliance, and DSL Modems
DBMS - Database Management System(s)	4	✓	\$6,900		Advantage Database Server software for 10 user licence per site	
Remote Connections (e.g. Home Office) over VPN	4	✓	\$3,000		Terminal Server Lic.	
Anti-Virus Software		✓	\$90	\$4	Norton	
Server(s) Hardware	4	✓	\$12,830		G301-U-N2400 Pr 256MB, NDRV, with Seagate tape Drive	
UPS	4	✓	\$680			
Modems (Fax, Lab, EDT)	8	✓	\$648		U.S. Robotics	
Lan drops/Patch Cables	36	✓	\$3,960		lan drops and patch cables (39 of each)	
Hub/Switch/Patch Panels	4	✓	\$834		Netgear 8 port network switch and NetGear Internet router	
Subtotal			\$36,336	\$4		

Client-Side Components					List specifications for equipment as needed to support your offering. List specific versions of software (e.g. Windows XP - Professional)
Qnty	Supplied by Vendor	One-time Capital Costs	Monthly Support Costs	Description & Support Offered	
Workstations + 17" Monitors + Operating System	36 ✓	\$49,176		17 " Zauru Crt monitors, VT7500G, P4, 128MB, 40 GB	Include all components from Req 5.6.4 a & B 16 exam rooms, 8 physician offices, 8 reception, 4 nursing stations Note: If your offering uses 'Windows XP' user switching to meet req. 5.6.12c you must quote only Windows XP. Req 5.6.13a - Provide Anti-virus for all workstations Req. 5.3.11e If req 5.3.5j or 5.3.6f is "Yes" Req. 5.3.4a If Req 5.3.5i is "Yes" Support for 'label on demand'
Anti-Virus Software	36 ✓	\$3,240	\$135	Norton	
Health Card Readers	8 ✓	\$1,200		Posh MX32 - hcv upgradable	
Scanner	4 ✓	\$2,160		HP ScanJet 5550C	
Network Printers					
Standard Laser Printer	4 ✓	\$3,480		Lexmark Laser Network printer	
Prescription Printer	4 ✓	\$400		Lexmark Inkjet	
Lab Requisition Printer	4 ✓	\$1,532		Epson LQ570E 24 pin dot matrix	
Local Printers					
Inkjet	8 ✓	\$800		Lexmark Inkjet	
Label Printer	8 ✓	\$1,592		Seiko Smart Label 1"	
Subtotal		\$63,580	\$135		
Recommended Software					List all 'recommended' software that an office should purchase which is not included with your CMS offering. Refer to Req 5.6.4 c-e, Req 5.6.7
Qnty	Supplied by Vendor	One-time Capital Costs	Monthly Support Costs	Description & Support Offered	
Office Productivity Software					State which version of the office suite is recommended
Accounting Software					
Real-time Server Monitoring	4 ✓	\$640		Ether detect monitor software	
	✓				
	✓				
	✓				
	✓				
Subtotal		\$640	\$0		

Implementation	Qty	Supplied by Vendor	One-time Capital Costs	Monthly Support Costs	Description & Support Offered
Hardware delivery and setup	4	✓	\$1,680		Delivery, unpacking and setup of all equipment at physician site
System Configuration	4	✓	\$1,000		All configuration required to implement the CMS as demonstrated during execution week (e.g. creating User accounts, security configuration, a single lab connection, printer setup, audit logging, etc.)
Demographics Conversion	1	✓	\$1,000		See assumptions below
Training	5 hrs	✓	\$2,680		On site training--5 hours per site See assumptions below
Subtotal			\$6,360	\$0	
Total (certified offering)			\$138,051	\$1,166	
Total (with recommended SW)			\$138,691	\$1,166	
Policies:					
Travel Charges	\$.35 per km				Provide details relating to all potential travel charges
Expense Policy	Charged to customer based on actual amount paid out, payable on receipt				Provide details relating to expenses (hotel, meals, etc.)
Payment Policy	1. Terms - 15 % deposit, balance over 12 months 2. Cash - Payment prior to installation				Provide details relating to payments (I.e. deposits required, terms, etc.)
Assumptions:					
Demographics Conversion is from one of the software packages/vendors listed in Profile Question 5.2.5b, and includes all data from requirement 5.3.1d					
Training costs are based on profile questions 5.2.5d and 5.2.5e					
Customer needs to purchase all software/hardware					
DSL circuits, DSL Modems, and Router/VPN appliance will be supplied by others					
Vendor is required to connect 'CMS' to router					
Server is scaled to provide for a minimum of 5 years storage of 15,000 patient records					
Setup for a locum is not required					
Phone lines required for lab, fax etc. are excluded					
Pricing Notes:					
All pricing must include concurrent connections for all 'client-side' workstations (i.e. at all times a user will be logged into the workstation and CMS on all workstations).					
All prices exclude taxes					
n/a = CMS offering does not support the requirement that would require this component/service					
incl = Price is included in another component/service provided by the vendor					
Monthly Support costs for the CMS Software as per CMS Local Specification (I.e. 8AM – 8PM Monday through Thursday, 8AM – 5PM Friday, and 9AM – 2PM Saturdays (Eastern Time Zone). All other support costs are subject to Vendor conditions and limitations.					

6.4. TEN PHYSICIAN CLINIC

Healthscreen - HS Practice v2						
CMS Local Solution Pricing Matrix - 10 physician clinic (10 physician FHN all located in 1 clinic (physician office), 10 support staff, 20 exam rooms)						Instructions/Explanatory Notes
CMS Software	Qty (FTE)	Named Users	One-time Capital Costs	Monthly Support Costs	Description	Extended pricing for all components for 'mandatory' and 'rated' requirements must be included
Site (physician office)	1		\$24,545	\$840	software and software installation	Includes all site licensed software included in your CMS Requires full access to all components of the CMS, includes licensing for drug databases Requires full access to all components of the CMS, includes licensing for drug databases Requires access to all CMS components, including the ability to 'document prescription refills', but not create new prescriptions Requires full access to PMS components (registration, billing, scheduling) only One of the lab interfaces from req. 5.5.1c Specify all third party software required for the CMS, such as MS Access, Crystal Reports, Lab/EDT communications software, Backup software
Physician	10	10	\$300	\$83	Data bank drug interaction module	
Nurse-Practitioner	2	2	included	included		
Nurse	2	3	included	included		
Receptionist	6	9	included	included		
Lab Interface	1	N/A	included	included		
Additional Software		N/A	\$175	included	pcAnywhere	
Subtotal			\$25,020	\$923		
CMS Server & LAN Components	Qty	Supplied by Vendor	One-time Capital Costs	Monthly Support Costs	Description & Support Offered	List specifications for equipment as needed to support your offering. List specific versions of software (e.g. SQL Server 2000 - Standard Edition)
Server Software/Operating System(s)		✓	\$1,750		Win2000 server software included with hardware, this price is for 35 win2000 cal lic	As stated in section 5.6.3, include all client access licenses as needed
DBMS - Database Management System(s)		✓	\$5,242		Advantage Databae Server software for 50 user licence	As stated in Profile Question 5.6.1e, include all client access licenses as needed
Remote Connections (e.g. Home Office) over VPN	4	✓	\$1,500		terminal server lic	Req 5.6.15a is required to allow remote office connections. If your offering does not support VPN, then enter N/A in the pricing columns.
Anti-Virus Software		✓	\$90	\$4	Norton	Req. 5.6.13a - Provide Anti-virus for all servers
Server(s) Hardware	1	✓	\$7,505		Acer G510s-U-P2600 Xeon 2.66 Ghz 1024MB 73 GG SCSI server win 2000 5 lic, Seagate tapedrive	Server cannot be used as a workstation as per 5.6.2 Server includes a backup device
UPS		✓	\$170			UPS is only required for Server(s), Router/VPN Appliance, and DSL Modems
Modems (Fax, Lab, EDT)	2	✓	\$162		U.S. Robotics	
Lan drops/Patch Cables	50	✓	\$5,500		lan drops and patch cables (50 of each)	
Hub/Switch/Patch Panels	3	✓	\$978		NetGear 24 port	
Subtotal			\$22,897	\$4		

Client-Side Components					Monthly Support Costs	Description & Support Offered	List specifications for equipment as needed to support your offering. List specific versions of software (e.g. Windows XP - Professional)
Qty	Supplied by Vendor	One-time Capital Costs	Monthly Support Costs				
Workstations + 17" Monitors + Operating System	40	✓	\$41,148		17 " Zauru Crt monitors, VT7500G, P4, 128MB, 40 GB	Include all components from Req 5.6.4 a & B 20 exam rooms, 10 physician offices, 6 reception, 4 nursing stations Note: If your offering uses 'Windows XP' user switching to meet req. 5.6.12c you must quote only Windows XP.	
Anti-Virus Software	40	✓	\$3,600	\$150	Norton	Req 5.6.13a - Provide Anti-virus for all workstations	
Health Card Readers	6	✓	\$900		Posh MX32 - hcv upgradable	Req. 5.3.11e	
Scanner	3	✓	\$1,620		HP ScanJet 5550C	If req 5.3.5j or 5.3.6f is "Yes"	
Network Printers							
Standard Laser Printer	5	✓	\$4,350		Lexmark Laser Network Printer		
Prescription Printer	5	✓	\$500		Lexmark Inkjet	Req. 5.3.4a	
Lab Requisition Printer	5	✓	\$1,915		Epson LQ570E 24 pin dot matrix	If Req 5.3.5i is "Yes"	
Local Printers							
Inkjet	10	✓	\$1,000		Lexmark Inkjet		
Label Printer	6	✓	\$1,194		Seiko Smart Label 1"	Support for 'label on demand'	
Subtotal			\$56,227	\$150			
Recommended Software					Monthly Support Costs	Description & Support Offered	List all 'recommended' software that an office should purchase which is not included with your CMS offering. Refer to Req 5.6.4 c-e, Req 5.6.7
Qty	Supplied by Vendor	One-time Capital Costs	Monthly Support Costs				
Office Productivity Software						State which version of the office suite is recommended	
Accounting Software							
Real-time Server Monitoring	1	✓	\$160		Ether detect monitor software		
		✓					
		✓					
		✓					
		✓					
		✓					
Subtotal			\$160	\$0			

Implementation	Qty	Supplied by Vendor	One-time Capital Costs	Monthly Support Costs	Description & Support Offered
Hardware delivery and setup		✓	\$840		Delivery, unpacking and setup of all equipment at physician site
System Configuration	1	✓	\$500		All configuration required to implement the CMS as demonstrated during execution week (e.g. creating User accounts, security configuration, a single lab connection, printer setup, audit logging, etc.)
Demographics Conversion	1	✓	\$2,500		
Training	5 hours	✓	\$2,625		See assumptions below
Subtotal			\$6,465	\$0	
Total (certified offering)			\$110,608	\$1,077	
Total (with recommended S/W)			\$110,768	\$1,077	
Policies:					
Travel Charges	\$0.35 per km				Provide details relating to all potential travel charges
Expense Policy	Charged to customer based on actual amount paid out, payable on receipt				Provide details relating to expenses (hotel, meals, etc.)
Payment Policy	1. Terms - 15 % deposit, balance over 12 months 2. Cash - Payment prior to installation				Provide details relating to payments (I.e. deposits required, terms, etc.)
Assumptions:					
Demographics Conversion is from one of the software packages/vendors listed in Profile Question 5.2.5b, and includes all data from requirement 5.3.1d					
Training costs are based on profile questions 5.2.5d and 5.2.5e					
Customer needs to purchase all software/hardware					
DSL circuits, DSL Modems, and Router/VPN appliance will be supplied by others					
Vendor is required to connect 'CMS' to router					
Server is scaled to provide for a minimum of 5 years storage of 15,000 patient records					
Setup for a locum is not required					
Phone lines required for lab, fax etc. are excluded					
Pricing Notes:					
All pricing must include concurrent connections for all 'client-side' workstations (i.e. at all times a user will be logged into the workstation and CMS on all workstations).					
All prices exclude taxes					
n/a = CMS offering does not support the requirement that would require this component/service					
incl = Price is included in another component/service provided by the vendor					
Monthly Support costs for the CMS Software as per CMS Local Specification (I.e. 8AM – 8PM Monday through Thursday, 8AM – 5PM Friday, and 9AM – 2PM Saturdays (Eastern Time Zone). All other support costs are subject to Vendor conditions and limitations.					