EHR REQUIREMENTS DOCUMENT TUTORIAL

The APA's EHR Committee has developed EHR User and System Requirements to help you select an EHR, as well as assist EHR vendors in building an optimal EHR product for psychiatry. This is a working document and we welcome feedback in order to make it as complete as possible.

An important point to keep in mind is that APA membership has widely varying needs in an EHR. Some will only want very basic functionality (e.g. creating bills, writing basic progress notes, and keeping track of patient medications while using the calendar in Outlook for appointment scheduling). Others in a solo or small group practice may need a bit more, perhaps the ability to send claims electronically or order and send prescriptions electronically. Those who practice in an outpatient mental health clinic or inpatient setting are going to need a full featured EHR containing much of the functionality described in this document. Those who accept Medicare/Medicaid may be considering participating in the government's Meaningful Use program and will need an HER to support those requirements. The document is intentionally comprehensive; Although it is expected that most clinicians will not need all of the requirements contained within it, it can serve as a complete reference to identify those requirements that are needed for a given practice.

There are 2 sets of requirements: **User** and **Systems**. **User Requirements** are those functions which you or your staff would access in the normal course of doing your daily work. **Systems Requirements** are those aspects of the EHR which operate behind the scenes to ensure its ongoing integrity, such as protecting the privacy of your patients' data and keeping the software up and running.

USER REQUIREMENTS SECTION:

The User Requirements are divided into 7 major functions: Appointments, Billing, Clinical Charting, Order Entry, Patient Access, General Documentation, and Reporting. The Clinical Charting function is further divided into Patient Documentation, Patient Information (General), and Patient Information (Clinical) sub-functions. Within each function/sub-function are one or more components. For example, within the Billing function, there are the "Insurance Coverage", "Guarantor", and "Insurance Companies" components. Each function and its associated components are in a separate document.

There are 5 columns:

1. <u>Fields:</u> These are individual data fields that a vendor would need to incorporate into the EHR in order to support the requirements within a particular component. All fields are

required to be displayed and included in the underlying databases, unless specifically stated otherwise. However, whether a user is specifically required to enter data in that field will be indicated next to it. If there is an "O", the user does not need to enter any data. If there is no letter next to the field, the user is required to enter data. Once entered and saved/signed, no clinical data can be erased and is potentially retrievable depending upon the requirements for a specific component. NOTE: For all inpatient functions, a patient id (ex. medical record no.) is required in addition to the patient name.

2. **Specific Requirements:** These are the actual requirements for each component. The list is meant to be as complete as possible. However, any given requirement may not be needed by your facility.

The first entry for each list is "Overall Component Settings/Priority" which refers to the entire function/component and is used to indicate in what settings the component is applicable, along with its associated priority for those settings. This entry is needed, because the overall component may have a different setting and/or priority than the individual requirements for that component. For example, all EHRs that are used in outpatient settings need to have an Appointments function, but it is not necessary for them to automatically create a billing charge each time an appointment is completed. In another example, the component "Problem Lists" within the "Patient Documentation" function has a priority of "I", but several of its individual requirements have an "E" priority. This means that the component is not an essential part of an EHR, but if it is provided, it is essential that these requirements be satisfied.

- 3. <u>Settings</u>: This column is primarily for the benefit of vendors to help them understand what functions/components they typically need to include in their products for particular types of practice locations. The 3 major practice locations in which the APA's membership primarily work, private practice, outpatient clinics, and inpatient units, are included. In addition, there is an indicator to designate those requirements which are unique to Child and Adolescent psychiatrists. Of note, any one requirement can have multiple settings. Of course, it is entirely possible that for any given function/component/requirement, the indicated setting(s) may be different from your specific practice setting.
- 4. <u>Priority:</u> This column is also intended for vendors to help them with their product development. You'll notice that the priorities for each requirement are listed on the left side of the column under "VEND". However, on the right side, there is room under "MEMB" for you to indicate your own priorities which will be helpful when looking at EHRs and interacting with vendors to decide which one will best suit your needs. For example, the support of group appointments has an "N" priority, but for your particular location, it may be essential, "E".
- 5. <u>Included In EHR:</u> This column is intended to be used by you to keep track of to what extent the requirements that you need are included in the EHRs you are investigating. It is also

expected that vendors will be using this document to indicate which requirements they support in their products.

SYSTEM REQUIREMENTS SECTION

The System Requirements section is organized in a similar manner as the User Requirements section, except there is no "Fields" column. The columns are intended to be used in the same way as described in the User Requirements section.

HOW TO MAKE THE BEST USE OF THE DOCUMENT:

The first task listed within the "Product Decision Making/Preparation" section of the "Selection /Implementation Guide" recommends determining what functions you are going to need in the EHR. The EHR Requirements documents can be very useful resources for that purpose, because they are meant to be comprehensive. As you go through them, you should note which function/components you want to have in an EHR. For each one, you then want to indicate which of the listed requirements are relevant to your work setting and the priority for each one. Remember, your priority may be different from what is listed.

The second task within the "Product Decision Making/Preparation" section of the "Selection /Implementation Guide" recommends determining what data elements you are going to need to be captured, stored, and updated. For each component that you want to include, you can go through the list of data elements in the "Fields" column and note which ones are relevant for your practice setting.

Once you have identified the functions, components, requirements, priorities, and data elements that are important to you, you will be in a much better position to thoroughly evaluate EHRs and make an optimal decision as to which one would be the best fit for your work.

APPOINTMENTS

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	APPOINTMENTS		VEND WEIND	
Patient Name Appointment Status Employee ID	Overall Component Setting/Priority	P,C	E	
	1) Recurrent appointments.	P,C	E	
	2) Alter calendar time divisions within a day (ex. display 15 min. time slots)	P,C	E	
	3) Sync with other scheduling software (ex. Outlook) on computer /mobile device.	P,C	I	
	4) Schedule provider/practice unavailable time (ex. office closed, vacations)	P,C	I	
	5) Employee ID → ID of employee entering, changing, deleting appt. info.	P,C	I	
	6) Support group appointments.	P,C	N	
	7) Automatically create a billing charge for completed appointments.	P,C	I	
	8) Appointment Status:	P,C	E	
	a. Pending			
	b. Confirmed			
	c. Cancelled; No Reschedule			
	d. Cancelled; Reschedule			
	e. No Show			
	f. Completed			

BILLING

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	INSURANCE COVERAGE	T.	1_	T
Patient Name/ID	Overall Component Setting/Priority	Α	E	
Insurance Co. Name				
Insurance Patient ID				
Insurance Group No. (O)				
Eligibility Start Date				
Eligibility Stop Date (O)				
Deductible (Individual/Family)				
Co- Pay/ Co- Insurance				
Max. Out-Of-Pocket				
(Individual/ Family) (O)				
Authorization (O)				
Reference No.				
Date of Author.				
Expiration Date				
No. Sessions				
No. Sessions Allowed				
(Non-Biological Illness) (O)				
**Insurance Coverage Fields Not				
Needed if Patient is Self-Pay**				
	1) Print statements/insurance claim forms within designated date range.	А	E	
	2) Electronically send claims to insurance companies.	A	I	

BILLING

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	INSURANCE COVERAGE			
	3) Easily input billing history when setting up EHR.	A	Е	
	4) Include provider information based on location where patient was seen.	A	I	
	5) Record payments from patients and insurance companies.	A	Е	
	6) Manage deductibles, co-pays, and discounts.	А	Е	
	7) Support guarantors.	А	Е	
	8) Track insurance authorizations; Issue reminder when new authorization needed.	А	Е	
	9) Support up to 3 insurance companies/patient.	А	Е	
	10) Ability to add/customize CPT/procedure codes and associated fees.	А	Е	
	11) For each procedure code selected, display default fee, but allow user to dynamically change it.	A	Е	
	12) Provide option for same procedure and diagnosis code to automatically appear each time a patient is seen.	А	E	
	13) Support decision support billing rules.	А	N	

BILLING

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	GUARANTOR			
Name * Address* Phone No.* Email Address (O) *Required if guarantor is not the patient	Overall Component Setting/Priority	A	E	
	1) Minimum of 2 phone numbers.	A	Е	
	INSURANCE COMPANIES			
Company Name* Phone Nos. (Member, Provider Mental Health, Pharmacy)* Claims Mailing Address (required if not sending claims electronically)* Electronic Claims Provider ID (required if sending claims electronically)* *Required if Patient not self-pay	Overall Component Setting/Priority	A	E	

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	EVALUATION			
Patient Name/ID DOB Clinician Name Date of Note Chief Complaint History of Present Illness Psychiatric History (including substance abuse) Family History Developmental History Personal History (school, employment, relationships) Medical History/Allergies Mental Status Exam Axes (I-V) Current Medications Summary Plan Author Signature/Date Other Fields As Needed by Provider (O)	Overall Component Setting/Priority	A	E	
	1) Ability to customize/create templates based on user /provider needs.	A	E	
	2) Support DSM nomenclature.	A	E	

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	EVALUATION			
	3) Support check boxes, free form text, and templates/macros for MSE and other fields, depending on user/provider needs.	A	E	
	4) Ability to save draft and re-edit prior to electronically signing.	А	E	
	5) No changes after electronically signed.	Α	E	
	6) Ability to print hardcopy or send electronically.	Α	E	
	DISCHARGE SUMMARIES / TRANSITION OF C	ARE		
Patient Name/ID	Overall Component Setting/Priority	Α	E	
DOB				
Date of Summary				
Date of Admission				
Date of Discharge Admission Course				
Discharge Medications				
Medication Reconciliation				
Completed Indicator				
Plan Details				
Primary Author Name				
Primary Clinician Phone No.				
Secondary Author Names				
(0)				
Author Signature				

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	DISCHARGE SUMMARIES / TRANSITION OF C	CARE		
	1) Automatically populate discharge medications.	А	E	
	2) Also to be used when transferring care to another clinician permanently.	А	E	
	3) Have customizable sections within "Plan" field (ex. Appointments, Medication Changes, Referrals, Tests, etc.)	A	I	
	4) Ability to print hardcopy and send electronically.	А	Е	
	5) Support draft and final copies.	A	Е	
	6) Support a minimum of 2 secondary clinicians.	А	E	
	PROBLEM LISTS			
Patient Name/ID DOB Date of Problem Date Resolved (O) Organ System/Type of Problem DSM/CPT Code (if applicable) (O) Description of Problem Priority (O) Resolution Plan (O) Responsible Clinician	Overall Component Setting/Priority	A		

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	<u>SETTINGS</u>	<u>PRIORITY</u>	INCLUDED
		P=Private Practice	E=Essential	<u>IN EHR</u>
		C=Clinic	I=Important	F=Full
		I=Inpatient	N=Nice	P=Partial
		Ch=Child/Adol A=All Settings		N= None
		A-All Settings	VEND MEMB	
	PROBLEM LISTS			
	1) Providers add manually.	А	E*	
	2) Select "Priority" from customized list.	A	E*	
	3) Select "Organ System/Type of Problem" from customized list.	A	E*	
	4) Decision Support Warnings automatically add to this list from other components.	А	l*	
	5) For each patient, dynamically sort on Date of Problem, Organ System/Type of Problem, and Priority, with multiple levels of sort.	A	E*	
	6) Ability to automatically add elements of Resolution Plan to Reminder List.	A	I	
	7) Provide patients with contents of list in terminology they can understand.	A	I	
	8) See the following Components which automatically access this list:		*if component is provided	
	a) Legal			
	b) Measurements (Physical)			
	c) Lab Results (Individual)			

<u>FIELDS</u>	SPECIFIC REQUIREMENTS PROGRESS NOTES	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
Patient Name/ID DOB Date of Note Author Names(s) Interval History Plan Mental Status Exam Axes (I-V) Current Medications Author Signature/Date Other Fields as Needed by Provider (O) Psychotherapy Note Indicator	Overall Component Setting/Priority	A	E	
	 Current Medications and Axes I-IV fields to be automatically populated. Ability to customize/create templates based on providers' needs, including MSE input. 	A A	E E	
	3) Support group notes. 4) Ability to automatically add elements of Plan to Reminder List. 5) Ability to print hardcopy or send electronically. 6) Ability to easily view previous notes when creating a new one. 7) Ability to copy sections of a previous note into a new one.	A A A A	E N E E I	

FIELDS	SPECIFIC REQUIREMENTS PROGRESS NOTES	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	8) Psychotherapy Note Indicator	Α	E	
Patient Name/ID Date of Call Message	Overall Component Setting/Priority	A	E	
	1) Ability to add ad hoc notes after a non-scheduled phone call/ interaction with a patient.	А	Е	
	TREATMENT PLANS			
Patient Name/ID Patient DOB Plan Date Component Category Component Plan /Goals Component Target Date Component Completion Date (O) Plan Expiration Date Patient/Legal Representative Signature/Date Clinician(s) Signature/Date (for each component)	Overall Component Setting/Priority	A	E	

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	TREATMENT PLANS			
	1) Warnings to Reminder List if expiration date within specific timeframe of current date (user defined).	А	I	
	2) Multiple provider input.	А	Е	
	3) Ability to move component entities to new plan if target dates not met by plan expiration date.	А	Е	
	4) Select "Component Category" from a customizable list (ex. "ADLs", "Mental Status", "Education/Training", "Employment", "Compliance", etc.)	А	E	
	5) Ability to print hardcopy or send electronically.	А	Е	

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News	DEMOGRAPHICS		le le	
Name	Overall Component Setting/Priority	A	E	
Address (R – If P,C)				
Phone (R – If P,C)				
E-Mail Address (O)				
Date of Birth				
Age (calculate)				
Primary Language				
Interpreter Needed				
Indicator				
Gender				
Ethnicity				
Marriage Status				
Religion (O)				
Emergency Contact:				
Name				
Address (O)				
Phone Nos.				
E-Mail Address (O)				
Primary Contact Indicator				
("self", "guardian", "minor")				

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	DEMOGRAPHICS			
Primary Contact: Name Address (O) Phone Nos. E-Mail Address (O) Preferred Method of Communication (R – if P,C) Patient Photo ID (O)				
	1) Multiple phone numbers (ex. home, office, mobile, etc.)	А	E	
	2) Primary phone no. indicator.	А	Е	
	3) Support alternative residence sites (homeless, jail, long term hospitalization, group home)	А	Е	
	4) Decision Support Warning to go into Reminders List if patient fits specific age criteria to perform specific testing.	А	ı	
	5) Up to 3 phone nos. each for emergency and primary contacts.	А	Е	
	6) Select "Gender", Ethnicity", "Marriage Status", and "Religion" from customizable lists.	А	Е	
	7) Ability to scan in and store a patient's photo to be used to assist with identification, ex. if the police have to be called for any reason.	А	N	
	8) Indicate patient's preferred method of communication (phone, e-mail, text).	P,C	I	

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	LEGAL			
Category ("living will", "advance directive", "guardianship", "capacity","minor with decision making auth") Date of Document Expiration Date Document Contents – (If 'living will', 'advance directive', or 'guardianship') If "capacity": Clinician Name Date/Time of Decision Reason for Capacity Request Reason for Determination	Overall Component Setting/Priority	A	E	
	1) Support scanning and storage of various legal documents.	A	Е	
	2) If "Capacity", automatically add to Problem List.	I	E	
	3) Display all categories pertinent to a particular patient in a visually noticeable way throughout the patient's chart.	А	E	
	4) Ability to customize "Category" options.	А	Е	

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	OTHER PROVIDERS			
Name Address (O) Phone Nos. E-Mail Address (O) Specialty	Overall Component Setting/Priority	A	E	
	1) Multiple providers (no limit)	А	Е	
	2) Multiple phone numbers (at least 2 for each provider).	А	Е	
	3) Support general list of providers for lookup, even if not currently associated with a specific patient, i.e. provider directory.	А	Е	
	REFERRAL SOURCE			
Name Organization (O) Type Address (O) Phone E-Mail Address (O)	Overall Component Setting/Priority	P,C	E	
	1) Customizable "Type" field, ex. provider, family member, friend, school.	P,C	E	

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	ALLERGIES			
Allergan Name Reaction Type Reaction Date of Onset (O)	Overall Component Setting/Priority	A	E	
	1) Multiple allergans (at least 3).	А	E	
	2) For medication allergy, select from same list of medications that is used for prescribing.	А	Е	
	3) Display all allergies in a visually noticeable way.	А	Е	
	4) Ability to select from customizable list of different types of allergans, ex. medications, latex, contrast dye, etc.	А	E	
	5) Reaction Type (distinguish between true allergy and sensitivity).	А	Е	
	DIAGNOSES (PHYSICAL)			
ICD Code Diagnosis Name Date of Onset Date Resolved (O)	Overall Component Setting/Priority	Α	E	
	1) Select from complete list of ICD codes.	А	E	
	2) Use to populate Axis III fields.	А	E	
	3) Allow free text in "Diagnosis Name" if no match on "ICD Code".	А	Е	

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	DIAGNOSES (PSYCHIATRIC)			
DSM Code DSM Name Axis (I or II) Current/Active Diagnosis Indicator Date of Onset or Diagnosis (O)	Overall Component Setting/Priority	A	E	
	1) Select from complete list of DSM Axis I and II codes.	А	E	
	MEASUREMENTS (PHYSICAL)			
Height (O) Weight (O) BP (O) BMI (O) Waist Circumference (O) Head Circumference (O) Temperature (O) Pulse (O) Respiration (O) Pain Scale (O) Pregnancy Months	Overall Component Setting/Priority	A	E	
	1) Graphing capability.	A	N	
	2) Normal/Abnormal values.	А	E	

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	MEASUREMENTS (PHYSICAL)	_		_
	3) Decision Support Warning for abnormal values and notification added to Problem List.	А	I	
	4) Calculate BMI based on Height and Weight.	A	E	
	5) Provide Growth Charts based on Height, Weight, and Age.	Ch	I	
	MEDICATIONS			
Medication Name Date Started (O) Date Stopped (O) Reason for Stopping (O) Route of Administration (O) Frequency (O) Special Instructions (O) Source of Information ("Patient", "Provider ", "Pharmacy")	Overall Component Setting/Priority	A	E	
	1) Support OTC/"natural" medications.	А	Е	
	2) Ability to enter medication history prescribed by other providers.	А	E	
	3) Access medication history from external sources (ex. Surescripts).	A	I	
	4) Ability to select medication from same list of all medications available for ordering; Support partial medication name search and type in free text if medication name not found.	А	E	
	5) Visually show concurrent medication usage.	A	N	

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	MEDICATION RECONCILIATION			_
Date/Time Reconciliation Done Name of Clinician Performing Reconciliation	Overall Component Setting/Priority	A	E	
	1) Compare list of medications patient is currently taking with list of active medications in the patient's chart.	А	E	
	Accessible as Standalone function, as well as easily accessible from Progress Note and Evaluation activities.	А	E	
	LAB RESULTS (for individual results)			
Prescriber Name Test Name Test Value Date Performed Date Entered Lab Provider Name	Overall Component Setting/Priority	A	E	
	1) Electronically receive report.	A	I	
	2) Scan hardcopy report.	A	E	
	3) Manually enter lab values.	A	Е	
	4) Electronically receive individual test results and populate fields.	A	I	
	5) Graph individual test result values over time.	A	I	
	6) Provide normal and abnormal value ranges for each test, if available.	А	E	

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	LAB RESULTS (for individual results)			
	7) Issue Decision Support Warning if value abnormal and automatically add to Problem List.	А	I	
	8) If abnormal value, provide ability to allow user to indicate means to be notified (ex. e-mail or phone).	A	I	
	OTHER RESULTS (Report Format)			
Result Type Result Date Result Content (actual report) Clinician Contact Name/ Phone No.	Overall Component Setting/Priority	Α	E	
	1) Ability to customize "Result Type" values (ex. "EEG", "EKG", 'Radiology', "Psychological Testing", "Labs', Measurements, Scales, etc.).	А	E	
	2) Provide 'Clinician Contact ' if known. This is person who can provide additional information on the test (ex. for "Psychological Testing", it could be the person who administered the test).	A	Е	

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	PHYSICAL SYMPTOMS			
Symptom Name Symptom Description (O) Date of Onset Date Resolved (O)	Overall Component Setting/Priority	A	E	
	1) Select "Symptom Name" from a customizable list of symptoms. Allow free text if not in the list.	А	E	
	2) "Symptom Description" is free text.	А	E	
	3) Can have multiple sets of Onset/Resolved Dates for a particular symptom if it recurs.	A	Е	
	4) Accessible from Evaluation and Progress Note functions, as well as standalone.	A	Е	
	SUBSTANCE ABUSE / SMOKING HISTORY			
Substance Name Substance Details/History (O) DSM-IV Related Diagnosis Date of Onset Date Stopped (O)	Overall Component Setting/Priority	A	E	

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	SUBSTANCE ABUSE / SMOKING HISTORY		VEND IVILIVID	
	1) Select "Substance Name" from a customizable list. Allow free text if not in the list.	A	Е	
	2) "Substance Details/History" is free text.	А	Е	
	3) Can have multiple sets of Onset/Stopped Dates for a particular substance if patient relapses.	A	E	
	4) Accessible from Evaluation and Progress Note functions, as well as standalone.	А	Е	

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	MEDICATIONS			
Medication Name Date Started Date Stopped (O) Reason for Stopping (O) No. Refills Route of Administration Frequency Special Instructions (O) Ordering Clinician Expiration Date (O – If I/P)	Overall Component Setting/Priority	A	E	
	1) Capability to electronically prescribe.	A	Е	
	2) Option of how to transmit new prescription (paper, electronic, phone call).	Α	E	
	3) Ability to transmit multiple prescriptions for a patient at one time.	А	Е	
	4) Electronically receive pharmacy renewal requests and place notification in Reminders List.	P,C	Е	
	5) Automatically determine when new prescription is needed, because it expired and place notification in Reminders List.	I	Е	

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	MEDICATIONS			
	6) Check drug-drug-allergy interactions, including OTC/"natural" medications.	A	E	
	7) Display severity of interaction and other warnings in a user friendly manner.	А	Е	
	Display all possible formulations (dosage forms, routes) for selection.	A	Е	
	9) Include prescriber information on prescription according to location where patient is being seen.	P,C	Е	
	10) Print prescriptions on formatted paper.	A	Е	
	11) Support formularies based on facility.	I	Е	
	12) Support formularies based on patient's insurance co.	P,C	E	
	13) Allow multiple formularies for each patient.	P,C	E	
	14) Adhere to state regulations for controlled prescriptions.	А	Е	
	15) If I/P, automatically place entry in Reminder List if medication order has an expiration date.	I	I	

<u>FIELDS</u>	SPECIFIC REQUIREMENTS LABS & OTHER (ex. EKG, Psychological Testing, Radio	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
Ordering Clinician Name Date/Time of Order Order Name Order Type Special Instructions (O) Date/Time Completed (O) Reason Not Performed (O) Ordering Clinician Name/Phone No. Results Transmission Mode	Overall Component Setting/Priority	A	E	
	1) Print orders.	А	E	
	2) Electronically send orders to the appropriate department or external location.	А	E	
	3) Select "Order Name" from a customizable list of values; Allow free text if not in list.	А	E	
	4) Select "Order Type" from a customizable list.	А	E	

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	N=Nice	INCLUDED IN EHR F=Full P=Partial N= None
			VEND MEMB	
	LABS & OTHER (ex. EKG, Psychological Testing, Radio	logy, etc.)		
	5) Support customizable lab order sets on a provider and practice level.	А	I	
	6) Decision Support Warnings to place an entry in the Reminder List for checking results.	А	E	
	7) Select method by which results will be communicated back to the clinician (ex. phone, fax, e-mail, within EHR).	А	E	

PATIENT ACCESS

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	<u>SETTINGS</u>	PRIORITY	INCLUDED
		P=Private Practice	E=Essential	<u>IN EHR</u>
		C=Clinic	I=Important	F=Full
		I=Inpatient	N=Nice	P=Partial
		Ch=Child/Adol		N= None
		A=All Settings		
			VEND MEMB	
	PROVIDE HARDCOPY INFORMATION TO PATIENTS (ex. Res	sults, Education)		
Patient Name	Overall Component Setting/Priority	Α	E	
Patient MRN (R-if I/P)				
Date of Report				
Type of Report				
Report Contents				
Authorization				
Name/Date				
	1) Customize according to needs and best interests of patients.	А	E	
	HARDCOPY PATIENT ACCESS			
	Overall Component Setting/Priority	Α	E	
	1) Ability for patients to provide/change demographic, insurance, and clinical	А	E	
	information via hardcopy forms.			
	2) Support HIPAA reguirements (acknowledge forms offered, store signed	А	E	
	forms).			
	PATIENT PORTAL			
	Overall Component Setting/Priority	P,C	N	
	1) Secure electronic access.	P,C	E*	
	2) Retrieve information (clinical and education) based on authorization from	P,C	E*	
	provider.			
	3) Schedule appointment.	P,C	N	
			*if component	
			provided	

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	RECEIVE EXTERNAL DOCUMENTS (ex. Results, Report	ts, Letters)		1
Patient Name/ID Results/Report Date Type of Document Comments (O) Non-Transmittal Flag Sending Provider: Name Phone. No E-Mail Address (O)	Overall Component Setting/Priority	A	E	
	1) Scan and store.	А	E	
	2) Accept electronic transmission and store.	А	Е	
	3) Select "Type" from customizable list.	А	E	
	4) Support Natural Language capability to convert information contained within documents into structured, digital form and store it.	А	N	
	5) Flag if received document should not be transmitted to any external entity.	A	Е	
IN	IFORMATION FOR OUTSIDE PROVIDERS AND OTHER ENTITIES (ex. Le	tters, Evaluations, Re	esults)	
Patient Name/ID Name of Outside Provider/Entity Date Sent Type of Information Sent Information Contents Authorization Name/Date	Overall Component Setting/Priority	A	E	

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
IN	FORMATION FOR OUTSIDE PROVIDERS AND OTHER ENTITIES (ex. Le	tters, Evaluations, Re	esults)	
	1) Customize according to specific needs.	Α	Е	
	2) Provide Hardcopy.	А	Е	
	3) Warnings about what authorizations needed and obtained before sending (see "Authorization" section in "Global Requirements").	A	I	
	4) Support electronic transmission.	A	I	
	5) Select "Type" from customizable list.	А	Е	
	PROVIDER CASELOADS			
Provider Name Provider Phone No. Provider E-Mail Address (O) Provider Type (ex. Psychiatrist, Social Worker, etc.) Provider Role (Ex. Psychopharmacology, Therapy, etc.) Patient Name/ID Patient DOB Date Started With Provider Date Ended With Provider (O)	Overall Component Setting/Priority	A		
	1) Support patient on multiple caseloads.	А	E*	
	2) Select "Type" and "Role" from customizable list.	А	E*	
			*if component is provided	

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice	INCLUDED IN EHR F=Full P=Partial N= None
	DEFEDENCE INFORMATION		VEND MEMB	
Name of Reference	Overall Component Setting/Priority	A	ı	
Type of Reference Link to Reference	overall component setting/1 nonty			
	1) Access to user determined internal and external reference materials (ex. drug information, patient confidentiality guidelines, best practices, acronyms/abbreviations, etc.)	А	I	
	Links accessible where most appropriate (ex. drug information within medication ordering function)	A	N	
	3) Automatic return to EHR after using reference.	А	E*	
	4) Select "Type" from customizable list.	A	E*	
			*if component is provided	

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	REMINDER / TO-DO LISTS			
Patient Name (R -if patient related) Date Added Target/Due Date (O) Date Completed (O) Description Category (ex. lab, billing, documentation, etc.) Priority	Overall Component Setting/Priority	A	E	
	1) Dynamically sort on patient, target date, priority, and category, with multiple levels of sort.	A	Е	
	2) Select "Category" from customizable list.	А	Е	
	3) Allow entries to be made manually or automatically from Decision Support Warnings.	A	Е	
	4) See the following Components which automatically access this list:	A	E	
	a) Problem Lists			
	b) Progress Notes			
	c) Treatment Plans			
	d) Ordering (Medications, Labs, Other)			

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	COVERAGE LISTS (for on-call or covering clini	cians)		
Covering Clinician Name Covering Clinician Phone No. Patient Name Patient MRN/ID (R - if I/P) Patient DOB Patient Location (R - if I/P) Patient Phone No. (R - if O/P) Primary Provider Name Primary Provider Phone No. Primary Patient Contact Name & Phone No. Patient Diagnoses Patient Medications To-Do Items (O) General Notes (O)	Overall Component Setting/Priority	I P, C	E	
	1) Available to both covering clinician and clinician whose patient is being covered.	А	E*	
	2) All Patient fields to be automatically populated once patient's name is selected or MRN/ID entered.	A	E* * if component is provided	

REPORTING

<u>FIELDS</u>	SPECIFIC REQUIREMENTS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None	
	DISEASE REGISTRIES				
	Overall Component Setting/Priority	I,C	E		
	1) Customize reports needed by facility and to satisfy government reporting requirements.	I,C	Е		
	MEANINGFUL USE				
	Overall Component Setting/Priority	А	E		
	1) Capture data and build statistics based on meaningful use criteria for Medicare/Medicaid attestation.	А	E		
	PROVIDER / PRACTICE REPORTS (not patient spo	ecific)			
	Overall Component Setting/Priority	A	E		
	1) Customize reports needed by specific providers/practices or departments.	A	E		
QUALITY REPORTING					
	Overall Component Setting/Priority	I,C	E		
	1) Customize reports needed by the facility and to satisfy government reporting requirements.	I,C	Е		

<u>COMPONENTS</u>	QUESTIONS/ SPECIFICS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	ACCESSABILITY			
DATA/SOFTWARE	1) Cloud/remote server support.	P,C I	E I	
	2) Local (Intranet, practice server, and/or PC hard drive) support.	P,C I	E E	
	3) Local (Intranet, practice server, and/or PC hard drive) support for software and customizable subset of data normally accessible from cloud/remote server.	P,C	E	
	4) Mobile (phone, tablet) device support for subset of software/data primarily housed on another computer (ex. PC, mainframe,etc.)	А	ı	
	a) Demographics (patient name, DOB, contact info.)			
	b) Current medications.			
	c) Pharmacy Contact Info.			
	d) Problem List.			
	e) Reminders List.			
	f) Appointments.			
	5) Support for DSM-V when it becomes available.	А	E	
	6) Underlying Decision Support mechanism with the ability to add/modify specific warnings.	А	E	

<u>COMPONENTS</u>	QUESTIONS/ SPECIFICS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	ACCESSABILITY			
USER INTERFACE	1) Device Support			
	a) Keyboard Support	A	E	
	b) Signature Capture	А	E	
	c) Pen Support	A	N	
	d) Point/Touch Support	А	N	
	e) Voice Recognition	А	N	
	2) Ability to link to external websites for information (ex. drug reference, hospital procedures) and, where appropriate, seamlessly return to EHR. (See User Requirements, "Documentation Global/Reference Information" section).	А	E	
	3) User Friendly, i.e. functions/data presented in a way which is familiar/comfortable to users and consistent with the way they do their work.	А	E	
	4) The ability to display any combination of selected clinical data elements within a specificed period of time in a graphical mode.	А	N	
	AVAILABILITY			
TIMEFRAMES	1) 24/7 availability for software and data, except for scheduled downtimes which must be agreed upon between the software developer and users so as to have the least impact on the user.	А	E	
	2) Ongoing monitoring of system integrity, both hardware and software, to ensure that critical elements are maintained (ex. response time, adequate storage, etc.	А	E	

<u>COMPONENTS</u>		SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	AVAILABILITY			
BACKUP SYSTEMS	1) Software/Data must be backed up sufficiently so that their availability is ensured if they need to be restored in the event of a systems failure.	А	Е	
	2) Functions need to be provided to create a hardcopy subset of demographic, insurance, and clinical data within a customizable timeframe to be used in the event of a systems failure.	А	E	
DOWNTIME PROCEDURES	1) Sufficient manual procedures need to be established between the software developer and the users so that in the event of an unexpected systems failure or planned upgrade, the users can still continue to do their work. Once the system is up and running, capability needs to be provided to allow any work done during downtime to be able to be inputted back into the system, ex. medication orders.	А	Е	
DISASTER RECOVERY	1) A specific set of procedures need to be established by both the software developer and the users to restore the software and data to full running status in the most expeditious way with the least impact on the users.	А	E	
DATA OWNERSHIP	1) All data needs to be owned solely by the users/providers, not the vendor.	А	Е	
	AUTHORIZATION			
CURRENT	1) Authorizations for the following entities to view/update data:	A	Е	
	a) Patients			
	b) Internal providers			
	c) External providers			
	d) External databases (ex. HIEs)			
	2) Authorizations must conform to HIPAA standards.	A	Е	

<u>COMPONENTS</u>	QUESTIONS/ SPECIFICS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None
	AUTHORIZATION			
	3) Ability to create customized sub-entities (ex. Internal Providers, MDs, Nurses, Social Workers, Clerical Staff, etc.) to grant group authorizations.	A	I	
	4) External Providers can only have Read access to their own patients or for patients for whom authorization is explicitly given (ex. if consulting) by an internal provider associated with the patient.	А	I	
	5) Internal Providers normally can only have access (Read and Update) to their own patients or patients temporarily assigned to them (ex. coverage).	A	I	
	6) Ability for providers to gain emergency access to any patient.	Α	E	
FUTURE	1) Each individual/entity, including:	Α	*	
	a) Patients			
	b) Internal providers			
	c) External providers			
	d) Legal Proxies (ex. guardian, advance directive designee, court)			
	e) Staff			
	needs an authorization level ("No Access", "Read", "Read/Update") for each data element.			
	2) Ability to designate an aggregate of data elements (ex. function, component, etc.) as having the same authorization level for a given individual/entity.	А	*	

COMPONENTS		SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice VEND MEMB	INCLUDED IN EHR F=Full P=Partial N= None		
	AUTHORIZATION					
FUTURE	3) Ability to create a hierarchy of data elements so that for a given individual/entity, any data element would have the same authorization level as the one above it in the hierarchy.	А	*			
	4) Each data element or aggregate of elements is assigned an individual/entity who can determine its level of authorization for the patient's own access in the event that the access of that data by the patient is deemed to be not in his/her best interests.	А	*			
	5) A record needs to be kept for each data element of each access to that element, including the individual/entity who accessed it, date/time, and any changes made to that element.	А	ı* *if provided			
	DECISION SUPPORT					
	1) Ability to provide both active and passive capability.	А	E			
	2) Ability for user to select which decision support entities to activate, degree of severity, and action to be taken (ex. place warning in Problem and or Reminder List, notify provider, etc.)	А	E			
	3) Ability to have user/developer add new decision support entities.	A	E			
INTEROPERABILITY						
STANDARDS	1) Needs to support any interoperability standards (ex. HL7) that are needed to communicate between the EHR and other systems, both internal and external.	А	Е			
INTERFACES	1) Interface With:	A	Е			
	a) Other software applications within practice/institution, as needed.					
	b) External software applications/databases (ex. HIEs), as needed.					

<u>COMPONENTS</u>	QUESTIONS/ SPECIFICS	SETTINGS P=Private Practice C=Clinic I=Inpatient Ch=Child/Adol A=All Settings	PRIORITY E=Essential I=Important N=Nice	INCLUDED IN EHR F=Full P=Partial N= None			
			VEND MEMB				
OPERATING SYSTEMS / PLATFORMS SUPPORTED							
	1) Mainframe, PC, MAC, Linux, or Unix, and Mobile (Apple, Android, or Microsoft)	I	Е				
	2) PC or MAC, and Mobile (Apple, Android, or Microsoft)	P,C	E				
SECURITY							
AUDIT TRAILS	1) Each transaction must have a corresponding transaction placed in an electronic audit trail.	А	Е				
ENCRYPTION	1) Any data that is either stored or transmitted outside of a physical location/Intranet must be encrypted.	А	Е				
	2) Encryption standards must be used (ex. Advanced Encryption Standard (AES) 128/256).	А	Е				