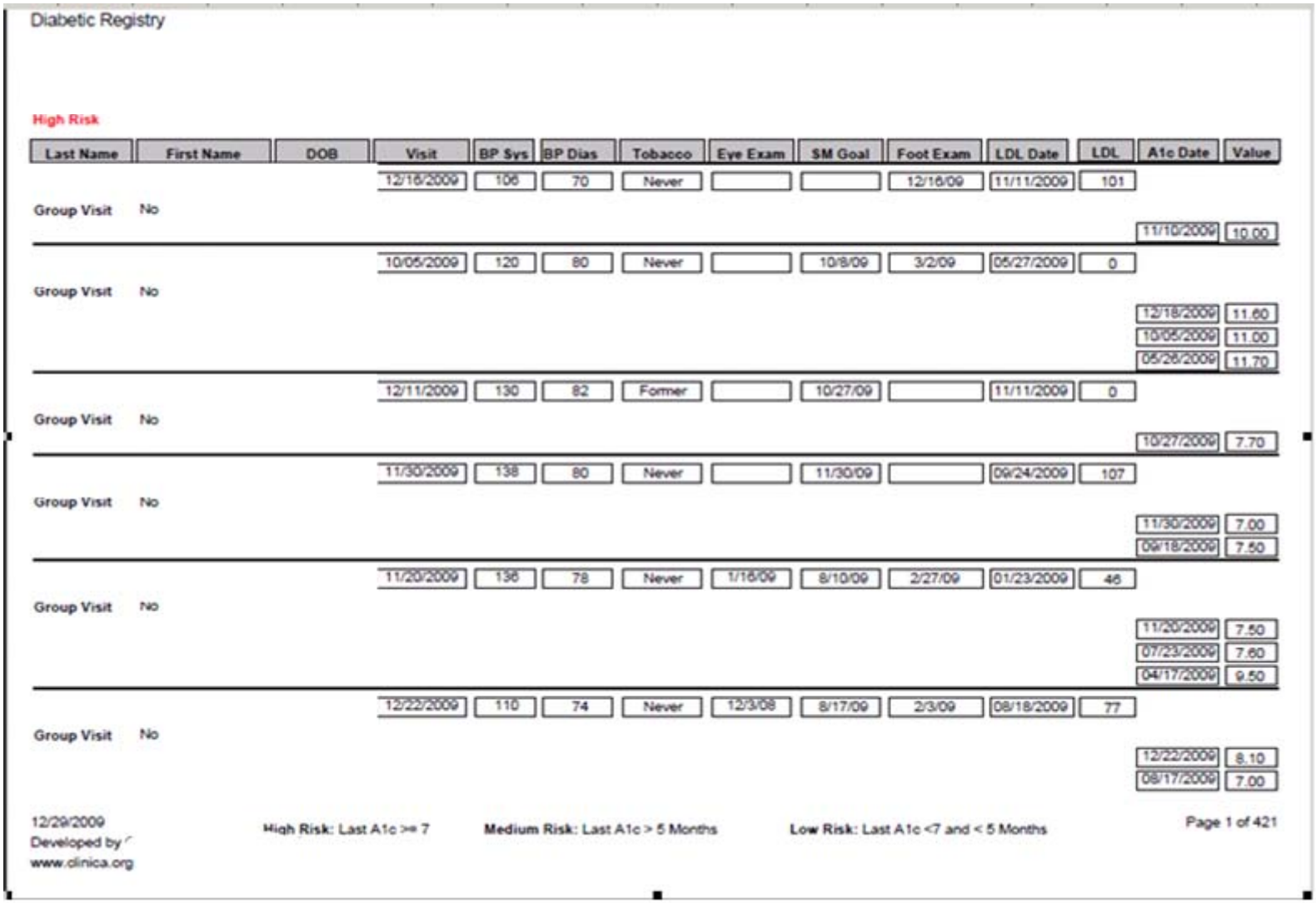
PPC 3: CARE MANAGEMENT
Element A: Guidelines for important conditions

Item 1: First Clinically important condition

Diabetes Registry, Workflow, Ruler and Guidelines:



Diabetic Registry

High Risk

Last Name	First Name	DOB	Visit	BP Sys	BP Dias	Tobacco	Eye Exam	SM Goal	Foot Exam	LDL Date	LDL	A1c Date	Value
			12/16/2009	106	70	Never			12/16/09	11/11/2009	101		
Group Visit	No											11/10/2009	10.00
			10/05/2009	120	80	Never		10/8/09	3/2/09	05/27/2009	0		
Group Visit	No											12/18/2009	11.60
												10/05/2009	11.00
												05/26/2009	11.70
			12/11/2009	130	82	Former		10/27/09		11/11/2009	0		
Group Visit	No											10/27/2009	7.70
			11/30/2009	138	80	Never		11/30/09		09/24/2009	107		
Group Visit	No											11/30/2009	7.00
												09/18/2009	7.50
			11/20/2009	136	78	Never	1/16/09	8/10/09	2/27/09	01/23/2009	46		
Group Visit	No											11/20/2009	7.50
												07/23/2009	7.60
												04/17/2009	9.50
			12/22/2009	110	74	Never	12/3/08	8/17/09	2/3/09	08/18/2009	77		
Group Visit	No											12/22/2009	8.10
												08/17/2009	7.00

12/29/2009
Developed by
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High Risk: Last A1c >= 7 **Medium Risk:** Last A1c > 5 Months **Low Risk:** Last A1c <7 and < 5 Months

Page 1 of 421

Diabetes Registry Workflow

Aim: To provide quality evidence-based care to our patients with Diabetes.

Aim: To maintain a comprehensive and accurate registry of our patients with Diabetes in order to perform appropriate and timely care.

Diabetes Registry Measures:	Average A1c	% of patients with two A1cs in the last 12 months	% of patients with last BP < 130/80	% of patients are current smokers	% of patients have an annual foot exam	% of patients with an annual self-management goal documented
	% of patients have A1cs < 7%		% of patients with last LDL < 100		% of patients have an annual eye exam	

	Actions					
Operations	Print off Diabetes registry and workflow the first Tuesday of every month.					
Front Desk	Review registry for last visit, blood pressure, eye exam, foot exam, lipids, and A1c.					
	Visit	**Blood Pressure**	**Eye Exam**	**Foot Exam**	**Lipids**	**A1c**
	If more than six months, make appointment. Otherwise, review Blood Pressure, Lipids and A1c for follow-up guidelines.	If blood pressure <130/80 use other risk factors to determine follow up needs. If BP Systolic is >130 or BP Dyastolic is >80 follow up at least every month.	Add patients without eye exam in the last 12 months to wait list for eye clinic. Contact patient when slot opens with date of clinic.	If no foot exam in the last 12 months, schedule an appoitment.	If LDL <100 use other risk factors to determine follow up needs. If LDL >100 but <130 follow up should be at least every three months. If LDL >130 follow up should be at least once a month.	If Hgb A1c > 9, follow up every month. If Hgb A1c >7 but <9 follow up should be at least every 3 months. If HgbA1c <7 follow up should be every three to six months
Case Manager	Review registry for risk stratification, tobacco, and self-management goal. **Note:** For patients who do not have information populated in the flowsheet, CM will open NextGen and determine if patient is actually a diabetes patient. Alert Clinical team to patients on huddle report.					
	Tobacco	**Self-Management**	**Group Visits**			
	If current smoker, review for tobacco cessation counseling. Advise patient to quit at next contact.	Monitor patients on registry for annual goal. Responsible for connecting with patient to set goal when in for a visit.	Determine which patients/providers do groups. Coordinate DM group visits for pod by doing the following: • Determine provider availability • Denise's schedule availability • Coordinate with NTM on support staff availability • BHP schedule availability Call pts and schedule for DM GV as needed.			
Provider	Review the flowsheet every visit and enter any new data. Review registry for any patients for which there are concerns and patients who are MOGE. Provide information to CM.					
MA	Review the flowsheet every visit and enter any new data. Responsible for patients on registry who are in for visit today.					
Nurse	Reviews copy of registry given by CM to ensure all follow-up has been completed and is accurate.					

Last Name	First Name	DOB	Visit	BP Syst	BP Dias	Tobacco	Eye Exam	SM Goal	Foot Exam	LDL Date	LDL	A1c Date	Value
Diabetes Planned Care Ruler			If more than six months, make appt. Otherwise, see BP, LDL & A1c rules	If above 130, appt every month	If above 80, appt every month	If current smoker, CM to review for Tobacco Cessation counseling	If not within one year, put on list for DM Eye Exam GV	If not within one year, CM to set goal with patient	If not within one year, make appt	If not within one year, make appt	If above 130, appt every month. If 100-130, appt every 3 months	If not within 3 months, make appt (6 months okay if last value less than 7.0)	If above 9, appt every month. If 7.0 - 9.0, appt every 3 months. If below 7.0, appt every 6 months

Care of the Adult Patient with Diabetes Mellitus
(Guidelines from HealthTeamWorks)

DIAGNOSTIC PARAMETERS	*Two samples needed unless patient has symptoms of hyperglycemia
Fasting Plasma Glucose	> 126 mg/dl (after no caloric intake for at least eight hours and no more than 14)
Random Plasma Glucose	>200 mg/dl
Oral Glucose Tolerance Test	>200 mg/dl in the two hour sample. Based on 75gm dose

CARE PARAMETERS		
GUIDELINE	**FREQUENCY**	**GOAL/COMMENTS**
HISTORY & PHYSICAL		
Diabetes Focused Visit	Every 3-6 months	More often if needed
Blood Pressure & Weight (BMI)	Every visit	Goal BP <130/80[1], Goal BMI < 25 (25-29.9 overweight; ≥ 30 obese)
Retinal Screening	Annually[2]	By ophthalmologist, optometrist, or retinal photograph (read by experienced expert)
Inspect Feet	Every visit	Without socks and shoes; if abnormal, consider referral to foot care specialist
Comprehensive Lower Extremity Exam	Annually	Vascular, neurological, & musculoskeletal exam (w/ monofilament)
Oral Health Assessment	Every 6 to 12 months	Refer to dentist or dental hygienist
LABS		
A1c	Quarterly if not meeting treatment goals otherwise at least every 6 months	General Goal <7% A lower goal may be beneficial if no significant hypoglycemia[3]
Fasting Lipid Profile	Annually	Goal: LDL <100 mg/dl Optional goal: LDL< 70 in patients with CVD HDL >40 mg/dl for **men** >50 mg/dl for **women** Triglycerides <150 mg/dl
Urine Microalbumin	Annually[4] - regardless of therapy	If >30mg/gm creatinine or >30 mg/24hrs initiate ACE-I (ARB if ACE-I intolerant)
Serum Creatinine	Annually	Use to estimate GFR; consider referral to nephrologist if GFR <60
MEDICATIONS/IMMUNIZATIONS (for appropriate patients)		
Aspirin	Initially/Ongoing	In all patients >40 yo or with CVD. May use low dose 81mg/day
ACE Inhibitor (ARB if ACE-I intolerant)	Initially/Ongoing	Individuals with hypertension, microalbuminuria or CVD
Statin	Initially/Ongoing	Use if not at lipid goal. In all patients >40 yo or with CVD, consider statin irrespective of LDL if total cholesterol ≥ 135
Influenza Vaccination	Annually	Per CDC recommendations
Pneumococcal Vaccination	At least once	Once; Revaccinate if ≥65 years old, AND first shot at <65 years AND first shot ≥5 years ago
THERAPEUTIC LIFESTYLE CHANGES		
Set Self-management Goals With Patient	Every focused visit	Review and revise as needed. Refer to ECS when indicated.
Assess Need for Diabetes Education	Every focused visit	Refer for DM education prn

Assess Nutrition Status	Every focused visit	Refer for medical nutrition therapy prn
Assess Exercise Status	Every focused visit	Increase physical activity based on needs/condition
Assess Smoking Status	Initially/Ongoing	If smoking, advise, counsel, treat
Depression Screening	Initially/Ongoing	Treatment and referral as needed
Advanced Directives	Annually	Discuss with patient each year and update directives as needed

[1] ACE inhibitors should be considered in most hypertensive patients (if no contraindication)

[2] For type 1 do initial comprehensive eye exam 3- 5 years after diagnosis. For type 2 do shortly after diagnosis. Then follow up annually or as directed by eye care provider.

[3] ADA 2006 Clinical Practice Recommendation: "The AIC goal for the *individual patient* is an AIC as close to normal as possible without significant hypoglycemia."

[4] For type 1 begin 5 years after diagnosis and type 2 at diagnosis. If microalbuminuria <30 mg/gm creatinine, screen annually; if 30-300 mg/gm, verify with 2 repeat tests within 3 to 6 months; if >300 mg/gm, evaluate for gross proteinuria.

8/31/2007

Diabetes Management Guideline Details

Long term treatment goals for persons with diabetes include: (1) achieving near-normal metabolic control, (2) preventing or delaying long-term complications of diabetes and (3) assisting the patient with diabetes to lead a productive life.

A primary component of metabolic control is blood glucose control. It was demonstrated through the Diabetes Control and Complications Trial (DCCT) that in patients with type 1 diabetes, the development or progression of nephropathy, retinopathy and neuropathy was reduced 50%-75% by using intensive insulin treatment regimens.[1] In the group where benefits were observed, the patients had an average HbA1c level of 7.2%. In a second study similar in design to the DCCT, patients with type 2 diabetes showed a comparable reduction in microvascular complications with similar glucose control.[2] The following chart outlines blood glucose targets in non-pregnant patients with diabetes. Glycemic targets generally are set higher in-patients with recurrent severe hypoglycemia, reduced awareness of hypoglycemic symptoms, advanced complications or co-existing disease, and the elderly. It is important to evaluate each patient with diabetes to develop individualized target glucose levels based on the patient's clinical status and the patient's willingness and ability to participate in his/her management of diabetes.

The United Kingdom Prospective Diabetes Study (UKPDS) provides strong support for the American Diabetes Association's position that vigorous treatment of diabetes can decrease the morbidity and mortality of the disease by decreasing chronic complications. The result shows that lowering blood glucose reduces the incidence of microvascular complications in type 2 diabetes as it does in type 1 diabetes. The UKPDS is another landmark study proving the value of metabolic control.[3]

Blood Glucose Goals in Non-Pregnant Patients with Diabetes[4]

	Normal— non-diabetes values	Goal—patients with diabetes	Action suggested if **
Preprandial fasting glucose	<100 mg/dl	90-130 mg/dl	<80 or >140 mg/dl
2-hour postprandial	<140 mg/dl	<180 mg/dl	>180 mg/dl
Bedtime glucose	< 120 mg/dl	100-140 mg/dl	<100 or >160 mg/dl
HbA1c*	<6%	<7%	>7%

*Normal levels will vary by assay method (values based on normal range of 4%-6%)

** "Action suggested" depends on the individual patient. Actions may be changes in medication, provision of diabetes education, or changes in self-management techniques.

[1] See reference 1
[2] See reference 2
[3] See reference 18
[4] See reference 3

Approximate Comparison of Average Blood Plasma Glucose and HbA1c Values Glucose mg/dl

65	100	135	170	205	240	275	310	345	380
4	5	6	7	8	9	10	11	12	13

HbA1c percent based on normal range of 4% -6%

Definitions

***Diabetes*:**
A chronic illness that requires continuing medical care and education to prevent acute complications and to reduce the risk of long-term complications.

The American Diabetes Association uses the following blood glucose values to define diabetes for diagnostic purposes:[5]

***Normal*:** Fasting plasma glucose <100 mg/dl.
Impaired fasting glucose("pre-diabetes"): Fasting plasma glucose ³100 mg/dl and <125 mg/dl.
Impaired glucose tolerance("pre-diabetes"): When results of oral glucose tolerance test are >140 mg/dl but <199 mg/dl in a two-hour sample.

Diagnosis:
A person is considered to have diabetes when one of the following diagnostic parameters are met[6]
*2 samples needed to confirm unless symptoms of hyperglycemia are present

Fasting plasma glucose[7] 126 mg/dl (after no caloric intake for at least eight hours and no more than 14).
Or
A random plasma glucose test *level of*[8] 200 mg/dl taken at any time during the day without regard to the time of the last meal with the classic symptoms of increased urination, increased thirst and unexplained weight loss
Or
An oral glucose tolerance test value *of* [9]200 mg/dl in the two-hour sample. Based on 75 gm dose[10]

Note: Fasting plasma glucose is the preferred method of diagnosis and is advised to be used universally. The hemoglobin A1c test is not recommended for diagnosis, nor is the finger-prick test using a glucose meter. **Abnormal values on either of these tests warrant formal evaluation.**

History and Physical Exam[11]

There are two levels of physical exam for the patient with diabetes. These include an annual comprehensive exam appropriate to the age and condition of the patient, and focused physical exams conducted between comprehensive annual exams. Areas of critical importance to include in the exam **specific to diabetes** are included below:

Diabetes-specific History areas to be included when indicated:
· Current medications
· Patient's results of self-monitoring of blood glucose
· Problems adhering to treatment plan
· Patient changes in treatment regimen
· Frequency and causes of hypo- and hyperglycemia
· Acute and chronic complications
· Sick-day management
· Nutrition plan
· Exercise/activity plan
· Hypoglycemic unawareness
· Oral hygiene status including identification of periodontal disease, caries and recent Clinical treatment by dentist
· Glucagon usage—in insulin-treated patients
· Contraception discussion and discussion of preconception glucose control in women of childbearing age

[5] See reference 4
[6] See reference 4
[7] See reference 3
[8] See reference 3
[9] See reference 3
[10] See reference 19
[11] See references 3,5,6, and 7

· Lifestyle, cultural, psychosocial, (including depression) educational, and economic factors that might influence the management of diabetes.
· History and Treatment of other conditions, including endocrine, eating disorders, or other mental health problems.

Diabetes-specific elements in Physical Exams:
· Blood Pressure
· Weight/ BMI –weight loss recommended for all overweight (BMI 25-29.9) or obese (BMI $\geq$ 30) individuals
· Annual dilated fundoscopic exam by eye care provider
· Foot exam, including touch sensation (monofilament 5.07), pedal pulses, checking for ulcers and deformities should be done at every encounter with a physician.

Laboratory[12]

· HbA1c at least **semi-annually**. In patients with less than adequate glucose control, this is recommended **quarterly**. (Inadequate control defined by HbA1c > 7%)
· Fasting lipid profile **annually** if normal and at more frequent intervals if abnormal. target goals for lipids are outlined below:

Lipid Profile Target Values

	Target Value in pts w/ DM or CAD
Total cholesterol	<200 mg/dl
Triglycerides	<150 mg/dl
LDL cholesterol	<100 mg/dl
HDL cholesterol	> 40 mg/dl Men
	>50 mg/dl Women

· Routine urinalysis performed **annually:** albumin/creatinine ratio in random spot collections
  · If urinalysis is **positive** for protein, a quantitative measure is needed to develop treatment plan. (e.g., 24 hour urine collection for protein)
  · If **not positive** for protein, microalbumin screening is recommended. Screening for microalbumin is generally done by measurement of the albumin/creatinine ratio in a spot collection of urine.
· **If the patient currently takes an ACE or ARB:** continued annual urine alb/cr surveillance recommended to assess response to ACE and progression of disease. Annual alb/cr can be discontinued and replaced with annual urinalysis for protein when macroalbuminuria is present.
· Serum creatinine used to estimate GFR should be measured annually.

Note: If microalbumin is positive, consider treatment with ACE inhibitors and/or ARBs. Beta blockers have also shown to be effective in reducing blood pressure and microalbuminuria.[13]

Complications[14]

Hypertension: Hypertension contributes to the development and progression of most chronic complications of diabetes.
  · The target goal for blood pressure in an adult with diabetes is 130/80 mm Hg or less.
  · ACE inhibitors are the drug of choice in most patients with diabetes. ARBs may be used if the patient is ACE intolerant. Beta blockers should also be considered in post MI patients.

***Nephropathy*:** Maintaining near normoglycemia has been proven to delay the onset of microalbuminuria and delay the progression of microalbuminuria to Clinical proteinuria in patients with diabetes.

Definitions of Abnormalities in Albumin Excretion

Category	24m – Hr collection (mg/24hrs)	Spot collection ug/mg/creat
Normal	< 30	< 30

[12] See references 3,5,6,7,8,9,10, and 11
[13] See reference 20
[14] See references 3,5,6,7,8,9,10,11,12,13,14, and 15

Microalbuminuria	30-300	30-299
Clinical albuminuria	> 300	> 300

- Decreasing blood pressure will delay the progression of diabetic nephropathy.
- ACE inhibitor use is indicated with patients with positive protein (>300 mg/24 hrs.) or ARB if the patient is ACE intolerant.
- ACE inhibitors or ARBs are also indicated in patients with microalbuminuria even if normotensive. (Refer to above chart for normal values).
- Consideration should be given for a referral to a Nephrologist with patients with gross proteinuria, or an elevated creatinine (GFR <60)

Note: Contraindications for ACE Inhibitor therapy include
- History of intolerance or adverse reaction to ACE Inhibitors
- Elevated levels of serum potassium, >5.5 mEq/L
- Renal artery stenosis
- Symptomatic hypotension
- Shock
- Pregnancy

Retinopathy: An annual evaluation of the retina is recommended.
- Refer patients with diagnosed diabetic eye disease to ophthalmologist experienced in the treatment of diabetic eye disease.

Neuropathy: There are three major types of neuropathy: distal symmetrical polyneuropathy, focal neuropathy, and autonomic neuropathy. Persons who develop neuropathy may or may not have symptoms.
- Improvement in neuropathy may be seen with improved glucose control.
- Patients who have had a history of foot lesions or prior amputation require preventative foot care to avert recurrence of problems.
- Comprehensive vascular, neurological and musculoskeletal exams are important annually, as are routine foot exams every time a person with diabetes is seen in the primary care setting.
- Educate all persons with diabetes about the risk for and prevention of foot problems.
- Medical assistants should be instructed to ask patients with diabetes to remove their shoes at every visit.

Vascular disease: Diabetes causes both large and small vascular complications.
- Patients with diabetes are at increased risk for cardiovascular disease.
  - Statins should be used to reduce LDL levels if baseline levels are greater than 100. A trial of statins should be considered in all patients with Diabetes and known cardiovascular disease regardless of the base line LDL with the goal of reducing LDL by 30-40.
  - Careful attention to modifying risk factors is suggested.
- Recommend cessation of smoking to all persons with diabetes.
- Aspirin therapy (81 to 325 mg/day) has been identified as a primary strategy to reduce cardiovascular event in patients with type 1 and type 2 diabetes.[15]

Diabetes and pregnancy: To prevent early pregnancy loss and decrease risk of congenital malformations, optimal diabetes control must begin prior to pregnancy. Prior to conception, the following is recommended:
- Optimize glycemic control to fall within the normal HbA1c range < 6 % prior to conception.
- Obtain baseline measure of all complications, including renal function and retinal status.
- Institute intensive insulin therapy or treatment with glyburide.

Routine immunizations:
- Annual influenza immunization.
- Pneumococcal vaccine according to recommended guidelines[16]
- TB Screening at least once for patients with DM

[15] See reference 24
[16] See reference 23

Treatment Goals[17]

Long-term treatment goals for persons with diabetes include achieving near-normal metabolic control, preventing or delaying long-term complications and living a quality productive life. Helping a patient set achievable short-term goals is helpful in encouraging patients to work toward a more ambitious long-term goal. Working with the patient to set treatment goals in the following areas is encouraged:

- ***Glycemic control****:* Both HbA1c levels and self-blood glucose monitoring levels are important. The optimum HbA1c is < 7%. The use of routine self-testing for glucose can assist the patient in glucose pattern recognition and improve his/her ability to alter daily activities to improve glucose control.
- ***Exercise****:* Any improvement in activity will improve diabetes management, since exercise improves glucose control. It enhances insulin sensitivity, assists with weight reduction and reduces cardiovascular risk. Appropriate frequency and intensity of exercise depends on the patient's physical condition and presence or absence of complications of diabetes. In sedentary individuals beginning an exercise program, consideration should be given to appropriate cardiac testing prior to beginning of a program. Working towards exercising at least 3-4 times per week for 20-45 minutes is a desirable goal.
- ***Nutrition:*** The overall goals of nutrition therapy in patients with diabetes are to provide adequate calories for maintenance of desired body mass index and to promote overall health. Several meal-planning systems are available to choose from, including exchange diet planning, general nutrition guidelines encompassed in the "food pyramid" system, portion control and carbohydrate counting. Dietary recommendations must consider complications of hypertension and hyperlipidemia.
- ***Oral Hygiene****:* Persons with uncontrolled diabetes are at increased risk to develop periodontal disease. Comprehensive dental exams including a soft tissue and caries exam, full mouth probing and charting, bleeding index, plaque index, full mouth radiographs are recommended every 3-5 years. Clinical treatment, including restorative care, scaling and/or periodontal debridement if warranted, fluoride treatment, and frequent maintenance recall should be considered every three to six months.
- ***Weight reduction****:* Many patients with diabetes will never reach their ideal body weight. Any loss of weight will be useful in the management of their diabetes. Encouraging gradual lifestyle changes may be more effective than expecting rapid results.

The Patient Self-Management Plan[18]

Encourage patients with diabetes to become actively involved in adjusting their diabetes management plan. An important role of the primary care physician in managing patients with diabetes is to help the patient to develop self-management skills to use for successful behavioral change.

Encourage short-term goals to reach long-term objectives. Therapy for the patient can be individualized utilizing both lifestyle changes and medication therapies to control diabetes.[19]

Note: These Clinical guidelines are designed to assist clinicians in treatment of adult patients with existing diabetes. "Adult" for purposes of the guideline generally refers to persons over age 21. The guidelines are not intended either to replace a clinician's judgment or to establish a protocol for all patients with a particular condition. Revised and accepted, August 2007.

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[19] See reference 1

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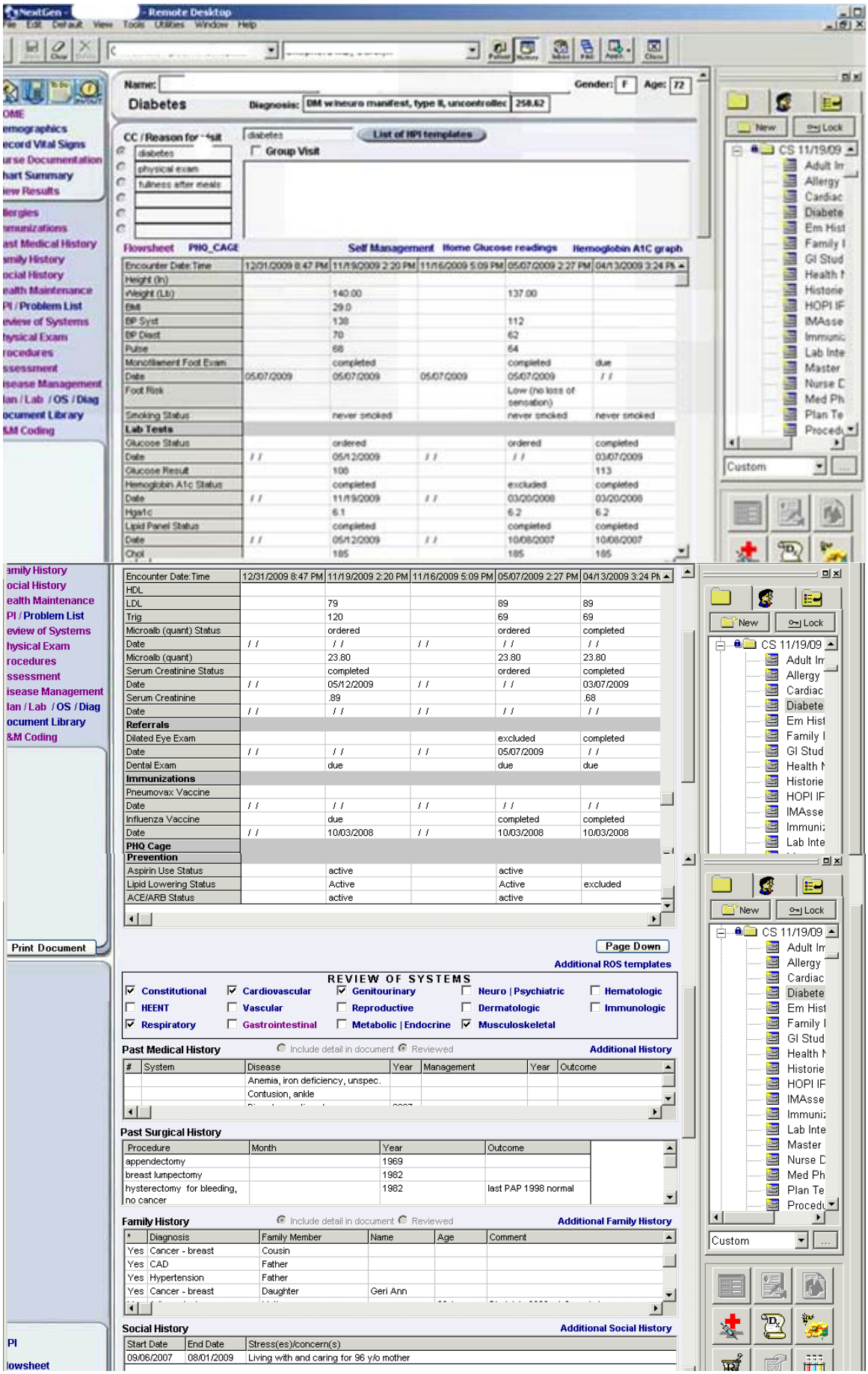
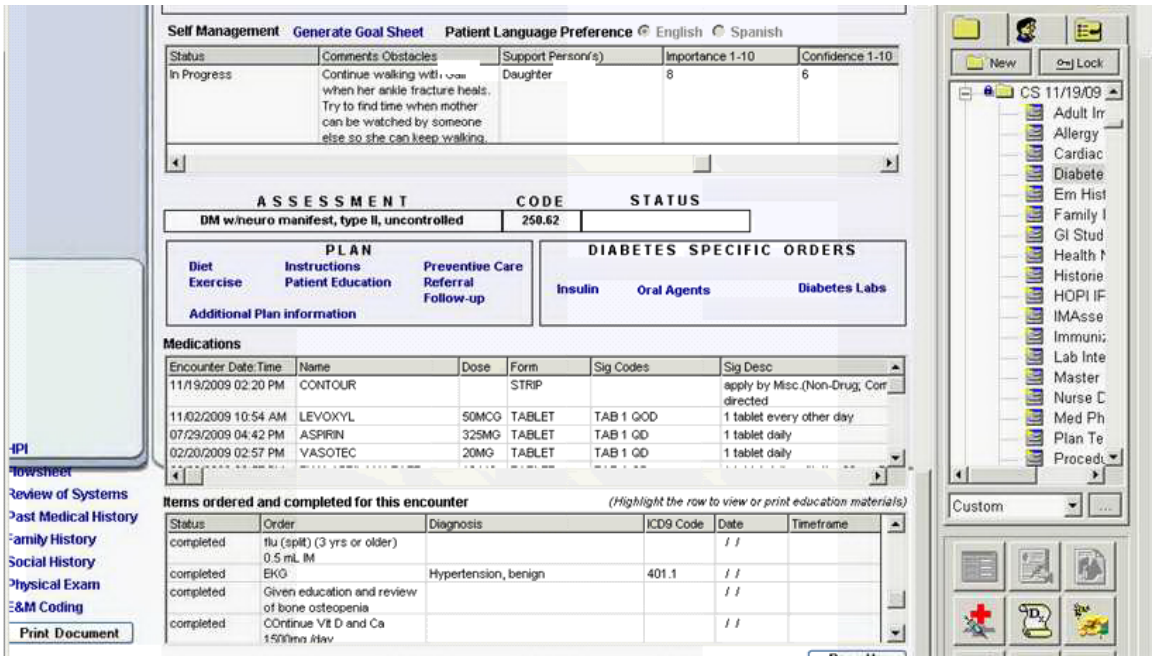
Screen shots of our customized diabetes template designed to accommodate planned care data collection.




Self Management
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Spanish
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Comments Obstacles
Support Person(s)
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Confidence 1-10
In Progress
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Exercise
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Patient Education
Preventive Care
Referral
Follow-up
Additional Plan information
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Date
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completed
EKG
Hypertension, benign
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Cardiac
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Item 2: Second Clinically important condition

Prenatal Registry, Workflow and Guidelines:

Prenatal Registry

Last Name	First Name	DOB	Last Visit	EDD	Wks at Visit	PN +	Primary Insurance	Preg End Date	Preg End Type	Current Wks Gest	CP	Risk Level	High Risk Problems
			11/22/09	12/5/09	38	No	[illegible]			43		2	Preterm or postdates delivery, prior
Antenatal Management Plan:	9/22/09: elevated 1hr GTT - 3hr scheduled - 9/28/09 pt arrived to 3hr appt and had not followed regimen - rescheduled for 10/7/09 nutritionist appt at that time also 3hr GTT normal 10/6 - pt declining flu shot												
			12/16/09	12/7/09	41		[illegible]			43		2	
Antenatal Management Plan:	post-term 12.12.2009: biwkly NST; induce next wk if pt willing; cervix not favorable today												
			12/1/09	12/16/09	37		Medicaid FQ	12/2/2009	Delivered	42	Y	2	Abortion, previous, 2nd trimester Alcohol or illicit drug dependence
Antenatal Management Plan:	Gestational HTN (9/14) *baseline 24 hr urine, PIH panel, previous PIH 6/09 WNL KF												
			12/21/09	12/27/09	39		Medicaid FQ			40			
Antenatal Management Plan:	Per records from previous provider - pelvimetry completed and proven to 6lb8oz and placenta was posterior without previa or abruption as of 5/13/09 Pt would like to breastfeed, had trouble w/ previous child, would like additional support. 10/29/09 11/12/09 tubal form signed and sent to med recs												

Tuesday, December 29, 2009 Page 1 of 322

Developed By [illegible]

Prenatal Registry Workflow

Aim: To provide quality evidence-based care to our prenatal patients.

Aim: To maintain a comprehensive and accurate registry of our patients who are pregnant in order to perform appropriate and timely care.

Prenatal Registry Measures/Goals:	% low birth weight	% pregnant teens	% breastfeeding at delivery	% of prenatal patients who smoke	% of smokers who quit	% of smokers who quit and decreased
	% entry of care in 1st trimester	% post partum return	% of prenatal patients who use ETOH	% of prenatal patients who use drugs	% of prenatal patients with nutritional risk	% of prenatal patients with psychosocial risk
	% entry of care in 3rd trimester	% infant return	% of ETOH users who quit	% of drug users who quit	% of with nutritional risk resolved	% of with psychosocial risk resolved

	Actions					
	***All staff who learn of a termed pregnancy are responsible for notifying their Pod Case Manager via a task**					
Operations	Print off Prenatal registry and workflow the first and third Tuesday of every month. COMs give registry to front desk.					
Front Desk	**Scheduling OB Visits**		**Documentation**		**Next Steps**	
	Front desk reviews last date of service and schedules an OB appointment based on gestational age. **Note:** Patient's gestational age is located on the last column of the registry printout calculated up to the day the registry is printed. • Up to 28 weeks—OB apt every 4 weeks • 28-36 weeks—OB apt every 2 weeks • 36-40 weeks—OB apt every week Compare patient name with Centering Pregnancy list and will not call Centering Pregnancy patients.		Document on the registry the outcome of the call to patient (e.g. left message, scheduled appt, etc.). **Note:** Make two attempts over two different days (should be different times of the day) to contact patient and then send a letter if unable to reach patient after two attempts. Document all contact attempts and letters sent in the telephone communication template in NextGen.		Give registry to the floor BHP after all patients have been reviewed and/or contact attempts have been made and documented.	
Case Manager	Review registry twice a month and update any of the below information. Review with Pod Providers in huddle.					
	Pt Lost to Contact	**Prenatal Plus**	**Centering**	**Risk Level**	**Delivered**	**Term Date**
	CM to team up with Front Desk to determine any other ways to contact patient within HIPAA guidelines.	If column blank, CM to audit patient chart and document PN+ status of patient in PN+ template. If patient is PN+, CM responsible flagging PN+ status on sticky note in chart and for seeing patient at their next visit.	CM responsible for checking Centering box on every patient in a Centering group.	CM responsible for documenting risk factors on risk assessment template, related to substance abuse, smoking, nutrition and psychosocial risk factors.	CM responsible for entering mom's delivery information in the post partum and pregnancy outcomes templates, and newborn data in the baby's chart.	CM responsible for documenting in the mom's pregnancy outcome template any abortions, fetal demise, transfer of care, moved, and ectopic pregnancies.
Provider	Review the flowsheet every visit and enter any new data. Review registry for any patients for which there are concerns and patients who are MOGE. Provide information to CM.					
MA	Review the flowsheet every visit and enter any new data. Responsible for patients on registry who are in for visit today.					
Pod BHP	Reviews copy of registry given by CM with Pod Nurse to ensure all follow-up has been completed and is accurate.					

Group B Streptococcal (GBS) Management in OB patients

ANTEPARTUM CARE	
Screening timeline	Universal antepartum GBS screening at 35 -37 weeks gestation.
Exceptions	GBS bacteriuria in early pregnancy is a marker of high colonization and is an indication for prophylaxis intrapartum. Planned scheduled cesarean delivery without the possibility for TOLAC.
Method	Swab both the lower vagina and rectum through the anal sphincter: ➢ Increases the yield substantially compared with sampling the cervix or sampling the vagina without also swabbing the rectum. ➢ When using a single swab, the vagina should be swabbed first followed by the rectum to reduce risk of colonizing the vagina with bugs from the rectum. Patients may collect their own samples: ➢ Studies indicate that when women in the outpatient clinic setting collect their own screening specimens, with appropriate instruction, GBS yield is similar to when specimens are collected by a health-care provider. One swab is preferred, two are acceptable: ➢ Both swabs should be placed in a single broth culture medium, because the site of isolation is not important for clinical management and laboratory costs can thereby be minimized
Results	Assure that the results of the screening culture are available at the time of delivery: ➢ If the culture is negative then IPA are not indicated. ➢ If the culture is positive, then IPA should be offered at time of delivery regardless of risk factors. ➢ Notify patient of results and if prophylaxis will be needed.
GBS bacteriuria	Treat with cephalexin or penicillin x 10 days, confirm cleared with test of cure.
INTRAPARTUM CARE	
Risk Factors	Only appropriate if antepartum GBS screening has not been done: ➢ Intraprtum antibiotics are indicated for all patients who have delivered a newborn that developed early onset GBS disease, regardless of culture status ➢ If GBS bacteruria present during current pregnancy, IPA are indicated regardless of culture status or whether bacteruria treated ➢ If GBS status unknown, treat if any of the following exist: * Delivery at < 37 weeks gestation. * Duration of ruptured membranes > 18 hours. * Intrapartum temperature > 100.4 F or 38.0 C.
Recommended IPA	Penicillin G 5 mill units IV initial dose then 2.5 million units q 4 hours. Alternative: ampicillin 2g IV initial dose the 1g IV q 4 hours. Penicillin allergic, low risk anaphylaxis: cefazolin 2g IV initial dose then 1g IV q 8 hours
Penicillin Allergic, High Risk Anaphylaxis	Ideally resistance testing to both clindamycin and erythromycin should be performed at the time of GBS testing. In 2003 GBS isolate resistance to emycin 37% and clinda 17%. If no resistance -- clindamycin 900 g IV q 8 hours (preferred if no resistance, emycin is an option) If GBS is resistant to clindamycin OR erythromycin – vancomycin If resistance is unknown – vancomycin 1 gm IV q 12 hours until delivery

Gibbs, R. Perinatal Infections due to GBS. Obstet. Gynecol., Nov 2004; 104: 1062-1076.
Centers for Disease Control. Prevention of Perinatal GBS Disease. MMWR 2002:51 (RR-11):10.

Clinical Guidelines for the Care of Patients with Gestational Diabetes (GDM)

INITIAL SCREENING (OGCT = Oral Glucose Challenge Test, 1-hour OGTT = Oral Glucose Tolerance Test, 3-hours)	
All pregnant women	Screen at 24 to 28 weeks gestation or at entry to care if > 28 weeks but< 34 weeks 50-g, 1-hour OGCT Screen without regard to time of last meal
High Risk pregnant women	Screen women at entry to care and again at 24 to 28 weeks 50-g, 1-hour OGCT High Risk: ➢ Age ≥ 35 years old ➢ Obesity BMI > 29 (based on pre-pregnancy weight) ➢ Personal history of GDM ➢ Previous macrosomic infant or GDM related ob complications ➢ Polycystic Ovarian Syndrome ➢ Glycosuria ➢ Strong family history of diabetes mellitus
DIAGNOSTIC CRITERIA	
Initial test: 50-g, 1-hour OGCT	< 135 mg/dl, no further testing required ≥ 135 mg/dl, follow with 100-g, 3-hour OGTT ≥ 200 mg/dl, woman has GDM and no 3-hour OGTT is necessary. Consider HbA1c if suspicion of preexisting diabetes.
Follow up test: 100-g, 3-hour OGTT (if > 135 mg/dl and < 200 mg/dl)	If two or more values meet or exceed the following thresholds, diagnose GDM: **Time** **mg/dl** Fasting >95 1-hour ≥180 2-hour ≥155 3-hour ≥140 If only one value meets or exceeds thresholds: ➢ Repeat 100-g, 3-hour OGTT in 3-4 weeks ➢ Recommend physical activity and nutrition counseling (30% of these women will develop GDM)
INITIAL MANAGEMENT	
Medical nutrition therapy (MNT)	Refer for nutrition counseling with RD/CDE and initiation of blood glucose monitoring ASAP. If RD/CDE appointment not available within one week: ➢ Provide handouts on diet and glucose monitoring as outlined by RD/CDE ➢ Initiate teaching and testing by nursing staff at time of diagnosis ➢ Follow up with RD/CDE in group or individual appointment ASAP
Blood glucose monitoring	Have patient check and record blood glucose 4 times a day, including fasting and 2 hours postprandials. Euglycemia is defined as < 20% of blood glucose values outside of recommended reference range. When the patient has collected reliable glucose values for a minimum of 1-2 weeks, and 20% of blood glucose values exceed the following goals while following prescribed nutrition and physical activity plan, consider medical therapy: **Time** **mg/dl** Fasting <95 1-hour pp <130-140 2-hour pp <120 Avoid discontinuing blood glucose monitoring in patients with GDM.
Food recording	Have patient record food and beverage intake including, what, amount, and meal and snack times.
Physical activity	Recommend regular physical activity 30 minutes/day, 5 days/week and consult with MD regarding any contraindications (preeclampsia, growth restriction, abruption, placenta previa, or vaginal bleeding).
Medical follow-up	Schedule MD/DO follow up visit in 2 weeks
EVALUATION and FOLLOW-UP	
Review records	Review food and blood glucose records to assess MNT compliance and blood glucose control.
Evaluation, Consideration, and Documentation	Appropriate weight gain based on BMI, normoglycemia, and the absence of ketonuria. Consider checking HgbA1C at diagnosis if diagnosed by an early GTT and again at 36 weeks: ➢ Patients with suspected preexisting DM ➢ Patients who require medication management ➢ Patients who have poor control ➢ Patients do not comply with blood sugar monitoring If the patient is well controlled on MNT alone at time of MD/DO visit, the patient may return to a midlevel PCP for follow up with consultative management by the MD/DO. In general, a patient with GDMA2 (requiring medical therapy) should be managed by an MD/DO with the possibility of co-management seeing an MD/DO every other visit to be determined by the consulting MD/DO.

CL115.1-10/07-PD 10/15/07

	MD/DO will clearly outline management plan in EMR, including: ➢ Frequency of visits and with what type of provider ➢ Threshold for starting or changing medication ➢ Plan for surveillance and when appropriate, plan for delivery An alert is to be placed in the postpartum alert field of the EMR indicating the need for postpartum OGTT for all GDM patients.
Medication therapy	If fasting blood glucose > 115 mg/dl or if an initial HgA1c was > 6.0, consider medication therapy without prior MNT because MNT alone is likely to fail. If fasting blood glucose ≤ 115 mg/dl, allow 2 weeks for blood glucose to optimize in response to MNT before prescribing medication.
Fetal Surveillance	Perform appropriate fetal surveillance for gestational age and disease status ➢ Initiate fetal kick counts in all patients at 28 weeks in all patients. ➢ Prenatal surveillance includes once or twice-weekly non-stress test (NST) and weekly amniotic fluid index. A biophysical profile may be done weekly if indicated. *Consult OB.* ➢ Diet controlled – if euglycemic, initiate testing at 40 weeks. If not euglycemic, initiate testing at 36 weeks. ➢ Medication controlled – if pregnancy without other complications, initiate surveillance at 32-34 weeks. ➢ Begin testing by 32 weeks in patients with poor control, previous adverse outcome, or other additional high risk condition ➢ Consider ultrasound for estimated fetal weight at 38 weeks (i.e. medication management, size > dates, poorly controlled, or HgbA1C at 36 weeks > 6)
OB Consultation	Consult OB for the following: ➢ Medication management, treatment planning ➢ Fundal height *>=3 cm* greater than dates ➢ 1/3 of postprandial blood sugars elevated *or undocumented control* ➢ *Non-reassuring fetal surveillance.* ***When consulted, OB will document detailed treatment and delivery plan in Antenatal Management Plan screen of EMR***
MEDICATION MANAGEMENT	
Glyburide	Only oral hypoglycemic agent that may be considered as an alternative to insulin. ➢ This is an option for women who refuse or cannot comply with insulin ➢ Take 30-60 minutes before breakfast and dinner, and not before bedtime ➢ More likely to fail in women who are diagnosed with GDM before 24 weeks, have significant fasting hyperglycemia, are morbidly obese, and are 35 years and older. ➢ Start at 2.5 mg q am and titrate up to a maximum of 10 mg bid
Insulin	National guidelines consider insulin to be the first line agent for all patients ➢ Easiest dosing is the best for patient, no regimen or dose proven superior. ➢ Should be used as first line medication in women with fasting hyperglycemia >=115mg/dl ➢ Titrate up from .5-.7 unit/kg ➢ A common initial dosage is 0.7 units per kg per day, with one dose consisting of two thirds of the total amount given in the morning and one dose consisting of one third of the total amount given in the evening. One third of each dose is given as regular insulin and the remaining two thirds as NPH insulin.
LABOR AND DELIVERY (Counsel all women regarding the possibility of cesarean delivery and shoulder dystocia)	
Induction of labor	Euglycemic with diet control -- induce by 41 weeks Euglycemic with medication control -- induce at 39-40 weeks ***Pregestational or above, consult OB for treatment and delivery plan*** ***OB may consider*** fetal lung maturity documentation by amniocentesis in women undergoing induction of labor prior to 38 weeks.
Estimated fetal weight (EFW)	EFW > 4,500 grams, ***OB consult needed.*** Elective cesarean should be offered. EFW 4,000 to 4,5000 grams, ***OB consult needed.*** The patient's delivery history, clinical pelvimetry, and the progress of labor are factors that play a role in determining mode of delivery. GDM patients with EFW > 4,000 grams with a prolonged second stage or arrest of descent in the second stage require assessment for cesarean delivery.
POSTPARTUM SCREENING	
Screen at 6-8 weeks postpartum: 75-gram, 2-hour OGTT	If patient otherwise meets diagnostic criteria for Type 2 DM this is not needed. If normal, reassess glycemia at 1-3 year intervals. If impaired, reassess annually and extensive counseling on DM prevention and lifestyle modifications: **Time** / **Normal mg/dl** / **Pre-diabetes mg/dl** / **Type 2 DM mg/dl** Fasting / <100 / ≥100 and <126 / ≥126 2-hour / <140 / ≥140 or <200 / ≥200

References: Colorado Clinical Guidelines Collaborative. Gestational Diabetes. September, 2006.
ACOG Practice Bulletin. Gestational Diabetes. 2002.

Infertility Guidelines

DEFINITION AND COUNSELING	
Infertility	1 year of unprotected, appropriately timed intercourse without conception (ie. SAB counts as pregnancy) > 6 months in female 35 or older
Initial Counseling	Talking points: ➢ 85 % of healthy couples become pregnant in 1 year, 93% in 2 years. ➢ Causes of infertility are varied and often unexplained even after complete evaluation. ➢ 60% of couples with unexplained infertility will become pregnant in 3 years. ➢ Male factor is causal in 40% of infertile couples. Evaluation cannot proceed without involvement of male partner. ➢ Diagnostic and treatment services for infertility are limited at Clinica Campesina. Complete evaluation may require follow-up with outside specialists who do not operate under Clinica's discount program.
INITIAL EVALUATION OF THE FEMALE	
Perform Annual Exam	
History	Pertinent history: ➢ Duration of problem ➢ Document menarche, cycle length and duration ➢ Associated symptoms especially: increased hair, temporal balding, headaches, peripheral vision loss, galactorrhea, pelvic pain, dyspareunia, dysmenorrhea. ➢ Document past pregnancies, including SABs, TABs and ectopics ➢ Document history of chronic medical illness, infections, surgeries ➢ Evaluate patient understanding of cycle and fertile window and document previous timing of previous attempts at pregnancy. Confirm patient taking PNV or folic acid.
Pertinent Positives	Pertinent positives should be referred immediately to Gyn: ➢ Gonorrhea, chlamydia, PID, other STDs ➢ Endometriosis diagnosis or symptoms ➢ Acute onset androgen excess ➢ Menopausal symptoms ➢ Surgery on pelvic organs ➢ Uterine abnormality ➢ Recurrent SAB ➢ Medical diagnoses including but not limited to: DM, HIV, SLE, Antiphospholipid Antibody syndrome
Physical	Complete physical with special attention to: ➢ BMI ➢ Skin: acne, hirsutism or evidence of shaving, acanthosis nigricans ➢ Thyroid: Masses, nodules ➢ Breasts: galactorrhea ➢ Abdomen: obesity, hirsutism, waist circumference ➢ Pelvis: clitoral enlargement, vaginal septum, immobility of uterus/cervix/ovaries, nodularity in pouch of douglas
Lab Testing	Labs: ➢ Pap, chlamydia, gonorrhea. Consider other STD testing (recommended by national guidelines) ➢ Consider Cystic fibrosis screening (recommended by national guidelines) ➢ Other testing as determined by ovulatory status, see below.

10/8/08

Determine Ovulatory Status of Female	
History	History: ➢ Regular, predictable menses q 24-35 days ➢ PMS symptoms ➢ Cervical mucus changes – spinnbarkeit of 8-10 cm ➢ If above present 95% patients are ovulating
Confirmatory Testing	Testing: ➢ Preferred method - Urinary LH kits: * Perform daily in afternoon starting 3-5 days prior to expected LH surge (ovulation). Patient to chart cycle day 1, days tested and day of surge on calendar. * May include: - Basal Body Temperature (BBT) - Serum progesterone (>15) 7 days after expected ovulation ie. Cycle day 21 in a 28 day cycle
PCOS	PCOS is a clinical diagnosis of exclusion when androgen excess and oligo-anovulation present: ➢ If diagnosed, screen patient with 2 hour OGTT and lipids ➢ Many PCOS patients meet criteria for Syndrome X ➢ Counsel patient that in addition to infertility concern her lifetime risk for diabetes and cardiac problems is increased considerably. ➢ Initial Treatment – 3 month exercise, weight loss, and lifestyle changes. ➢ Advise patient that initial goal is loss of 10% of body weight as this often can be enough for return to normal ovulation. ➢ Recommend permanent changes to prevent or delay the onset of future illness. If above fails – refer to GYN for ovulation induction
INITIAL EVALUATION OF THE MALE	
Perform History and Physical	
History	➢ Testicular injury, radiation, surgery or chemotherapy ➢ Past evidence of fertility includes children, miscarriages or abortions.
Physical	➢ Evaluate for hypospadias, cryptorchidism, varicoceles ➢ Semen analysis – if abnormal confirm with additional testing 2 weeks later STD testing Normal physical exam and semen analysis should be documented prior to referral of the couple to GYN.
Urology	Referral for Urology indicated for: ➢ Abnormality on physical exam ➢ Persistent abnormality on 2 semen analyses
BASICS OF USING FERTILITY AWARENESS METHOD TO GET PREGNANT	
Chart Cycles Faithfully	➢ 1st day of period, duration of menses and any spotting ➢ Intercourse ➢ PMS symptoms ➢ Ovulation signs ➢ LH kit days (start 3-5 days prior to expected surge) ➢ LH surge day (day kit positive)
Be Aware of Ovulation Signs	➢ Spinnbarkeit of 8-10 cm when stretched is sign of fertile window and is the most hospitable to sperm passage through the cervix ➢ Basal Body temperature – requires digital thermometer, first am check ➢ Increased desire ➢ Urinary LH kits – pm checks better
Know When to Have Intercourse	➢ At least every other day the week before ovulation is expected ➢ Day that LH kit turns positive ➢ If doing pm LH checks, day after as well
Other Unproven but Cheap Tricks	➢ Guaifenesin - taken the week of ovulation in women without good spinnbarkeit can help to thin cervical mucus ➢ Using a diaphragm or Instead softcup after intercourse for 12 hours can help to maximize chances of sperm entering uterus

1) ACOG Practice Bulletin #34. Management of Infertility Caused by Ovulatory Dysfunction. February 2002
2) Kovacs, P. Infertility: Evaluation and Treatment. Medscape Continuing Medical Education. January 5, 2006.

10/8/08

CL112.1-10/08-PD

Management of Postdates Pregnancy

DIAGNOSIS				
Postdates Pregnancy	EGA is >40 weeks			
Post Term Pregnancy	EGA ≥ 42 weeks; accurate determination of EGA is essential in reducing the false diagnosis of post term pregnancy.			
MANAGEMENT				
36 weeks until 40 4/7 weeks EGA	Weekly visits with any provider. Membranes can be stripped in the absence of a contraindication (e.g. placenta previa) after 39 weeks of gestation.			
Starting at 40 5/7 weeks EGA	Visits to be supervised by physician or CNM			
EGA between 40 5/7 and 42 weeks	First NST to be scheduled and repeated twice weekly until delivery: ➢ Physician or CNM to cosign all NSTs done at Clinica. Examine the cervix and consider induction at each of these visits if the cervix is favorable (Bishop score ≥ 6).			
AFI	AFI to be scheduled at EGA of 40 5/7 to 41 weeks and repeated at least weekly until delivery. Should be evaluated for variable decelerations on NST at any gestation.			
Patient Education	Patient to be informed that current methods of fetal surveillance are of unproven benefit in reducing or preventing maternal or neonatal morbidity or mortality. Patient asked to contact clinic or go to Labor & Delivery for: ➢ Decreased fetal movement ➢ Leakage of clear fluid or blood ➢ Regular contractions.			
INDUCTION				
After 40 weeks	Deliver if the fetal testing is non-reassuring irrespective of the condition of the cervix.			
At 41 weeks	Offer induction if cervix is favorable (Bishop score ≥ 6). Expectant management if cervix is unfavorable until 42 weeks. Induction date should usually be scheduled by 42 and 0/7 weeks.			
When induction is scheduled:	Contact provider scheduled to be on call for OB the day of the induction.			
BISHOP SCORE				
Factor	0	1	2	3
Cervical dilation (cm)	Closed	1-2	3-4	5+
Cervical effacement (%)	0-30	40-50	60-70	80+
Fetal station	-3	-2	-1	+1, +2
Cervical consistency	Firm	Medium	Soft	-
Cervical position	Posterior	Mid	Anterior	-

References:

ACOG Practice Bulletin: CLINICAL MANAGEMENT GUIDELINES FOR OBSTETRICIAN—GYNECOLOGISTS NUMBER 55, SEPTEMBER 2004

Clinical Criteria to Permit Offer of Attempt at Vaginal Birth After Cesarean (VBAC):

Indications that a trial of labor is permissible:

1.) The prior operative report(s) is(are) available and indicate no more than two lower uterine segment cesarean sections (Kerr incision in Mexico) ***OR***

2.) The operative report(s) is(are) not available. However, the following criteria per patient report were met:
   a.) Full term infant(s)
      i. 36+ weeks or 9th month gestation(s)
      ii. Weight(s) greater than 5 lbs. (2275 g)
   b.) No more than two cesarean sections performed the following reasons:
      i. Failure to progress
      ii. Relative Cephalo-Pelvic Disproportion (CPD)
      iii. Breech Presentation
      iv. Non-reassuring Fetal Heart Tracing
      v. Macrosomia with or without trial of labor unless diabetic
   c.) Or successful VBAC after most recent cesarean

AND

3.) Patient has been informed of risk and benefits and consents to a trial of labor.

4.) The patient has been informed they will need to deliver at SAN and that the Obstetrician on call at the time she presents will make the decision about whether she can have a TOLAC.

Indications that a repeat cesarean section is likely necessary:

1.) There have been more than two cesarean sections without successful full term VBAC.

2.) The operative report(s) is(are) available and indicate a prior classical incision, low vertical incision with extension into the active segment, or T-shaped uterine incision.

3.) There was a prior contraindicating non-obstetrical uterine surgery, such as a myomectomy or metroplasty in which a full thickness incision of the uterus was made.

4.) The operative report(s) is(are) not available and per patient report the indication for any cesarean section was likely one of the following:
   a.) Pre-term infant
      i. Less than 36 weeks gestation
      ii. Weight less than 5 lbs. (2275g)
   b.) Placenta Previa or Vasa Previa
   c.) Placental Abruption
   d.) Cord Prolapse
   e.) Emergent Fetal Distress
   f.) Absolute Cephalo-Pelvic Disproportion (i.e. congenitally abnormal pelvis)
   g.) Oblique or Transverse Fetal Lie
   h.) Multiple Gestation

5.) Prior cesarean section was for macrosomia or CPD after Clinically adequate trial of labor, (2-4 hrs arrested labor at greater than 4cm dilation despite oxytocin augmentation with documented adequate contractions), and current gestation estimated to be as big as or larger than prior gestation.

6.) Current gestation with Macrosomia if estimated fetal weight greater than 10 lbs. (4500g) in non-diabetic or 8 lbs. 12 oz. (4000g) in diabetic.

7.) Patient refuses a trial of labor and desires a repeat cesarean section.

Having referred any question to an obstetrician, in my best Clinical judgement, I conclude that:

This patient may attempt a VBAC.

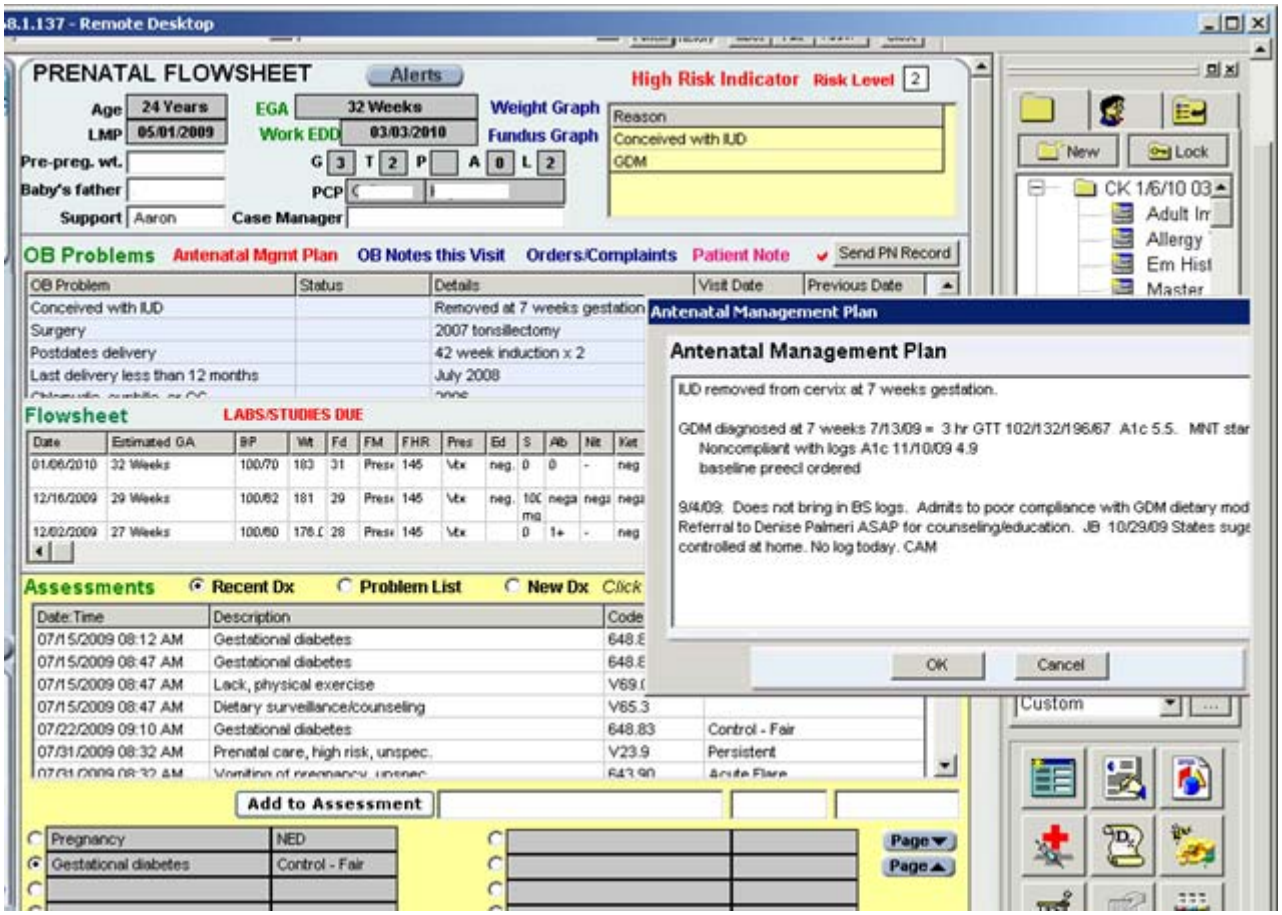
This patient is for a repeat cesarean section.

Clinician Name: _____

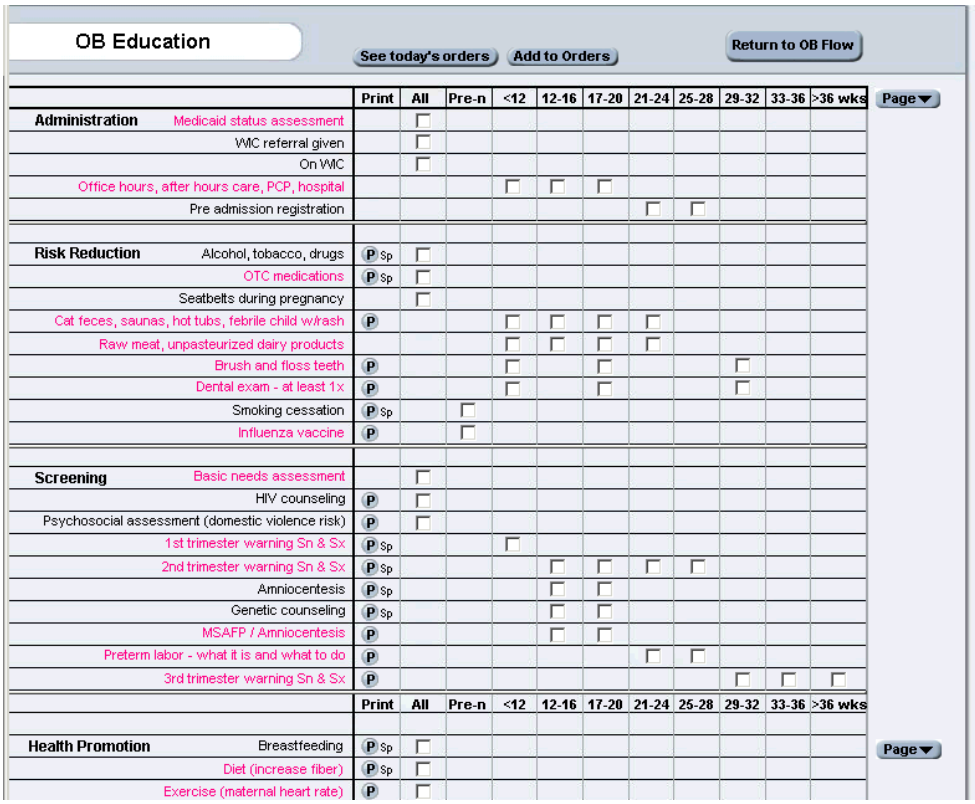
Clinician Signature: _____

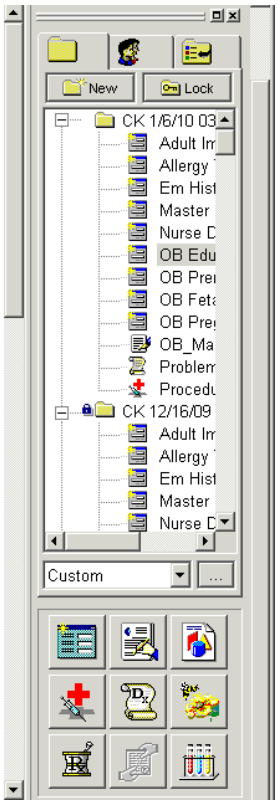
Date: _____

Screen shots of our customized prenatal templates designed to accommodate planned care data collection

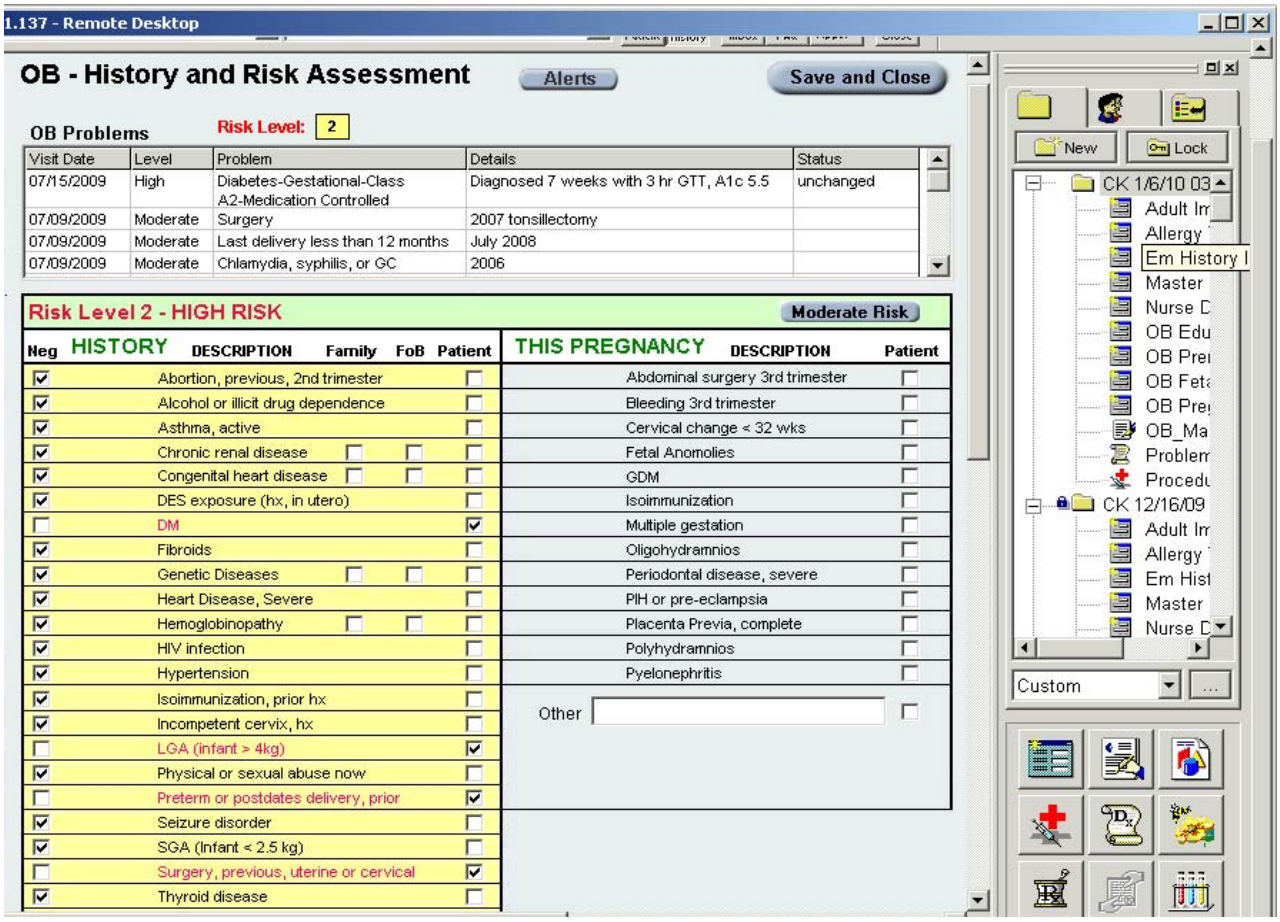


OB education already given is highlighted in pink. May be repeated any time.



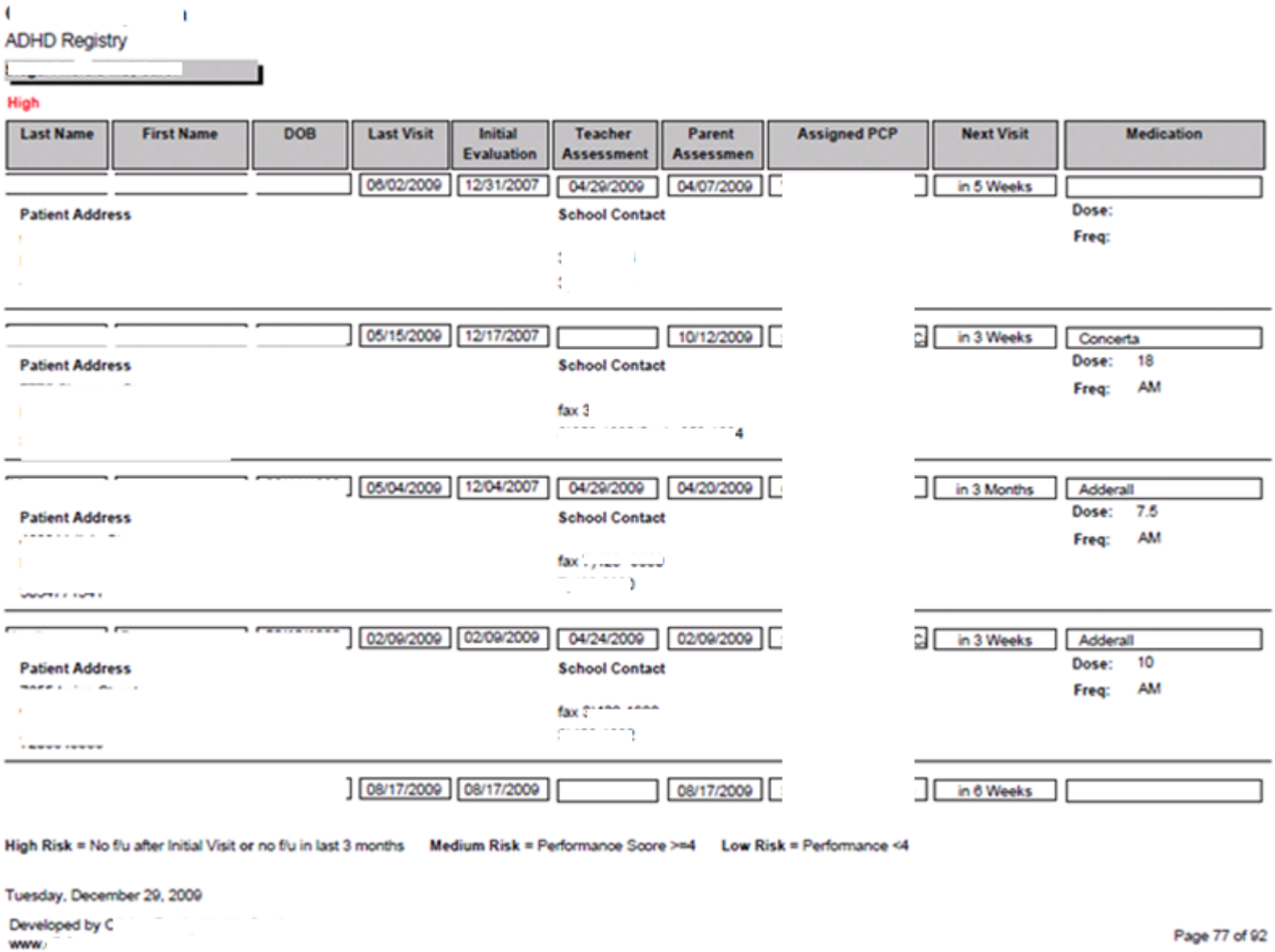


Formal and ongoing OB Risk assessment



Item 3: Third Clinically important condition

ADHD Registry, Workflow, and Guidelines:



ADHD Registry

High

Last Name	First Name	DOB	Last Visit	Initial Evaluation	Teacher Assessment	Parent Assessmen	Assigned PCP	Next Visit	Medication
			08/02/2009	12/31/2007	04/29/2009	04/07/2009		in 5 Weeks	Dose: Freq:
Patient Address					School Contact				
			05/15/2009	12/17/2007		10/12/2009		in 3 Weeks	Concerta Dose: 18 Freq: AM
Patient Address					School Contact fax 3				
			05/04/2009	12/04/2007	04/29/2009	04/20/2009		in 3 Months	Adderall Dose: 7.5 Freq: AM
Patient Address					School Contact fax				
			02/09/2009	02/09/2009	04/24/2009	02/09/2009		in 3 Weeks	Adderall Dose: 10 Freq: AM
Patient Address					School Contact fax				
			08/17/2009	08/17/2009		08/17/2009		in 6 Weeks	

High Risk = No f/u after Initial Visit or no f/u in last 3 months **Medium Risk** = Performance Score >=4 **Low Risk** = Performance <4

Tuesday, December 29, 2009

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www.

Page 77 of 92

ADHD Registry Workflow

Aim: To provide quality evidence-based care to our patients who have ADHD.

Aim: To maintain a comprehensive and accurate registry of our patients with ADHD in order to perform appropriate and timely care.

<table>
<tr><td rowspan="2">ADHD Registry Measures/Goals:</td><td>% of pts with management plan</td><td rowspan="2">% of pts with 2 f/u visits within 9 mos of initial visit</td><td rowspan="2">% of pts with 25% reduction in performance score</td><td rowspan="2">% of pts with 25% reduction in symptom score</td><td>% of pts prescribed meds</td><td>% of pts started meds</td></tr>
<tr><td>% of pts with 4 assessment scores (2 parent, 2 teacher)</td><td>% of pts with med f/u within 30 days</td><td>% of pts stayed on meds for 7 mos</td></tr>
<tr><td></td><td colspan="6">Actions</td></tr>
<tr><td>Operations</td><td colspan="6">Print off ADHD by Rendering Provider registry and workflow the third Tuesday of every month and give to the Provider.</td></tr>
<tr><td>Provider</td><td colspan="6">* Review registry monthly for any patients for which there are concerns and patients who are MOGE.
* Notate on registry who needs a visit and who needs a teacher questionnaire to be obtained by fax.
* Determine care plan for adult patients with ADHD and transfer to high risk mental health database if appropriate.
* Behavioral Health Referral as appropriate.
* Give registry to CM for follow-up once registry review is complete. CM will give to FD once completed.
* Review the flowsheet every visit and enter any new data.
Risk Level | Initial Evaluation | Teacher Assessment | Follow-up Visit
High risk--no follow-up within 1 month after initial eval OR no follow-up in > 3 mos after last follow up visit); Medium risk= performance score >= 4, Low risk = performance score <=4, be sure has follow up task at least 3 mos after last appt. Adult patients with ADHD diagnosis should be highlighted for BHP review. | If no initial eval, confirm that this patient belongs in the registry. If patient belongs in registry, have Front Desk schedule initial eval appointment with ADHD Provider Champion at the site. | If no teacher eval in last 3 months, have CM or FD fax follow-up teacher Vanderbilt scale to school (may need to get school info from parent if not in registry). If never any teacher eval, fax initial teacher Vanderbilt scale. | Ensure follow up every three month unless care individualized. Notate individualized care plans on registry.</td></tr>
<tr><td>Case Manager</td><td colspan="6">* CM will schedule patients who are in an ADHD group (visit indicated by Provider on registry) and do reminder calls for group visits.
* CM will communicate with school as needed for patients.
* Conduct ADHD groups with provider as scheduled.
* Confirm agenda of group with provider prior to group.
* Determine patient status of parents participating in group.
* CM to give registry to FD when finished to schedule individual patients
Note: Email Barb Rayburn for any patients identified as MOGE or who the Provider indicated does not have ADHD.</td></tr>
<tr><td>Front Desk</td><td colspan="6">Schedule individual ADHD appointment with PCP for list of patients determined by the Provider (patients not in Group Visits). Confirms appt for both group and individual appts. Gives parent Follow-up Questionnaire to complete while in waiting room UNLESS first visit, in which case Initial Assessment questionnaire should be used. Faxes teacher follow-up questionnaires as indicated by provider.</td></tr>
<tr><td>BHP</td><td colspan="6">* May need to provide family therapy after consultation with provider.
* Review adult patients with ADHD diagnosis with Provider.
* Assist referrals to mental health center if further eval needed.
* Consult with team on ADHD group curriculum.</td></tr>
<tr><td>MA</td><td colspan="6">Review the flowsheet every visit and enter any new data (Vanderbilts, review medications). Responsible for patients on registry who are in for visit today. Collect Vanderbilts from patients for review by provider prior to office visit.</td></tr>
</table>

ADHD Evaluation, Dx and Mgmt Using NextGen

Xxxx, MD

Thursday, April 09, 2009

Caring for families of children with ADD/ADHD– It's OK to refer internally to them. A couple providers per site should be able to handle all your ADHD kids.

1. What's required for Dx?
   a. meeting the DSM-4 criteria; ADHD is excluded if developmental delay is present, Dx would be "hyperkinesis with developmental delay"
   b. Impairment in performance at least 2 domains: work, school and home
2. Evaluation
   a. Hx in the office
      i. PMH: prematurity, trauma
      ii. Family: being hyper, trouble in school ("is your child like anyone in your family?")
      iii. substance abuse (stimulants)
      iv. ROS: some assessment for cardiac abnormalities (Cardiac screen attached)
   b. Reports from parents and teachers: use the Vanderbilt forms (available on the Template)
      i. Data entry could be done by an MA or an OT–does not need (keenan says "should not") be a provider task
      ii. "diagnostic assessment date" field must be filled
      iii. scales from teachers
         1. twice a year (initial and post-Rx), more if med changes
         2. an introductory form letter to teachers whose opinions are being solicited is a good idea, available via the template
         3. discrepant results from multiple teachers (eg in middle or high school) teachers: mention in HPI or in the Comments area of the flowsheet, trying to note if there's someone who represents a consensus view or is particularly discordant with the majority
         4. phone calls are needed in a minority
   c. Exam
      i. brief
      ii. "soft" neuro signs: clumsy rapid alternating movement or "mirroring" (using both hands) when asked to do unilateral thumb to finger
   d. ECG?: not needed if ROS and Fam Hx unremarkable
3. What's required for Mgmt?
   a. Identify a site champion or two: "I do a lot from home"
   b. Parent involvement is essential
   c. Engagement with school staff (e.g., an interpreter for non-English parents)
   d. Visits: 2-3 needed for the initial evaluation and mgmt
      i. #1: brief exam and hx; get the info that permits the forms; sign HIPAA form
      ii. #2: when results back to discuss the results and talk about treatment options

iii. #3: in ~1 week to make decision re: Rx options (child does not need to be present)
iv. #4: in 2 wks if meds started

e. Visits: maintenance/continuation
   i. Q 3 mos
   ii. discuss DC meds over the summer for those kids who are not developmentally delayed or appear to be autism spectrum disorder
   iii. August is the time to touch base again with family prior to the start of school

f. The template: it needs revision, but it works
   i. School # is fine; "School Contact" should be the school fax number
   ii. select GV if indicated
   iii. Colored "?" will give you guidance

g. GV
   i. separate registry for group patients for use by CM
   ii. parents/guardians meet with BHP and provider
   iii. kids with CM, provider does exam and review of meds/progress

h. Meds: "active" means already prescribed and taking
   i. takes 10-14 dys to titrate up to therapeutic dose
   ii. 2nd Vanderbilt after 2 wks @ target dose, if it is tolerated

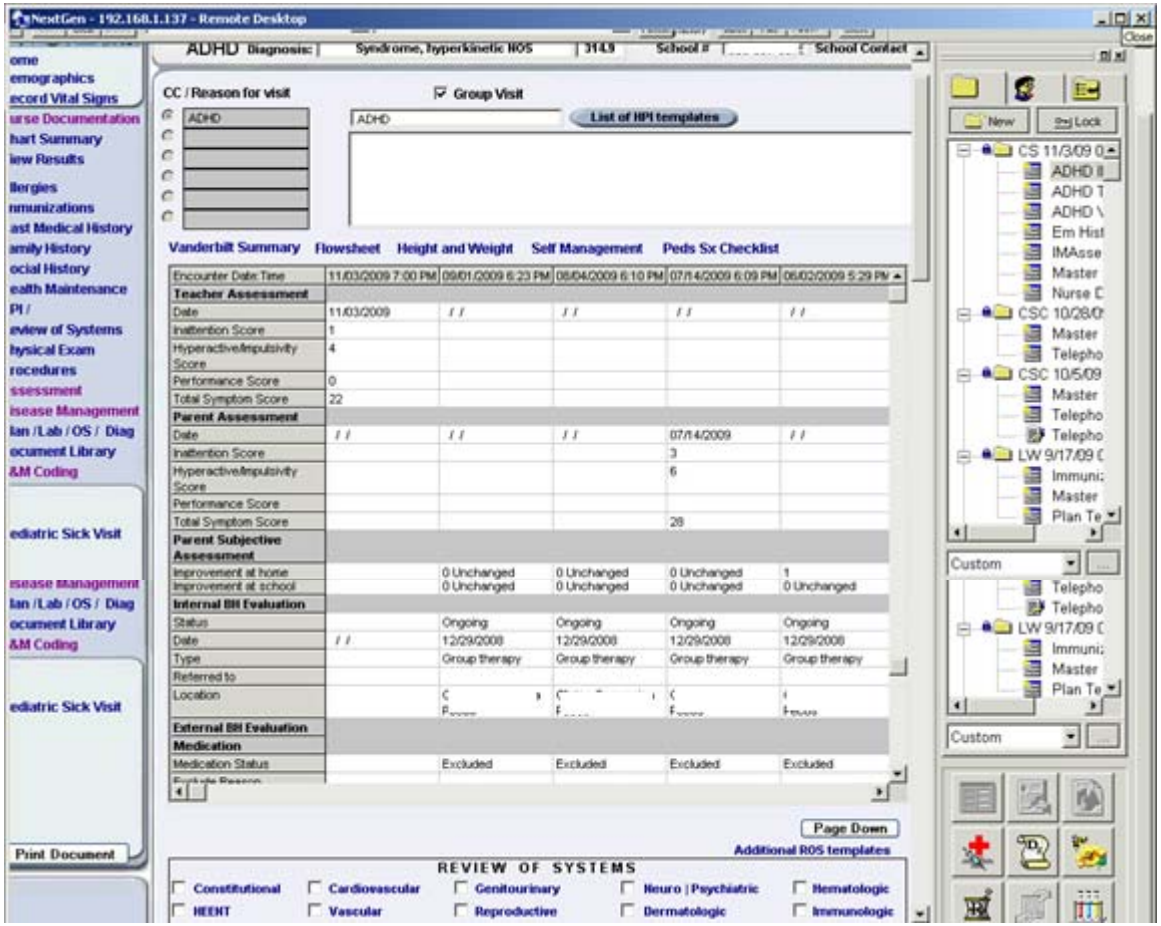
i. Behavioral: goal setting
   i. less TV, more physical activity

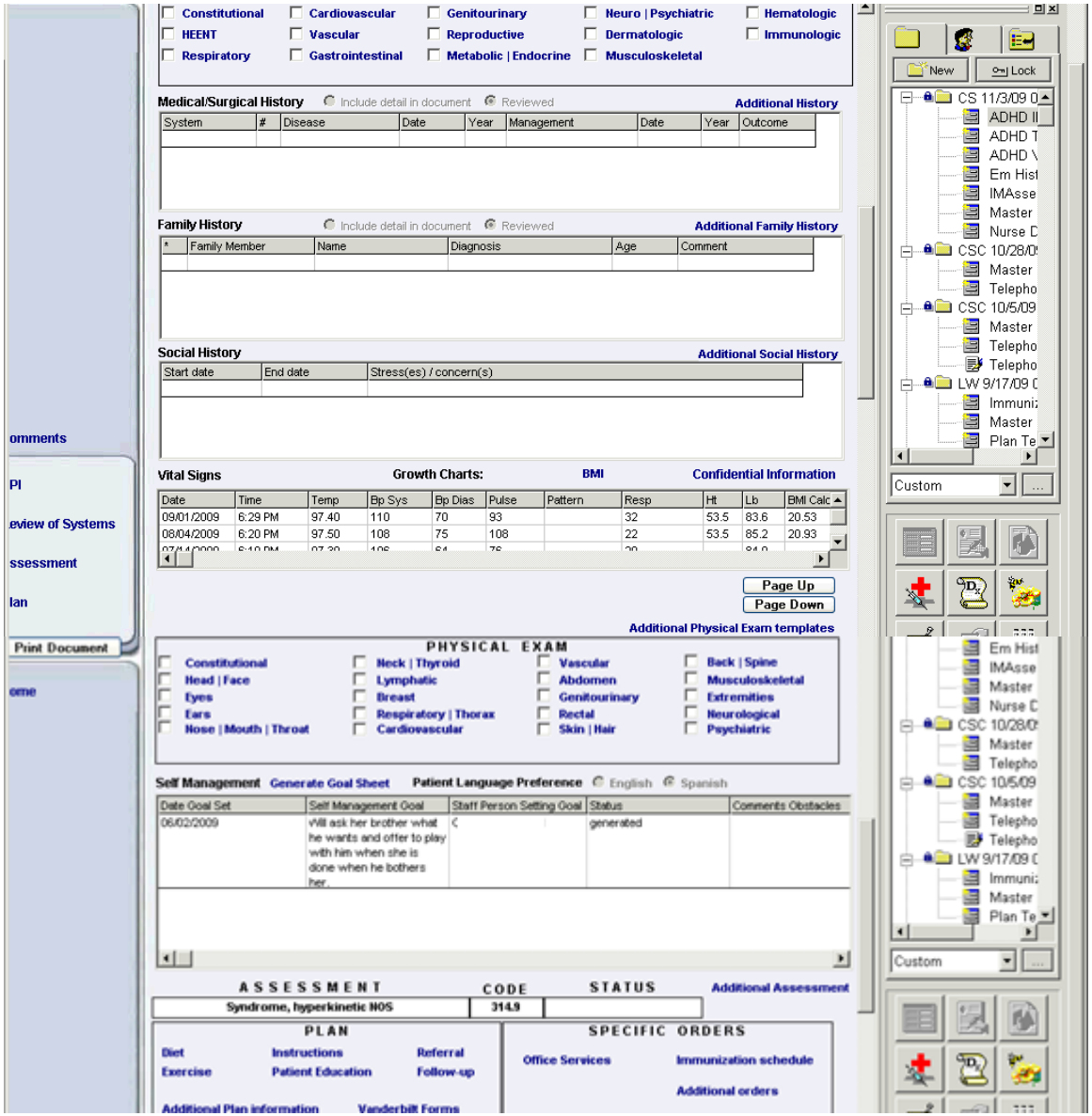
4. Flow
   a. forms need to go to parents when they arrive and before they start waiting
   b. forms need to go to school with the return fax number on it

Improving Attention-Deficit/Hyperactivity Disorder Treatment Outcomes Through Use of a Collaborative Consultation Treatment Service by Community-Based Pediatricians: *A Cluster Randomized Trial*
Jeffery N. Epstein, PhD; David Rabiner, PhD; Diane E. Johnson, PhD; David P. FitzGerald, PhD;Allan Chrisman, MD; Alaattin Erkanli, PhD; Kevin K. Sullivan, BS; John S. March, MD; Peter Margolis, MD, PhD; Edward C. Norton, PhD; C. Keith Conners, PhD ARCH PEDIATR ADOLESC MED/VOL 161 (NO. 9), SEP 2007
WWW.ARCHPEDIATRICS.COM

A Process for Developing Community Consensus Regarding the Diagnosis and Management of Attention-Deficit/Hyperactivity Disorder
Pediatrics 2005;115;e97-e104 Jane Meschan Foy and Marian F. Earls

Screen shots of our customized diabetes template designed to accommodate planned care data collection.


NextGen - 192.168.1.137 - Remote Desktop
ADHD Diagnosis:
Syndrome, hyperkinetic NOS
314.9
School #
School Contact
CC / Reason for visit
Group Visit
ADHD
List of HPI templates
Vanderbilt Summary
Flowsheet
Height and Weight
Self Management
Peds Sx Checklist
Encounter Date:Time
11/03/2009 7:00 PM
09/01/2009 6:23 PM
08/04/2009 6:10 PM
07/14/2009 6:09 PM
06/02/2009 5:29 PM
Teacher Assessment
Date
11/03/2009
Inattention Score
Hyperactive/Impulsivity Score
Performance Score
Total Symptom Score
Parent Assessment
Parent Subjective Assessment
Improvement at home
Improvement at school
Internal BH Evaluation
Status
Ongoing
Type
Group therapy
Referred to
Location
External BH Evaluation
Medication
Medication Status
Excluded
Page Down
Additional ROS templates
REVIEW OF SYSTEMS
Constitutional
Cardiovascular
Genitourinary
Neuro | Psychiatric
Hematologic
HEENT
Vascular
Reproductive
Dermatologic
Immunologic
Print Document
New
Lock
Custom



Support text box: Three of the conditions that we have chosen to manage as populations are patients with diabetes, prenatal care and children with ADHD. Other examples of focus not listed here include patients with depression, chronic pain, patients on anticoagulation therapy, RSV prophylaxis, and neonates with hyperbilirubinemia.