

Diabetes Disease Management Tool

The complexity of Diabetes Management is changing rapidly. The integration of diabetes care with hypertension, Cardiometabolic Risk Syndrome, weight management, lipids, renal disease, nephrology, neurology, ophthalmology, podiatry and many other disciplines makes it the ideal treatment focus for electronic patient management.

Also, the care of diabetes has moved through the three stages of health care decision making: intuitive – which requires great skill, knowledge and experience; evidenced-based – which requires knowledge of current standards of care; precise medicine – where the goals and treatments are standardized such that except in unusual cases it is possible to care for patients based on algorithms, treatment protocols and guidelines.

SETMA's disease management tool standardizes care and brings to bear on each patient's care, what is known in the medical literature about optimal, excellent care of patients with diabetes.

Following SETMA's Model of Care, our care of diabetes includes:

1. Tracking quality metrics one patient at a time
2. Auditing metrics over panels and populations of patients
3. Analyzing the audited data to find leverage points for improvement
4. Public Reporting provider performance and transparently sharing with our patients that performance.
5. Designing quality improvement initiatives based on these four steps.

A complete description and explanation of this Model of Care can be found at: [Primary Care: The Future - Primary Care Progress \(PCP\)](#)

As SETMA grew, we came to believe that the future of healthcare will be founded on four domains:

1. Method -- The methodology of healthcare must be electronic patient management.
2. Content -- The content and standards of healthcare delivery must be evidenced-based medicine.
3. Structure -- The structure and organization of healthcare delivery must be patient-centered medical home.

Diabetes – Disease Management

4. Compensation - The payment must be capitation with rewards for quality in both process and outcomes.

In this time, SETMA has become an NCQA Tier-Three Patient Centered Medical Home and a AACH accredited ambulatory care clinic, an AAACH Medical Home and the first multispecialty group to become an affiliate of Joslin Diabetes Center. We document all patient care in the same database whether the patient is in the hospital, home health, physical therapy, hospice, nursing home, clinic or emergency department and are supporting the development of a regional health information exchange.

Quality Metrics Philosophy

SETMA's approach to quality metrics and public reporting is driven by these assumptions:

1. Quality metrics are not an end in themselves. Optimal health at optimal cost is the goal of quality care. Quality metrics are simply "sign posts along the way." They give directions to health. And the metrics are like a healthcare "Global Positioning Service": it tells you where you want to be; where you are, and how to get from here to there.
2. The auditing of quality metrics gives providers a coordinate of where they are in the care of a patient or a population of patients.
3. Statistical analytics are like coordinates along the way to the destination of optimal health at optimal cost. Ultimately, the goal will be measured by the well-being of patients, but the guide posts to that destination are given by the analysis of patient and patient-population data.
4. There are different classes of quality metrics. No metric alone provides a granular portrait of the quality of care a patient receives, but all together, multiple sets of metrics can give an indication of whether the patient's care is going in the right direction or not. Some of the categories of quality metrics are: access, outcome, patient experience, process, structure and costs of care.
5. The collection of quality metrics should be incidental to the care patients are receiving and should not be the object of care. Consequently, the design of the data aggregation in the care process must be as non-intrusive as possible. Notwithstanding, the very act of collecting, aggregating and reporting data will tend to create a Hawthorne effect.
6. The power of quality metrics, like the benefit of the GPS, is enhanced if the healthcare provider and the patient are able to know the coordinates while care is being received.
7. Public reporting of quality metrics by provider name must not be a novelty in healthcare but must be the standard. Even with the acknowledgment of the Hawthorne effect, the improvement in healthcare outcomes achieved with public reporting is real.
8. Quality metrics are not static. New research and improved models of care will require updating and modifying metrics.

SETMA currently tracks the following:

- 34 NCQA HEDIS measures;
- 14 NCQA Diabetes Recognition Metrics;
- 35 NQF-endorsed measures;

- 27 PQRS measures;
- 9 PCPI measures related to the physician role in hypertension management;
- 43 measures of the Bridges to Excellence program for Asthma, Chronic Stable Angina, Congestive Heart Failure, COPD, Diabetes and Hypertension;
- 10 PCPI related to Diabetes;
- 6 PCPI for Stages 4 and 5 of Chronic Kidney Disease;
- 5 PCPI for Chronic Stable Angina;
- 7 PCPI for Congestive Heart Failure;
- 20 PCPI Transition of Care measures.

We are also participating in the Guidelines Advantage Program which is a collaborative between the American Heart Association, the American Diabetes Association and the American Cancer Society. And we are tracking the metrics associated with the MA STARS, the ACO quality metrics and the Meaning Use metrics.

In addition to endorsed-measurement sets, SETMA tracks these self-designed quality measures: 10 measures related to hyperlipidemia; 12 measures related to Chronic Kidney Disease Stages 1-III. Also, in the hospital setting, SETMA has designed an internal study to identify patterns in hospital readmissions, such as lengths of stay, morbidities and co-morbidities, socio-economic status, ethnicity, gender, age, follow-up calls, follow-up visits in clinic, etc.. The purpose is to control cost and increase safety by reducing preventable readmissions to the hospital.

Population Management and Quality Improvement Metrics

SETMA tracks a number of key data points for diabetes, hypertension and hyperlipidemia for its entire patient population. These measures are compared between patients who are controlled against patients who are not controlled. Secondly, the results for the controlled and uncontrolled populations are further analyzed by gender, age, ethnicity, numbers of medications, frequency of visits, frequency of test, income and other measures in an effort of to reduce disparities in patient care across all demographics.

To ensure timely adherence by providers, SETMA has designed functions within its EHR to alert providers to patient conditions which must be reported to local or state agencies for infectious disease control. SETMA reports the results of all of measures publicly, by provider name, at www.setma.com.

The Limitations of Quality Metrics

The New York Times Magazine of May 2, 2010, published an article entitled, "The Data-Driven Life," which asked the question, "Technology has made it feasible not only to measure our most basic habits but also to evaluate them. Does measuring what we eat or how much we sleep or how often we do the dishes change how we think about ourselves?" Further, the article asked, "What happens when technology can calculate and analyze every quotidian thing that happened to you today?" Does this remind you of Einstein's admonition, "**Not everything that can be counted counts, and not everything that counts can be counted?**"

Technology must never blind us to the human. Bioethicist, Onora O'Neill, commented about our technological obsession with measuring things. In doing so, she echoes the Einstein dictum that not everything that is counted counts. She said, *"In theory again the new culture of accountability and audit makes professionals and institutions more accountable for good performance. This is manifest in the rhetoric of improvement and rising standards, of efficiency gains and best practices, of respect for patients and pupils and employees. But beneath this admirable rhetoric the real focus is on performance indicators chosen for ease of measurement and control rather than because they measure accurately what the quality of performance is."*

Technology Can Deal with Disease but Cannot Produce Health

In our quest for excellence, we must not be seduced by technology with its numbers and tables. This is particularly the case in healthcare. In the future of medicine, the tension - not a conflict but a dynamic balance - must be properly maintained between humanity and technology. Technology can contribute to the solving of many of our disease problems but ultimately cannot solve the "health problems" we face. The entire focus and energy of "health home" is to rediscover the trusting bond between patient and provider. In the "health home," technology becomes a tool to be used and not an end to be pursued. The outcomes of technology alone are not as satisfying as those where trust and technology are properly balanced in healthcare delivery.

Our grandchildren's generation will experience healthcare methods and possibilities which seem like science fiction to us today. Yet, that technology risks decreasing the value of our lives, if we do not in the midst of technology retain our humanity. As we celebrate science, we must not fail to embrace the minister, the ethicist, the humanist, the theologian, indeed the ones who remind us that being the bionic man or woman will not make us more human, but it seriously risks causing us to be dehumanized. And in doing so, we may just find the right balance between technology and trust and thereby find the solution to the cost of healthcare.

It is in this context that SETMA whole-heartedly embraces technology and science, while retaining the sense of person in our daily responsibilities of caring for persons. Quality metrics have made us better healthcare providers. The public reporting of our performance of those metrics has made us better clinician/scientist. But what makes us better healthcare providers is our caring for people.

Team Approach to Healthcare Delivery

The ideal setting in which to deliver and to receive healthcare is one in which all healthcare providers value the participation by all other members of the healthcare-delivery team. In fact, that is the imperative of Medical Home. Without an active team with team-consciousness and team-collegiality, Medical Home is just a name which is imposed upon the current means of caring for the needs of others. And, as we have seen in the past, the lack of a team approach at every level and in every department of medicine creates inefficiency, increased cost, potential for errors and it actually eviscerates the potential strength of the healthcare system.

Why is this? Typically, it is because healthcare providers in one discipline are trained in isolation from healthcare providers of a different discipline. Or, they are in the same buildings and often are seeing the same patients but they rarely interact. Even their medical record documentation is often done in compartmentalized paper records, which are rarely reviewed by anyone but members of their own discipline. This is where the first benefit of technology can help resolve some of this dysfunction. Electronic health records (EHR), or electronic medical records (EMR) help because everyone uses a common data base which is being built by every other member of the team regardless of discipline. While the use of EMR is not universal in academic medical centers, the growth of its use will enable the design and function of records to be more interactive between the various schools of the academic center.

And, why is that important? Principally, because more and more healthcare professionals are discovering that while their training often isolates them from other healthcare professionals, the science of their disciplines is crying for integration and communication. For instance, there was a time when physicians rarely gave much attention to the dental care of their patients, unless they had the most egregious deterioration of teeth. Today, however, in a growing number of clinical situations, such as the care of diabetes, physicians are inquiring as to whether the patient is receiving routine dental care as evidence-based medicine is indicating that the control of disease and the well-being of patients with diabetes is improved by routine dental care. Also, as the science of medicine is proving that more and more heart disease may have an infectious component, or even causation, the avoidance of gingivitis and periodontal disease have become of concern to physicians as well as dentist.


Disruptive Innovation

In addition, Medical Home places major emphasis upon issues which historically have been the concern of nurses. Physicians who use EMRs are discovering that the contribution of nursing staff can make the difference in the excellent and efficient use of this documentation and healthcare-delivery method. No longer is the nurse a “medical-office assistant” ancillary to the care of patients, but the nurse is a healthcare colleague central and essential to the patient’s healthcare experience. As evidence-based medicine expands the scope of what *The Innovator’s Prescription: A Disruptive Solution for Health Care* By Clayton M. Christensen labels as “empirical medicine” which ultimately leads to “precise medicine,” it is possible for physicians and nurses to be a true-healthcare delivery team, as opposed to the nurses only being an aide to the physician.

It is as a result of the need for the integration of healthcare disciplines at the delivery level, that the imperative becomes obvious for the restructuring of the training of the members of this healthcare team. And, the first change must come in the relationships between the leaders of the training programs who educate and mentor future healthcare scientist, teachers, caregivers and researchers. The educational leaders must model this integration for their disparate student bodies and that modeling will require the investment of the most precious and rare resource: time.

The Diabetes Suite of Templates can be accessed from:

- AAA Home



Patient: Robert Test Jr Sex: M Age: 42 Patient's Code Status: DNR
 Home Phone: (409)888-8888 Date of Birth: 03/25/1970
 Work Phone: () - Cell Phone: () -

Patient has one or more alerts!
[Click Here to View Alerts](#)

[STARS Program Measures](#) [Pre-Vist/Preventive Screening](#) [Bridges to Excellence View](#)

<p>Preventive Care</p> <p>SETMA's LESS Initiative Last Updated: 11/16/2012</p> <p>Preventing Diabetes Last Updated: 03/02/2011</p> <p>Preventing Hypertension Smoking Cessation </p> <p>Care Coordination Referral PC-MH Coordination Review <i>Needs Attention!!</i> HEDIS NQF PQRS ACO Elderly Medication Summary</p> <p>Exercise</p> <p>Exercise CHF Exercise Diabetic Exercise </p> <p>Patient's Pharmacy <input type="text" value="Kroger"/> Phone: <input type="text" value="(409)833-3703"/> Fax: <input type="text" value="(409)833-5184"/> <input type="button" value="Rx Sheet - Active"/> <input type="button" value="Rx Sheet - New"/> <input type="button" value="Rx Sheet - Complete"/> <input type="button" value="Home Health"/> </p>	<p>Template Suites</p> <p>Master GP Pediatrics Nursing Home Ophthalmology Physical Therapy Podiatry Rheumatology</p> <p>Hospital Care</p> <p>Hospital Care Summary Daily Progress Note Admission Orders </p>	<p>Disease Management</p> <p>Diabetes Hypertension Lipids Acute Coronary Syn Angina Asthma Cardiometabolic Risk Syn CHF Diabetes Education Headaches Renal Failure Weight Management </p> <p>Pending Referrals </p> <table border="1"> <thead> <tr> <th>Status</th> <th>Priority</th> <th>Referral</th> <th>Referring Provider</th> </tr> </thead> <tbody> <tr> <td>Completed</td> <td>Routine</td> <td>Sotolongo, Rodolfo</td> <td>Deiparine</td> </tr> <tr> <td>Completed</td> <td>Routine</td> <td>Mammogram</td> <td>Anwar</td> </tr> <tr> <td>Completed</td> <td>Routine</td> <td>Colonoscopy</td> <td>Deiparine</td> </tr> <tr> <td>Completed</td> <td>Routine</td> <td>Colonoscopy</td> <td>Deiparine</td> </tr> <tr> <td>Completed</td> <td>Stat</td> <td>Abdominal U/S</td> <td>Duncan</td> </tr> <tr> <td>Completed</td> <td>Routine</td> <td></td> <td></td> </tr> </tbody> </table>	Status	Priority	Referral	Referring Provider	Completed	Routine	Sotolongo, Rodolfo	Deiparine	Completed	Routine	Mammogram	Anwar	Completed	Routine	Colonoscopy	Deiparine	Completed	Routine	Colonoscopy	Deiparine	Completed	Stat	Abdominal U/S	Duncan	Completed	Routine			<p>Last Updated</p> <table border="1"> <tr><td>02/28/2012</td></tr> <tr><td>06/07/2011</td></tr> <tr><td>11/16/2012</td></tr> <tr><td>//</td></tr> <tr><td>//</td></tr> <tr><td>//</td></tr> <tr><td>//</td></tr> <tr><td>//</td></tr> <tr><td>//</td></tr> <tr><td>//</td></tr> <tr><td>//</td></tr> <tr><td>//</td></tr> <tr><td>//</td></tr> <tr><td>//</td></tr> </table> <p>Special Functions</p> <p>Lab Present Lab Future Lab Results Hydration Nutrition Guidelines Pain Management Immunizations Reportable Conditions</p> <p>Information</p> <p>Charge Posting Tutorial Drug Interactions E&M Coding Recommendations Insulin Infusion</p> <table border="1"> <tr><td>Chart Note</td></tr> <tr><td>Return Info</td></tr> <tr><td>Return Doc</td></tr> <tr><td>Email</td></tr> <tr><td>Telephone</td></tr> <tr><td>Records Request</td></tr> <tr><td>Transfer of Care Doc</td></tr> </table>	02/28/2012	06/07/2011	11/16/2012	//	//	//	//	//	//	//	//	//	//	//	Chart Note	Return Info	Return Doc	Email	Telephone	Records Request	Transfer of Care Doc
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- NextGen's Main Tool Bar's Template Icon

The screenshot displays the NextGen medical software interface for a patient named Robert Test Jr. The interface is divided into several sections:

- Patient Information:** Name (Robert Test Jr), Sex (M), Age (42), Date of Birth (03/25/1970), Patient's Code Status (DNR), Home Phone ((409)888-8888), Work Phone (() -), and Cell Phone (() -). A red alert banner states "Patient has one or more alerts!" with a link to "Click Here to View Alerts".
- Programs and Measures:** STARS Program Measures, Pre-Vist/Preventive Screening, and Bridges to Excellence View.
- Preventive Care:** Includes links for SETMA's LESS Initiative, Preventing Diabetes, Preventing Hypertension, Smoking Cessation, Care Coordination Referral, PC-MH Coordination Review, HEDIS, NQF, PQRS, ACO, and Elderly Medication Summary.
- Exercise:** Links for Exercise, CHF Exercise, and Diabetic Exercise.
- Patient's Pharmacy:** Kroger, with phone and fax numbers.
- Rx Sheet Options:** Active, New, Complete, and Home Health.
- Template Suites:** Master GP, Pediatrics, Nursing Home, Ophthalmology, Physical Therapy, Podiatry, and Rheumatology.
- Hospital Care:** Hospital Care Summary, Daily Progress Note, and Admission Orders.
- Pending Referrals:** A table with columns for Status, Priority, Referral, and Referring Provider.

Status	Priority	Referral	Referring Provider
Completed	Stat	Abdominal U/S	Duncan
Completed	Routine	Sotolongo, Rodolfo	Deiparine
Completed	Routine		Holly
Completed	Immediate		Colbert
Completed	Routine		Colbert
Completed			Arb...
- Disease Management:** Diabetes, Hypertension, Lipids, Acute Coronary Svn, Angina, Asthma, Cardiometabolic Risk Svn, CHF, Diabetes Education, Headaches, Renal Failure, and Weight Management.
- Special Functions:** Lab Present, Lab Future, Lab Results, Hydration, Nutrition, Guidelines, Pain Management, Immunizations, Reportable Conditions, Charge Posting Tutorial, Drug Interactions, E&M Coding Recommendations, and Insulin Infusion.
- Information:** Charge Posting Tutorial, Drug Interactions, E&M Coding Recommendations, and Insulin Infusion.
- Chart Note:** Return Info, Return Doc, Email, Telephone, Records Request, and Transfer of Care Doc.
- Sidebar:** Patient History window showing a list of dates and times. A red box highlights the "Template" icon in the "My Practice" section.

- When the Template button is clicked you will be presented with the preference list.
- If the Diabetes master template is listed as one of your preferences, select it.
- If it is not one of your preferences, select the All radio button and then scroll down until you find it in the list.



NOTE: For more on how to set up your preferences, [Click Here](#)

Before detailing the Diabetes Master Template (the first template in the diabetes suite), we need to look at the **standard of excellence for Diabetes Care** which is tracked and documented by SETMA's Diabetes Suite of Templates.

- To do this, go to SETMA's **Navigation Buttons** on the right hand side of the Diabetes Master Template.

Diabetes Management

Diabetes Since Patient
 Type I Type II GDM Pre-Diabetes Other Month Year Age Sex

[Joslin Treatment Goals](#) [Imp Diabetes Concepts](#)
[Diagnostic Criteria](#) [Screening Criteria](#) [Evidenced-Based Recs](#)

Current Frequency of SMBG

Adherence

[Dental Care](#)

Dilated Eye Exam [Smoker](#) E-mail + -
[Metabolic Syndrome](#) + -

Flu Shot [Framingham Risk Scores](#)

Foot Exam 10-Year General Risk %
 10-Year Stroke Risk %
 Global Cardio Score pts

Monofilament [Weight Management](#) [Lipids Management](#)
[HPT Management](#) [Immunizations](#)

HgbA1C [Weight Management](#) [Lipids Management](#)
[HPT Management](#) [Immunizations](#)

Pneumovax [Weight Management](#) [Lipids Management](#)
[HPT Management](#) [Immunizations](#)

Urinalysis

Aspirin Yes No
 Statin Yes No

Vital Signs

Height	<input type="text" value="72.00"/>	Waist	<input type="text" value="40.00"/>	Finger Stick	<input type="text"/>
Weight	<input type="text" value="210.00"/>	Hips	<input type="text" value="42.00"/>	Glucose	<input type="text"/>
BMI	<input type="text" value="28.48"/>	Chest	<input type="text" value="42.00"/>	Pulse	<input type="text"/>
Body Fat %	<input type="text" value="22"/>	Abdomen	<input type="text" value="44"/>	Blood Pressure	<input type="text" value="130"/> / <input type="text" value="85"/>
Protein Req	<input type="text" value="114"/>	Ratio	<input type="text" value="0.95"/>	<input type="text" value="BP In Diabetics"/>	<input type="text"/>
BMR	<input type="text" value="2945"/>	BER	<input type="text" value="3150"/>	<input type="text" value="Vitals Over Time"/>	<input type="text"/>

Most Recent Labs

[HbA1C](#)
 Previous

[eAG](#)

[Mean Plasma Glucose](#)

[C-Peptide](#)

Fructosamine

Cholesterol
 LDL
 HDL
 Triglycerides
[Trig/HDL Ratio](#)

Glucose
 Fasting

Insulin

[HOMA-IR](#)

Na
 K
[Magnesium](#)
 BUN
 Creatinine
[U Microalbumin](#)
 Albumin/Creat

Navigation

Diabetes General

-
-
-
-
-
-
-
-
-
-
-
-
-

Education Booklet Given On

Last DE

Current SQ Insulin Dose as of

Time of day	Units	Type	Units	Type	Blood Sugars
<input type="text"/>	<input type="text" value="0.00"/>	<input type="text"/>	<input type="text" value="0.00"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text" value="0.00"/>	<input type="text"/>	<input type="text" value="0.00"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text" value="0.00"/>	<input type="text"/>	<input type="text" value="0.00"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text" value="0.00"/>	<input type="text"/>	<input type="text" value="0.00"/>	<input type="text"/>	<input type="text"/>

- At the top of the Navigation Buttons, there is the title **Navigation**.

The screenshot shows the 'Diabetes Management' software interface for a patient named Robert Test Jr. The 'Navigation' section at the top right is highlighted with a red box, containing radio buttons for 'Diabetes' (selected) and 'General'. The interface is divided into several sections: 'Adherence' with a table of medical appointments; 'Vital Signs' with a table of physical measurements; 'Current SQ Insulin Dose' with a table of insulin doses; 'Most Recent Labs' with a table of laboratory results; and a sidebar on the right with various navigation buttons like 'Diab Sys Review', 'Diabetic History', 'Eye Exam', 'Nasopharynx', 'Cardio Exam', 'Foot Exam', 'Neurological Exam', 'Complications/Education', 'initiating Insulin', 'Insulin Pump', 'Lifestyle Changes', 'Diabetes Plan', 'Education Booklet Given On', 'Diabetes Education', 'Telephone Record', and 'Last DE'.

- The next function is two buttons which are entitled:
 - Diabetes**
 - General**
- Make sure the box beside the word “**Diabetes**” is checked.

Diabetes Management Patient: Robert Test Jr. Diabetes Since: Month 5 Year 2001 Age 42 Sex M

Type I Type II GDM Pre-Diabetes Other Current Frequency of SMBG: Daily

[Joslin Treatment Goals](#) [Imp Diabetes Concepts](#) [Diagnostic Criteria](#) [Screening Criteria](#) [Evidenced-Based Recs](#)

Adherence
 Dental Care: //
 Dilated Eye Exam: 06/16/2008
 Flu Shot: 11/04/2011
 Foot Exam: 02/07/2011
 Monofilament: 02/07/2011
 HgbA1C: 02/22/2012
 Pneumovax: 03/02/2011
 Urinalysis: //
 Aspirin: Yes No
 Statin: Yes No

Vital Signs
 Height: 72.00 Weight: 210.00 BMI: 28.48 Body Fat %: 22 Protein Req: 114 BMR: 2945
 Waist: 40.00 Hips: 42.00 Chest: 42.00 Abdomen: 44 Ratio: 0.95 BER: 3150
 Finger Stick Glucose: // Pulse: // Blood Pressure: 130 / 85
 BP In Diabetics: // Vitals Over Time: //

Most Recent Labs
 HgA1C: 8.0 (02/22/2012)
 Previous: 8.2 (01/01/2012)
 eAG: 182
 Mean Plasma Glucose: 207.5 (Insulin)
 C-Peptide: //
 Fructosamine: //
 Cholesterol: 212 (11/15/2012)
 LDL: 111 (11/15/2012)
 HDL: 63 (11/15/2012)
 Triglycerides: 118 (11/15/2012)
 Trig/HDL Ratio: 1.87
 Glucose Fasting: //
 Insulin: //
 HOMA-IR: //
 Na: // K: // Magnesium: //
 BUN: // Creatinine: // U Microalbumin: //
 Albumin/Creat: //

Navigation
 Diabetes General
 Home
 Diab Sys Review
 Diabetic History
 Eye Exam
 Nasopharynx
 Cardio Exam
 Foot Exam
 Neurological Exam
 Complications/Education
 Initiating Insulin
 Insulin Pump
 Lifestyle Changes
 Diabetes Plan
 Education Booklet Given On: //
 Diabetes Education
 Telephone Record
 Last DE: //

Current SQ Insulin Dose as of // **Blood Sugars**

Time of day	Units	Type	Units	Type	Blood Sugars (mg/dl)
	0.00		0.00		
	0.00		0.00		
	0.00		0.00		
	0.00		0.00		

Diary

Urinalysis Labs Over Time

- This will display twelve Navigation Buttons.

Diabetes Management

Diabetes Since Patient **Robert** Test Jr
 Age **42** Sex **M**

Type I Type II GDM Pre-Diabetes Other Month **5** Year **2001**

Navigation
 Diabetes General

Current Frequency of SMBG

[Joslin Treatment Goals](#) [Imp Diabetes Concepts](#)
[Diagnostic Criteria](#) [Screening Criteria](#) [Evidenced-Based Recs](#)

Adherence
[Dental Care](#)
 Dilated Eye Exam [Smoker](#) E-mail + -
 Flu Shot [Metabolic Syndrome](#) + -
 Foot Exam [Framingham Risk Scores](#)
 Monofilament
 HgbA1C 10-Year General Risk %
 Pneumovax 10-Year Stroke Risk %
 Urinalysis Global Cardio Score pts
 Aspirin Yes No [Weight Management](#) [Lipids Management](#)
 Statin Yes No [HPT Management](#) [Immunizations](#)

Vital Signs
 Height Waist Finger Stick Glucose
 Weight Hips Pulse
 BMI Chest [Blood Pressure](#)
 Body Fat % Abdomen /
 Protein Req Ratio
 BMR BER

Most Recent Labs [Check for New Labs](#)
 HgA1C
 Previous
 eAG
 Mean Plasma Glucose
 C-Peptide
 Fructosamine
 Cholesterol
 LDL
 HDL
 Triglycerides
 Trig/HDL Ratio
 Glucose
 Fasting
 Insulin
 HOMA-IR
 Na
 K
 Magnesium
 BUN
 Creatinine
 U Microalbumin
 Albumin/Creat

Current SQ Insulin Dose as of

Time of day	Units	Type	Units	Type	Blood Sugars
	0.00		0.00		<input type="text"/>
	0.00		0.00		<input type="text"/>
	0.00		0.00		<input type="text"/>
	0.00		0.00		<input type="text"/>

Last DE

Home

Diab Sys Review

Diabetic History

Eye Exam

Nasopharynx

Cardio Exam

Foot Exam

Neurological Exam

Complications/Education

Initiating Insulin

Insulin Pump

Lifestyle Changes

Diabetes Plan

- The Navigation button at the bottom of this list of twelve is “Diabetes Plan”

Diabetes Management

Diabetes Since: Patient Robert Test Jr, Age 42, Sex M

Type I Type II GDM Pre-Diabetes Other Month 5 Year 2001

Current Frequency of SMBG: Daily

Adherence

Dental Care: //

Dilated Eye Exam: 06/16/2008

Flu Shot: 11/04/2011

Foot Exam: 02/07/2011

Monofilament: 02/07/2011

HgbA1C: 02/22/2012

Pneumovax: 03/02/2011

Urinalysis: //

Aspirin: Yes No

Statin: Yes No

Vital Signs

Height: 72.00, Weight: 210.00, BMI: 28.48, Body Fat %: 22, Protein Req: 114, BMR: 2945

Waist: 40.00, Hips: 42.00, Chest: 42.00, Abdomen: 44, Ratio: 0.95, BER: 3150

Finger Stick Glucose: //, Pulse: //, Blood Pressure: 130 / 85

Most Recent Labs

HgA1C: 8.0 (02/22/2012), Previous: 8.2 (01/01/2012)

eAG: 182

Mean Plasma Glucose: 207.5

Fructosamine: //

Cholesterol: 212 (11/15/2012), LDL: 111 (11/15/2012), HDL: 63 (11/15/2012), Triglycerides: 118 (11/15/2012)

Trip/HDL Ratio: 1.87

Glucose: Fasting //, Insulin: //

Na: //, K: //, Magnesium: //, BUN: //, Creatinine: //, U Microalbumin: //, Albumin/Creat: //

Navigation

- Diabetes General
- Home
- Diab Sys Review
- Diabetic History
- Eye Exam
- Nasopharynx
- Cardio Exam
- Foot Exam
- Neurological Exam
- Complications/Education
- Initiating Insulin
- Insulin Pump
- Lifestyle Changes
- Diabetes Plan**
- Education Booklet Given On: //
- Diabetes Education
- Telephone Record
- Last DE: //

- Click on the **Diabetes Plan Button**, this launches the **Diabetes Plan** template (We will discuss the content of this template later).

Diabetes Plan

Meal Requirements: Total Daily Dose, Total Meal Dose, Pre-lunch, Basal Requirement, Pre-breakfast, Pre-dinner

Laboratory & Procedures: Ordering Provider, BMP, C-Peptide, Creatinine, EKG, Flu Shot, Fructosamine, Hepatic Profile, HgbA1C, Lipid Profile w/LDL, Magnesium, Micral Strip, Pneumovax, Spot AC Ratio, TSH, Venipuncture

Management: Change SMBG to, Phone glucose data, Refer to eye specialist, HgbA1C Treat Goals

Medications: Continue present insulin, Continue Aspirin, Start Aspirin 325 mg, Begin/Increase/Decrease/Stop options

Assessment: Dx1, Dx2, Dx3, Chronic Conditions, EM Coding, Sliding Scale, Insulin Over Time

Return

- Consortium Data Set**
- Patient Adherence
- Comments
- Follow Up Document
- Document

Double-Click to View/Add Meds: Brand Name, Comparison of Human Insulin, Conditions - Glycemic Control, Drugs - Glucose Levels, Basal/Bolus Insulin, Incretins, Byetta, Actions: Byetta

You MUST click "Save" above after entering new insulin information.

- In the list of **Navigation Buttons** at the right hand side of the **Plan Template**, the second button is entitled **Consortium Data Set**, click on that button. This will launch a pop up window titled "PCPI Diabetes Management". The Diabetes Management is a means of measuring diabetes care given by a provider. The data points are taken from the Physician Consortium for Performance Improvement (PCPI). Additional functionality has been added to make it easier to provide diabetes care right rather than not at all.

PCPI Diabetes Management

Has the patient had a Hemoglobin A1c within the last year? **Yes**
 Date of Last

Has the patient had a Lipid Profile within the last year? **Yes**
 Date of Last

Has the patient had a urinalysis within the last year? **No**
 Date of Last Ordered Today

Has the patient had a dilated eye exam within the last year? **No** *Add Referral Below*
 Date of Last

Has the patient had a flu shot within the last year? **No**
 Date of Last

Has the patient had a 10-gram monofilament exam within the last year? **No**
 Date of Last

Is the patient on Aspirin? **No** *Add Medication Below*
 Is the patient allergic to aspirin? Yes No

Is the patient's blood pressure controlled (<130/80 mmHg)? **No**

Today's Blood Pressure /
 /

Does the patient have at least one visit schedule for the next six months? *Follow-Up Visit*

Has the Diabetes Treatment Plan been completed with the last year? **Yes**
 Date Last Completed

Referrals	Active Medications												
Double-Click to Add/Edit	Double-Click to Add/Edit												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Referral</th> <th style="width: 30%;">Date</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	Referral	Date			<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Brand Name</th> <th style="width: 40%;">Dose</th> </tr> </thead> <tbody> <tr> <td>ACTEMRA</td> <td>400 mg/20 mL (20 mg/mL)</td> </tr> <tr> <td>ALLEGRA</td> <td>60 mg</td> </tr> <tr> <td>AQUATAB C</td> <td>10 mg-30</td> </tr> </tbody> </table>	Brand Name	Dose	ACTEMRA	400 mg/20 mL (20 mg/mL)	ALLEGRA	60 mg	AQUATAB C	10 mg-30
Referral	Date												
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ALLEGRA	60 mg												
AQUATAB C	10 mg-30												

Upon completing the evaluation and treatment of a patient with diabetes, the provider can launch the PCPI measure set function. The measures which are done appear in black; those which are not done appear in red. For any metrics which are not completed, the button to the right can be clicked. Depending upon the metric, the provider will be taken to the point in the EMR where that element is documented such as in the Foot examination or in the case of a lab test, the clicking of the button will order the test, send it to the lab, send it to charge posting and place the order on the chart.

In addition to the PCPI diabetes data set, SETMA also tracks:

- The HEDIS Diabetes set
- The PQRS Comprehensive Diabetes Data set
- The Joslin Diabetes Data set
- The NCQA Diabetes Data Set – this differs from the HEDIS measurement set although it is also produced by NCQA.
- The Bridges to Excellence Diabetes Measurement set.
- National Quality Forum Comprehensive Diabetes Measurement Set
- AQA Diabetes Measurement Set

Those will be learned elsewhere.

The Physician Consortium for Performance Improvement

The Physician Consortium for Performance Improvement (PCPI) is a group of clinical and methodological experts convened by the AMA. The Consortium includes representatives from more than 60 national medical specialty and state medical societies, the Agency for Healthcare Research and Quality, and the Centers for Medicare and Medicaid Services.

The Consortium's vision is to fulfill the responsibility of physicians to patient care, public health, and safety by:

- becoming the leading source organization for evidence-based clinical performance measures and outcomes reporting tools for physicians; and
- ensuring that all components of the medical profession have a leadership role in all national forums seeking to evaluate the quality of patient care.

The Consortium's mission is to improve patient health and safety by:

- identifying and developing evidence-based clinical performance measures that enhance quality of patient care and that foster accountability;
- promoting the implementation of effective and relevant clinical performance improvement activities; and
- advancing the science of clinical performance measurement and improvement.

The Consortium works to develop evidence-based clinical performance measures and clinical outcomes reporting tools to support physicians in quality improvement efforts.

The Consortium has published a number of disease management data sets which established quality of care measures with which physicians and other healthcare providers can measure their own performance.

The 9 data points which are automatically captured and documented by SETMA's Diabetes Suite of Templates, and, which are collected and displayed on the Consortium Data Set pop-up on the Diabetes Plan, are the quality measures for diabetes developed by the Consortium.

These 9 data points are the basis along with several other data points of SETMA's **Daily Diabetes Care Audit**. These data points are:

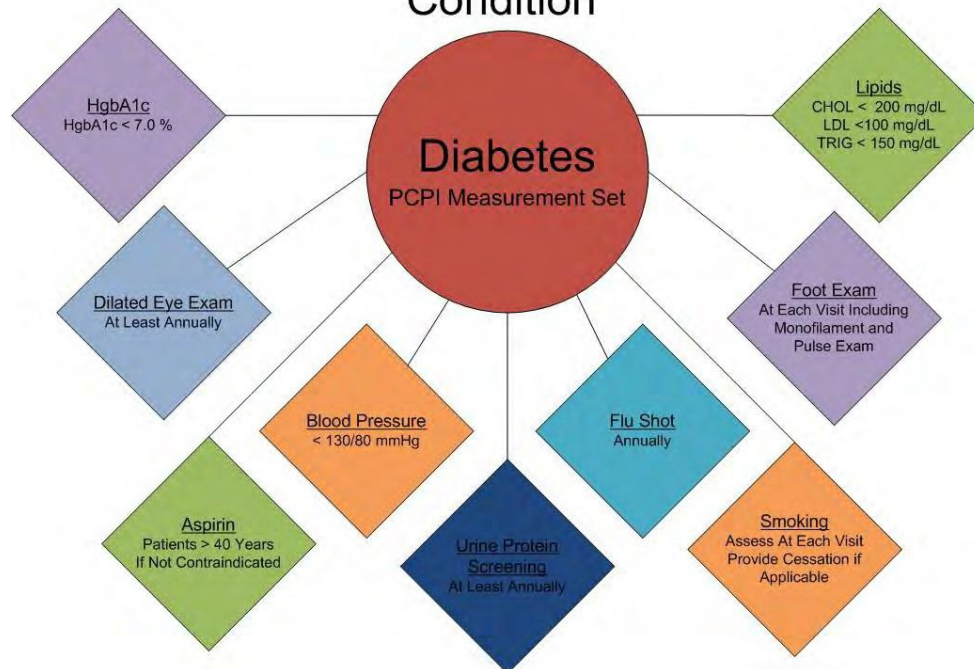
1. Collected automatically
2. Provide a quick and easy review for the SETMA healthcare provider to evaluate his/her own Diabetes care.
3. Provide a quick and easy way of completing the Diabetes measures required if they werenot completed.
4. Attention to these data points places in you line for additional reimbursement when CMS begins paying providers for performance in the coming years.
5. The Consortium material should be completed by the nursing staff and reviewed by the provider.

SETMA employs two definitions in quality metrics analysis:

- A “cluster” is seven or more quality metrics for a single condition, i.e., diabetes, hypertension, etc.
- A “galaxy” is multiple clusters for the same patient, i.e., diabetes, hypertension, lipids, CHF, etc.

SETMA believes that fulfilling a single or a few quality metrics does not change outcomes, but fulfilling “clusters” and “galaxies” of metrics which are measurable at the point-of-care can and *will* change outcomes. The following illustrates the principle of a “cluster” of quality metrics. A single patient, at a single visit, for a single condition, will have eight or more quality metrics fulfilled for a condition, which WILL change the outcome of that patient’s treatment.

A “Cluster” -- Multiple Metrics on a Single Condition



The following illustrates a “galaxy” of quality metrics. A single patient, at a single visit, may have as many as 60 or more quality metrics fulfilled in his/her care which WILL change the quality of outcomes and will result in the improvement of the patient’s health. And because of the improvement in care and health, the cost of that patient’s care will be decreased as well.

A "Galaxy" -- Multiple "Clusters" Tracked on a Single Patient at a Single Visit



SETMA’s model of care is based on the concepts of “clusters” and “galaxies” of quality metrics. Foundational to this concept is that the fulfillment of quality metrics is incidental to excellent care rather than being the intent of that care.

The Elements of the Consortium Data Set for Diabetes

Hemoglobin A1C –

- The standard is that the patient has had a Hemoglobin A1C in the last year or has one at this visit.
- The date of the last Hgb A1C is displayed on this template.
- If this data point is out of date, a button will appear to the right of the date box.
- When you depress this button you will automatically order and charge post a Hgb A1C, **making it easier to do it right than not to do it at all.**

PCPI Diabetes Management

Has the patient had a Hemoglobin A1c within the last year? Yes No

Date of Last

Has the patient had a Lipid Profile w/in the last year? Yes No

Date of Last

Has the patient had a urinalysis within the last year? Yes No

Date of Last Ordered Today

Has the patient had a dilated eye exam within the last year? Yes No

Date of Last

Has the patient had a flu shot within the last year? Yes No

Date of Last

Has the patient had a 10-gram monofilament exam within the last year? Yes No

Date of Last

Is the patient on Aspirin? Yes No

Is the patient allergic to aspirin? Yes No

Is the patient's blood pressure controlled (<=130/80 mmHg)? Yes No

Today's Blood Pressure /

Does the patient have at least one visit schedule for the next six months?

Has the Diabetes Treatment Plan been completed with the last year? Yes No

Date Last Completed

Referrals		Active Medications	
Double-Click to Add/Edit		Double-Click to Add/Edit	
Referral	Date	Brand Name	Dose
		ACTEMRA	400 mg/20 m (20 mg/mL)
		ALLEGRA	60 mg
		AQUATAB C	10 mg-30

Fasting Lipid Profile Current –

- The standard is that there has been a Lipid Profile in the last year or one has been done today.
- If the Lipid Profile is out of date, the order button will appear to the right of the date box which when depressed will order and charge post a Lipid Profile.
- If the patient has not fasted for twelve hours, a Lipid panel should be ordered by the [Future Labs Template](#).

Diabetes is an independent risk factor for cardiovascular disease, as is LDL. In addition to limb, renal function and vision preservation, the careful treatment of diabetes is necessary to mitigate the cardiovascular risk burden placed on a patient's life by their having diabetes. Part of the optimal care of patients with diabetes is the calculation of their Framingham Risk Scores and the discussion with them of their "What IF" scenarios. They can be found at

[Framingham Cardiovascular Risk Assessment](#)

Several of the scores include the presence or absence of diabetes and one score which is derived from the Framingham data entitled Global Cardiovascular Risk Score includes the Hemoglobin A1c value as an element of the score's calculation.

PCPI Diabetes Management

Has the patient had a Hemoglobin A1c within the last year? Yes No
 Date of Last

Has the patient had a Lipid Profile within the last year? Yes No
 Date of Last

Has the patient had a urinalysis within the last year? No Yes
 Date of Last Ordered Today

Has the patient had a dilated eye exam within the last year? No Yes
 Date of Last

Has the patient had a flu shot within the last year? No Yes
 Date of Last

Has the patient had a 10-gram monofilament exam within the last year? No Yes
 Date of Last

Is the patient on Aspirin? Yes No
 Is the patient allergic to aspirin? Yes No

Is the patient's blood pressure controlled (<130/80 mmHg)? No Yes
 Today's Blood Pressure /
 /

Does the patient have at least one visit schedule for the next six months?

Has the Diabetes Treatment Plan been completed with the last year? Yes No
 Date Last Completed

Referrals	Active Medications												
Double-Click to Add/Edit	Double-Click to Add/Edit												
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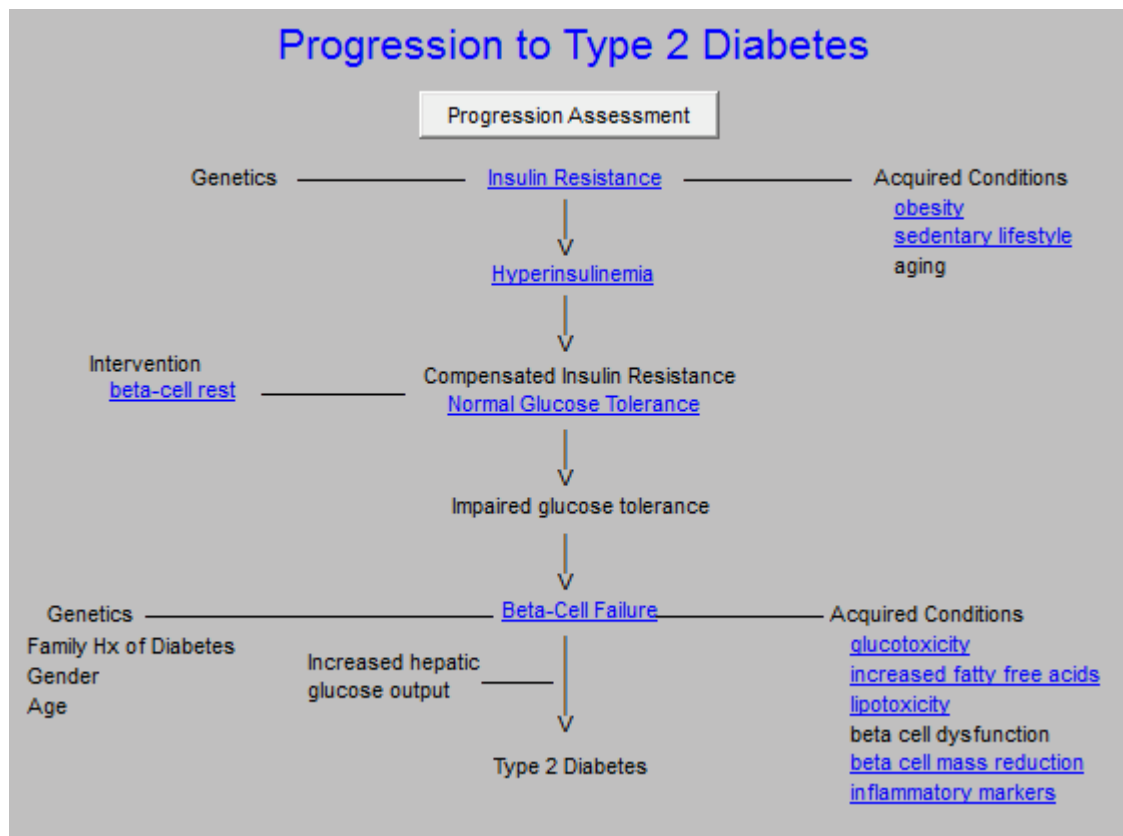
In addition, the calculation of the Cardiometabolic Risk Syndrome assessment for each patient with diabetes is important. The tutorial for that calculation is found at:

[Metabolic Syndrome Tutorial](#)

The Cardiometabolic Risk Syndrome has been known at one time or another by the following names:

- Syndrome X
- Metabolic Syndrome
- Insulin Resistance Syndrome

In SETMA's tutorial for the Cardiometabolic Risk Syndrome, the following chart appears which shows the progression from pre-diabetes to diabetes. It shows the elements of that progression.



In the EMR, each of the underscored elements in blue are hyperlinks and can be accessed for information on the contribution of each of the elements to the progression to diabetes. The following are the documents which are deployed when each of these buttons are clicked:

The button entitled Progression Evaluation when accessed deploys the following. When used in the EMR, the template is automatically populated with the HbA1c and the Fasting Blood Glucose to calculate the stage toward the development of diabetes.

Progression to DM Evaluation

HbA1C <input type="text" value="6.3"/> % FPG <input type="text" value="108"/> mg/dL	<input type="button" value="Calculate >>"/>	Stage <input type="text" value="Stage III - Type 2 Diabetes Mellitus"/> Insulin Resistance <input type="text" value="Moderate"/> Insulin Levels <input type="text" value="Mildly Increased or Normal"/> Treatment <input type="text" value="Insulin Sensitizer"/>
<input type="button" value="View Algorithm"/>	<input type="button" value="OK"/> <input type="button" value="Cancel"/>	

The following is deployed with you click on the button entitled View Algorithm and it defines the stages of progression to diabetes.

Progression of Type II Diabetes

Factors	Stage 1 Normal Glucose Tolerance	Stage 2 Impaired Glucose Tolerance/ Impaired Fasting Glucose	Stage 3 Type 2 Diabetes Mellitus	Stage 4 Type 2 Diabetes Mellitus	Stage 5 Type 2 Diabetes Mellitus
HgbA1C	< 5.5 %	5.5 - 6.1 %	6.2 - 7.5 %	7.6 - 10.0 %	> 10.0 %
Fasting Glucose	< 110 mg/dL	110 - 125 mg/dL	126 - 160 mg/dL	161 - 240 mg/dL	> 240 mg/dL
Insulin Resistance	Moderate	Moderate	Moderate	Moderate to Severe	Severe
Insulin Levels	Highly Increased	Moderately Increased	Slightly Increased to Normal	Mildly to Moderately Decreased	Highly Decreased
Treatment	Diet + Exercise	Diet + Exercise	Insulin Sensitizer	Insulin Sensitizers + Insulin Secretagogue	Insulin Sensitizers + Insulin

The next PCIP measure is for urinalysis.

Urinalysis Current –

- The standard is that a urinalysis with microscopic examination and protein analysis is done at least once a year.
- If the date box indicates that the urinalysis is “out of date,” a button will appear.
- When depressed a urinalysis will be ordered and charged posted and sent to the lab.

PCPI Diabetes Management

Has the patient had a Hemoglobin A1c within the last year?
 Date of Last

Has the patient had a Lipid Profile within the last year?
 Date of Last

Has the patient had a urinalysis within the last year?
 Date of Last Ordered Today

Has the patient had a dilated eye exam within the last year?
 Date of Last

Has the patient had a flu shot within the last year?

Has the patient had a 10-gram monofilament exam within the last year?
 Date of Last

Is the patient on Aspirin?
 Is the patient allergic to aspirin? Yes No

Is the patient's blood pressure controlled (<130/80 mmHg)?

Today's Blood Pressure /

Does the patient have at least one visit schedule for the next six months? Follow-Up Visit

Has the Diabetes Treatment Plan been completed with the last year?
 Date Last Completed

Referrals	Active Medications
Double-Click to Add/Edit	
Referral	Date

Brand Name	Dose
ACTEMRA	400 mg/20 r (20 mg/mL)
ALLEGRA	60 mg
AQUATAB C	10 mg-30

Preservation of renal function is so important in patients with diabetes, SETMA has created a disease management tool for renal disease from the National Kidney Foundation's published standards of kidney care. The following link will take you to the tutorial for that tool.

[Renal Tutorial](#)

The following is the Evaluation of Chronic Renal Failure from that management tool. When completed, this will give the provider the stage of renal disease.

Evaluation of Chronic Renal Failure

[Review of Systems](#) [Decreased GFR](#)

[Return](#)

Modifiable Risk Factors

- Anemia
- Cardiovascular disease
- Decreased nitric oxide
- Depression/poor mental health
- Diabetes
- Drug toxicity
- Dyslipidemia
- Elevated angiotensin II
- Elevated homocysteine
- Elevated/persistent proteinuria
- Hyperaldosteronism
- Hypertension
- Increased endothelin
- Infection/Inflammation

- Lack of awareness
- Lower urinary tract obstruction
- Menopause
- Nutrition (high protein/high phosphate diet)
- Oxidative stress
- Poor glycemic control in diabetes
- Poor physical functioning
- Smoking
- Systemic infections
- Thrombogenic factors
- Uremic toxins
- Urinary stones
- Urinary tract infections
- Vocational disability

Non-modifiable Risk Factors

- Age
- Autoimmune diseases
- Ethnicity
(African-American, American Indian, Hispanic, Asian, Pacific Islander)
- Exposure (chemical/environmental)
- Family history of kidney disease
- Low birth weight
- Low income/education
- Neoplasm
- Recovery from acute kidney failure
- Reduction in kidney mass
- Renal transplant

Information

- [Kidney Structure](#)
- [Kidney Function Testing](#)
- [Categories of Testing](#)
- [Chronic Kidney Disease](#)
- [HBP and CKD](#)
- [Nephrotoxic Drugs](#)

Classification of Risk Factors

Stage of Kidney Disease

Total

0	Modifiable	0	Class I	0	Class III
0	Non-modifiable	0	Class II	0	Class IV

Uncontrolled diabetes is the most common cause of renal failure in the United States. Routine urinalysis is the first step in anticipating renal impairment.

Eye Exam Current –

- The standard is that a dilated eye examination by an ophthalmologist is done annually on all patients with diabetes.
- If the date box indicates that there has not been a dilated eye examination in the past year, the referral template can be access at the bottom of the screen to complete a referral to an ophthalmologist.

PCPI Diabetes Management

Has the patient had a Hemoglobin A1c within the last year?
 Date of Last

Has the patient had a Lipid Profile within the last year?
 Date of Last

Has the patient had a urinalysis within the last year?
 Date of Last *Ordered Today*

Has the patient had a dilated eye exam within the last year?
 Date of Last

Has the patient had a flu shot within the last year?
 Date of Last

Has the patient had a 10-gram monofilament exam within the last year?
 Date of Last

Is the patient on Aspirin?
 Is the patient allergic to aspirin? Yes No

Is the patient's blood pressure controlled (<130/80 mmHg)?

Today's Blood Pressure /
 /

Does the patient have at least one visit schedule for the next six months?

Has the Diabetes Treatment Plan been completed with the last year?
 Date Last Completed

Referrals	Active Medications												
Double-Click to Add/Edit													
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ACTEMRA	400 mg/20 m (20 mg/mL)												
ALLEGRA	60 mg												
AQUATAB C	10 mg-30												

Flu Shot Current –

- The standard is that a flu shot has been given each year to patients with diabetes.
- If the flu shot has not been given in the past year, there will be a button which allows you to indicate that a flu shot is being ordered for today.
- If you depress this button, it is necessary also to complete the Immunization Template for a flu shot and to tell your nurse to give the flu shot.

PCPI Diabetes Management

Has the patient had a Hemoglobin A1c within the last year? Yes No
 Date of Last

Has the patient had a Lipid Profile within the last year? Yes No
 Date of Last

Has the patient had a urinalysis within the last year? No Yes
 Date of Last *Ordered Today*

Has the patient had a dilated eye exam within the last year? No Yes
 Date of Last

Has the patient had a flu shot within the last year? No Yes
 Date of Last

Has the patient had a 10-gram monofilament exam within the last year? No Yes
 Date of Last

Is the patient on Aspirin? Yes No
 Is the patient allergic to aspirin? Yes No

Is the patient's blood pressure controlled (<130/80 mmHg)? No Yes
 Today's Blood Pressure /
 /

Does the patient have at least one visit schedule for the next six months?

Has the Diabetes Treatment Plan been completed within the last year? Yes No
 Date Last Completed

Referrals	Active Medications
Double-Click to Add/Edit	
Referral	Date

Brand Name	Dose
ACTEMRA	400 mg/20 mL (20 mg/mL)
ALLEGRA	60 mg
AQUATAB C	10 mg-30

Foot Exam Current –

- The standard of care is that a thorough foot examination be completed at least once a year and at every visit for patients with diabetes.
- This foot examination must include:
 - A visual inspection of the foot and especially the skin between the toes.
 - An examination of the pulses in the foot.
 - A 10-gram monofilament examination of the sensory capacity of the foot.
 - An examination of the nails.
- If a foot examination has not been done, a button will appear which when depressed will take you right back to the Foot Exam on the Diabetes Suite of Templates allowing you to quickly and easily complete that required examination.

PCPI Diabetes Management

Has the patient had a Hemoglobin A1c within the last year?
 Date of Last

Has the patient had a Lipid Profile within the last year?
 Date of Last

Has the patient had a Urinalysis within the last year?
 Date of Last Ordered Today

Has the patient had a dilated eye exam within the last year?
 Date of Last

Has the patient had a flu shot within the last year?

Has the patient had a 10-gram monofilament exam within the last year?
 Date of Last

Is the patient allergic to aspirin? Yes No

Is the patient's blood pressure controlled (<130/80 mmHg)?

Today's Blood Pressure /
 /

Does the patient have at least one visit scheduled for the next six months?

Has the Diabetes Treatment Plan been completed within the last year?
 Date Last Completed

Referrals	Active Medications
Double-Click to Add/Edit	
Referral	Date

Brand Name	Dose
Double-Click to Add/Edit	
ACTEMRA	400 mg/20 mL (20 mg/mL)
ALLEGRA	60 mg
AQUATAB C	10 mg-30

Semmes-Weinstein 5.07 (10 g) Monofilament Examination

Last Performed 02/07/2011

Procedures

1. Have the patient look away or close his or her eyes.
2. Hold the filament perpendicular to the skin.
3. Avoiding any ulcers, calluses, or sores, touch the monofilament to the skin until it bends.
4. Hold in place for approximately 1.5 seconds, and then gently remove it.
5. Randomly test the sites listed below.
6. Elicit a response from the patient at each site. Lack of sensation at any site may indicate diabetic neuropathy.

The monofilament may be cleaned with 1:10 sodium hypochlorite solution if contaminated with blood or body fluids.

High Risk Areas (P=sensation present, A=sensation absent, D=sensation diminished)

	Right	Left	Right	Left
Toe Pulp	1	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A	Heel	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
	2	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A		<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
	3	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A		<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
	4	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A		<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
	5	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A		<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
Metatarsal Heads	1	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A	Foot	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
	2	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A		<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
	3	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A		<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
	4	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A		<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
	5	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A		<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A

OK

Cancel

Monitor Blood Pressure –

- The standard is that the patient's blood pressures should be measured at every visit.
- The box beside the name "blood pressure," does not contain the date as the standard is "every visit," but it documents today's blood pressure.
- If the blood pressure is higher than the standard for blood pressure care for a patient with diabetes, the blood pressure value will be in red.
- The blood pressure standard for patients with diabetes less than 130/80 mmHg.
- Many diabetologists argue that blood pressure control is more important than blood sugar control for avoiding the complications of diabetes.

PCPI Diabetes Management

Has the patient had a Hemoglobin A1c within the last year? Yes No
 Date of Last

Has the patient had a Lipid Profile within the last year? Yes No
 Date of Last

Has the patient had a urinalysis within the last year? No Yes
 Date of Last Ordered Today

Has the patient had a dilated eye exam within the last year? No Yes
 Date of Last

Has the patient had a flu shot within the last year? No Yes

Has the patient had a 10-gram monofilament exam within the last year? No Yes
 Date of Last

Is the patient on Aspirin? Yes No

Is the patient allergic to aspirin? Yes No

Is the patient's blood pressure controlled ($\leq 130/80$ mmHg)? No Yes

Today's Blood Pressure /
 /

Does the patient have at least one visit schedule for the next six months?

Has the Diabetes Treatment Plan been completed with the last year? Yes No
 Date Last Completed

Referrals	Active Medications
Double-Click to Add/Edit	Double-Click to Add/Edit
Referral	Brand Name
Date	Dose
	ACTEMRA 400 mg/20 n (20 mg/mL)
	ALLEGRA 60 mg
	AQUATAB C 10 mg-30

Ensure the patient has at least two office visits per year –

- The standard of this measure is indicated in its name.
- Enter the timeframe for a follow-up within the next six months to fulfill this measure.
- The patient's follow-up instructions are documented here.

PCPI Diabetes Management

Has the patient had a Hemoglobin A1c within the last year?	Yes	<input type="button" value="Order HgbA1c"/>
Date of Last <input type="text" value="02/22/2012"/>		
Has the patient had a Lipid Profile within the last year?	Yes	<input type="button" value="Order Lipid Profile"/>
Date of Last <input type="text" value="11/15/2012"/>		
Has the patient had a urinalysis within the last year?	No	<input type="button" value="Order Urinalysis"/>
Date of Last <input type="text" value="/ /"/> Ordered Today		
Has the patient had a dilated eye exam within the last year?	No	<i>Add Referral Below</i>
Date of Last <input type="text" value="06/16/2008"/>		
Has the patient had a flu shot within the last year?	No	<input type="button" value="Order Flu Shot"/>
Date of Last <input type="text" value="11/28/2012"/>		
Has the patient had a 10-gram monofilament exam within the last year?	No	<input type="button" value="Click to Complete"/>
Date of Last <input type="text" value="02/07/2011"/>		
Is the patient on Aspirin?		
Is the patient allergic to aspirin? <input checked="" type="radio"/> Yes <input type="radio"/> No	No	<i>Add Medication Below</i>
Is the patient's blood pressure controlled ($\leq 130/80$ mmHg)?	No	
Today's Blood Pressure	<input type="text" value="130"/> / <input type="text" value="85"/>	
	<input type="text"/>	
	<input type="text"/>	

Does the patient have at least one visit schedule for the next six months? Follow-Up Visit

Has the Diabetes Treatment Plan been completed with the last year? **Yes**

Date Last Completed

Referrals	Active Medications
Double-Click to Add/Edit	Double-Click to Add/Edit
Referral	Brand Name
Date	Dose
	ACTEMRA 400 mg/20 m (20 mg/mL)
	ALLEGRA 60 mg
	AQUATAB C 10 mg-30

Is the patient on Aspirin? –

- The standard is that every patient who has diabetes should be on aspirin, unless there is a contraindication.
- Aspirin is so important because of the increased inflammatory and prothrombotic state of all patients with diabetes that it is asked about on:
 1. The Diabetes Master Template (see below),
 2. The Diabetes Plan Template
 3. The Diabetes Management template as an element of the Consortium data set.
- There are check boxes for saying that the patient is or is not on Aspirin.
- These check boxes are interactive with the check boxes on the Master template and the Plan template.
- If the patient has a contraindication for aspirin, it should be documented on this template.
- **The acceptable contraindications are concurrent treatment with the following medications or one of the listed complications:**
 - o Aggrenox
 - o Allergic
 - o Bleeding
 - o Coumadin
 - o Patient Refuses
 - o Plavix

PCPI Diabetes Management

Has the patient had a Hemoglobin A1c within the last year?
 Date of Last

Has the patient had a Lipid Profile within the last year?
 Date of Last

Has the patient had a urinalysis within the last year?
 Date of Last Ordered Today

Has the patient had a dilated eye exam within the last year?
 Date of Last

Has the patient had a flu shot within the last year?
 Date of Last

Has the patient had a 10-gram monofilament exam within the last year?
 Date of Last

Is the patient on Aspirin?
 Is the patient allergic to aspirin? Yes No

Today's Blood Pressure /
 /

Does the patient have at least one visit schedule for the next six months? Follow-Up Visit

Has the Diabetes Treatment Plan been completed with the last year?
 Date Last Completed

Referrals	Active Medications
Double-Click to Add/Edit	
Referral	Date

Brand Name	Dose
ACTEMRA	400 mg/20 n (20 mg/mL)
ALLEGRA	60 mg
AQUATAB C	10 mg-30

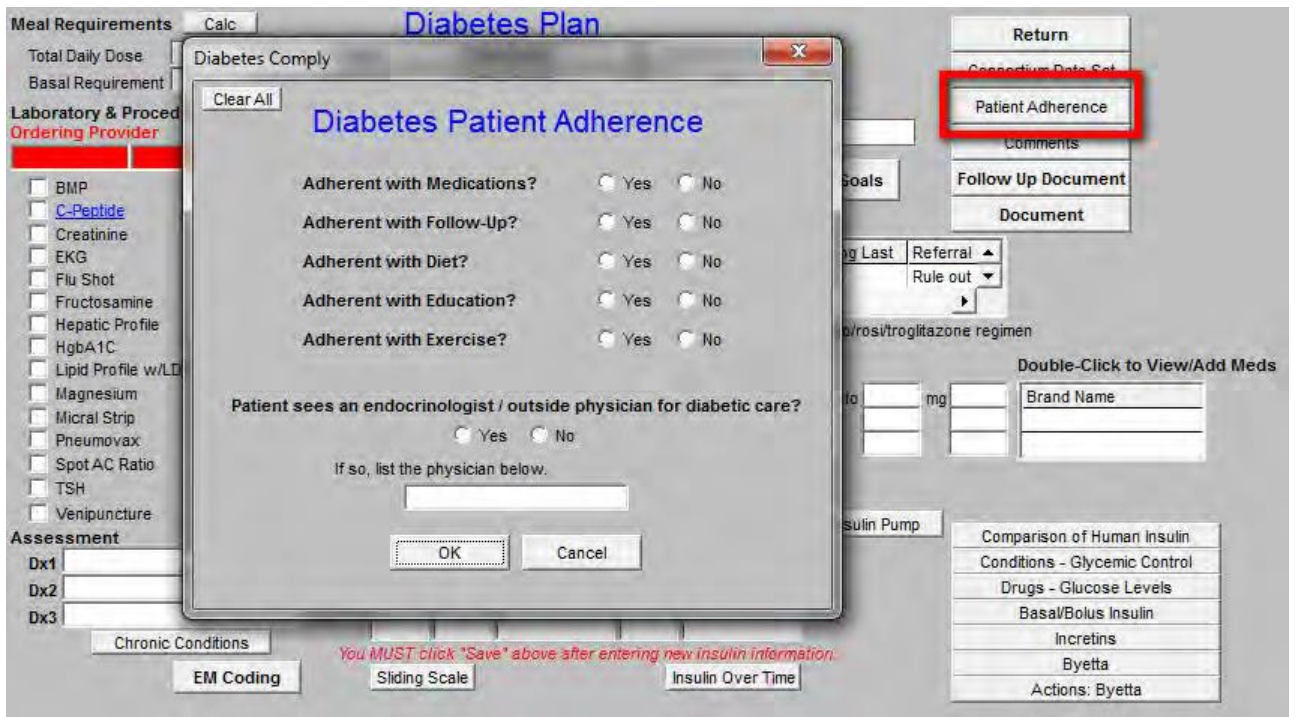
Once these elements have been checked and it only takes a few seconds, the documentation of excellence in diabetic care based on the consortium data set has been completed. In two years, when Medicare starts paying providers for performance, the completion of the Consortium Data Set will qualify you for increased reimbursement from Medicare.

Diabetes Patient Adherence

SETMA also tracks the **adherence of patients with Diabetes**. There are 7 data points which are tracked. These data points are displayed on a pop-up which is launched by a button entitled **Patient Adherence** which is found on the **Diabetes Plan** beneath the Consortium Data Set button.

These compliance data points must be manually documented on each visit. The compliance materials should be completed by the nursing staff. **This is also part of SETMA's diabetes care audit.** The data points are:

- Adherent with medication?
- Adherent with Follow-up?
- Adherent with Diet?
- Adherent with Education?
- Adherent with Exercise?
- Patient sees an endocrinologist? Outside physician?
 - o Yes/No
 - o If yes, list the physician below (a pop-up gives the names of endocrinologists)



Now click Ok, and it takes you back to the Diabetes Plan template.

Back to the Diabetes Master Template

On the Diabetes Master Template It will be noted that like all SETMA templates, which are built on NextGen's platform, they appear with the following at the top of each template:

- Title Bar
- Menu Tool Bar
- Top Tool Bar

NOTE: For more information on NextGen Toolbars, [Click Here](#).

Beneath the Top Tool Bar there are **three lines of functions** before getting to the main Diabetes management tool; they are:

1. A line in which the patient's type of diabetes is documented.
 - a. On this line there are check boxes for Type 1, Type 2, GDM (Gestational Diabetes Mellitus), "pre-Diabetes and a button for "Other."
 - b. When depressed the "Other" launches a pop-up which 28 forms, types or presentations of diabetes.
 - c. One of the first four, or one of the last 24 types of diabetes should be documented as the type of diabetes this patient has.

Diabetes Management

Diabetes Since: Patient Robert Test Jr, Age 42, Sex M, Month 5, Year 2001

Current Frequency of SMBG: Daily

Type I Type II GDM Pre-Diabetes

Adherence: Dental Care, Dilated Eye Exam (06/16/2008), Flu Shot (11/04/2011), Foot Exam (02/07/2011), Monofilament (02/07/2011), HgbA1C (02/22/2012), Pneumovax (03/02/2011), Urinalysis, Aspirin, Statin

Vital Signs: Height 72.00, Weight 210.00, BMI 28.48, Body Fat % 22, Protein Req 114, BMR 2945, Waist 40.00, Hips 42.00, Chest 42.00, Abdomen 44, Ratio 0.95, BER 3150, Finger Stick Glucose, Pulse, Blood Pressure 130/85

Most Recent Labs: HqA1C 8.0 (02/22/2012), Previous 8.2 (01/01/2012), eAG 182, Mean Plasma Glucose 207.5, C-Peptide, Fructosamine, Cholesterol 212 (11/15/2012), LDL 111 (11/15/2012), HDL 63 (11/15/2012), Triglycerides 118 (11/15/2012), Trio/HDL Ratio 1.87, Glucose, Insulin, HOMA-IR, Na, K, Magnesium, BUN, Creatinine, Albumin/Creat

Current SQ Insulin Dose as of: Table with columns: Time of day, Units, Type, Units, Type, mg/dl

Diabetes Plan: Diabetes Education, Telephone Record

2. A line with five hyperlinks for the following pop-ups:

Diabetes Management

Diabetes Since: Patient Robert Test Jr, Age 42, Sex M

Type I Type II GDM Pre-Diabetes Other Month 5 Year 2001

Current Frequency of SMBG: Daily

Navigation: Diabetes General

Home

- Diab Sys Review
- Diabetic History
- Eye Exam
- Nasopharynx
- Cardio Exam
- Foot Exam
- Neurological Exam
- Complications/Education
- Initiating Insulin
- Insulin Pump

Lifestyle Changes

- Diabetes Plan
- Education Booklet Given On: //
- Diabetes Education
- Telephone Record
- Last DE: //

Most Recent Labs

HgA1C	8.0	02/22/2012
Previous	8.2	01/01/2012
eAG	182	
Mean Plasma Glucose	207.5	Insulin
C-Peptide		//
Fructosamine		//
Cholesterol	212	11/15/2012
LDL	111	11/15/2012
HDL	63	11/15/2012
Triglycerides	118	11/15/2012
Trig/HDL Ratio	1.87	
Glucose		//
Fasting		//
Insulin		//
HOMA-IR		//
Na		//
K		//
Magnesium		//
BUN		//
Creatinine		//
U Microalbumin		//
Albumin/Creat		//

Diagnostic Criteria **Screening Criteria** **Evidenced-Based Recs**

Dental Care

Dilated Eye Exam	06/16/2008
Flu Shot	11/04/2011
Foot Exam	02/07/2011
Monofilament	02/07/2011
HgbA1C	02/22/2012
Pneumovax	03/02/2011
Urinalysis	//

Vital Signs

Height	72.00	Waist	40.00	Finger Stick Glucose	
Weight	210.00	Hips	42.00	Pulse	
BMI	28.48	Chest	42.00	Blood Pressure	130 / 85
Body Fat %	22	Abdomen	44	BP In Diabetics	
Protein Req	114	Ratio	0.95	Vitals Over Time	
BMR	2945	BER	3150		

Current SQ Insulin Dose as of //

Time of day	Units	Type	Units	Type	Blood Sugars mg/dl
	0.00		0.00		
	0.00		0.00		
	0.00		0.00		
	0.00		0.00		

a. Joslin Treatment Goals

Since 2004, SETMA has had a growing relationship with the Joslin Diabetes Center affiliated with Harvard Medical School. In 2010, SETMA became a formal affiliate of Joslin.

Diabetes Management

Diabetes Since Patient Robert Test Jr
 Type I Type II GDM Pre-Diabetes Other Month 5 Year 2001 Age 42 Sex M

Joslin Treatment Goals [Imp Diabetes Concepts](#)
 Diagnostic Criteria Evidenced-Based Recs

Current Frequency of SMBG Daily

Adherence // [Dental Care](#) [Smoker](#) E-mail + - [Most Recent Labs](#) [Check for New Labs](#)

Diabetes Joslingoals

Joslin Treatment Goals

HgbA1c	Less than 7.0 %
Blood Pressure	Less than 130/80 mmHg
Cholesterol (LDL)	Less than 100 mg/dL Less than 70 mg/dL if cardiovascular disease present
Microalbumin	Less than 20 mcg/mg of creatinine

OK Cancel

Current SQ Insulin Dose as of // Blood Sugars

Time of day	Units	Type	Units	Type	Blood Sugars mg/dl
	0.00		0.00		
	0.00		0.00		
	0.00		0.00		
	0.00		0.00		

Diary

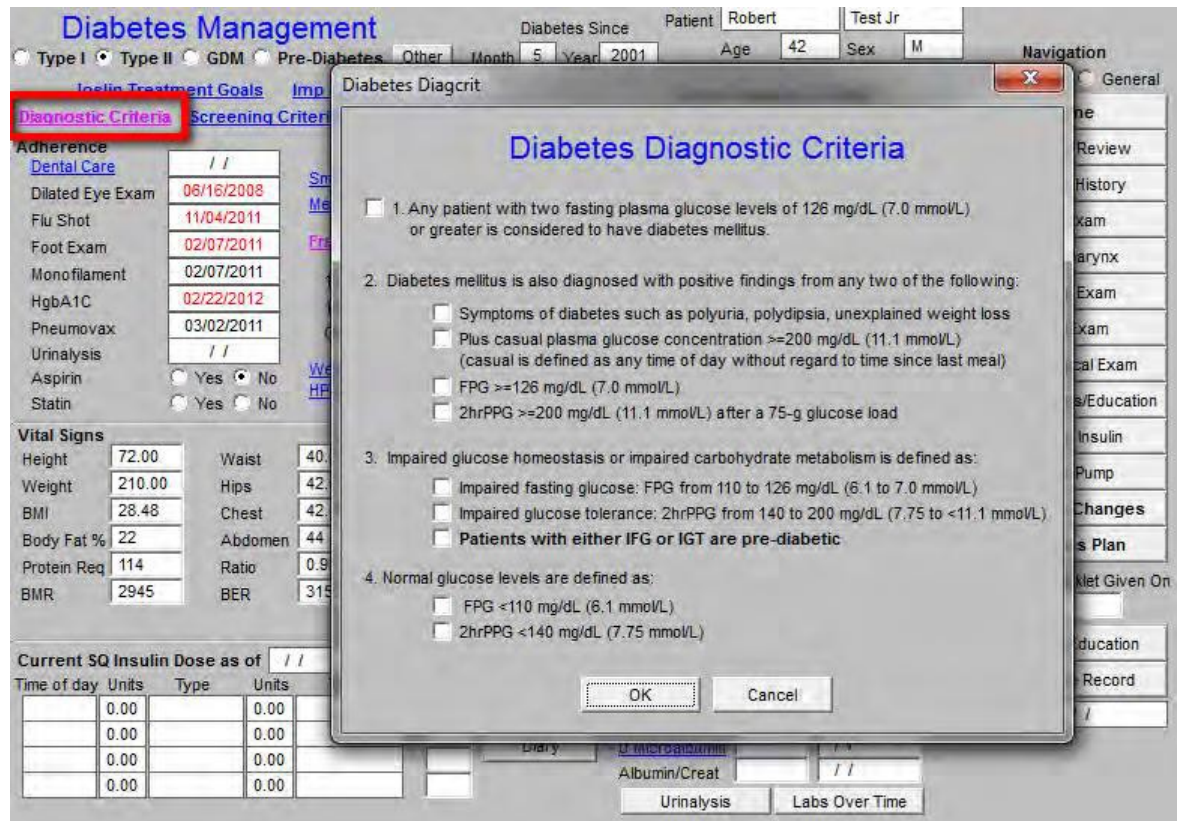
Magnesium	//
BUN	//
Creatinine	//
U Microalbumin	//
Albumin/Creat	//

Urinalysis Labs Over Time

Navigation Diabetes General

- Home
- Diab Sys Review
- Diabetic History
- Eye Exam
- Nasopharynx
- Cardio Exam
- Foot Exam
- Neurological Exam
- Complications/Education
- Initiating Insulin
- Insulin Pump
- Lifestyle Changes
- Diabetes Plan
- Education Booklet Given On //
- Diabetes Education
- Telephone Record
- Last DE //

- b. **Diagnostic Criteria** – this launches a pop-up which is entitled **Diabetes Diagnostic Criteria**.



c. **Screening Criteria** – this launches a pop-up entitled, **How Is Diabetes Diagnosed?**

1. This data is also found in the **Preventing Diabetes** function on AAA Home.
2. It is on the pop-up which is launched from **Screening Recommendations**.
3. Expanded information on **Impaired Fasting Glucose and Impaired Glucose Tolerance** is found on the Preventing Diabetes template on the pop-up launched from **IFG and IGT**.

Diabetes Management

Diabetes Since Patient Robert Test Jr
 Type I Type II GDM Pre-Diabetes Other Month 5 Year 2001 Age 42 Sex M

Joslin Treatment Goals **Imp Diabetes Concepts**
 Diagnostic Criteria **Screening Criteria** Evidenced-Based Recs

Current Frequency of SMBG Daily

Diabetes Diag

How is Diabetes Diagnosed?

The ADA recommends that all individuals age 45 and above, particularly those with a BMI equal to or greater than 25, should be tested for diabetes, and if the test is normal, they should be re-tested every three years. Testing should be conducted at earlier ages and carried out more frequently in individuals who have any of the following diabetes risk factors:

- are overweight (BMI >25)
- have a first-degree relative with diabetes
- are members of a high-risk ethnic population (African-American, Hispanic-American, Native-American or Pacific)
- have delivered a baby weighing more than 9 pounds or have had gestational diabetes
- have HDL cholesterol levels equal to or less than 35 mg/dl and/or a triglyceride level equal to or greater than 250 mg/dl
- have high blood pressure
- on previous testing, had impaired glucose tolerance or impaired fasting glucose

OK Cancel

- d. **Imp. Diabetes Concepts** – this identifies three key principles (but not **THE** key principles) for the successful management of diabetes.

Diabetes Management

Diabetes Since Patient Robert Test Jr
 Type I Type II GDM Pre-Diabetes Other Month 5 Year 2001 Age 42 Sex M

Joslin Treatment Goals **Imp Diabetes Concepts**
 Diagnostic Criteria Screening Criteria Evidenced-Based Recs

Current Frequency of SMBG Daily

Diabetes Imp

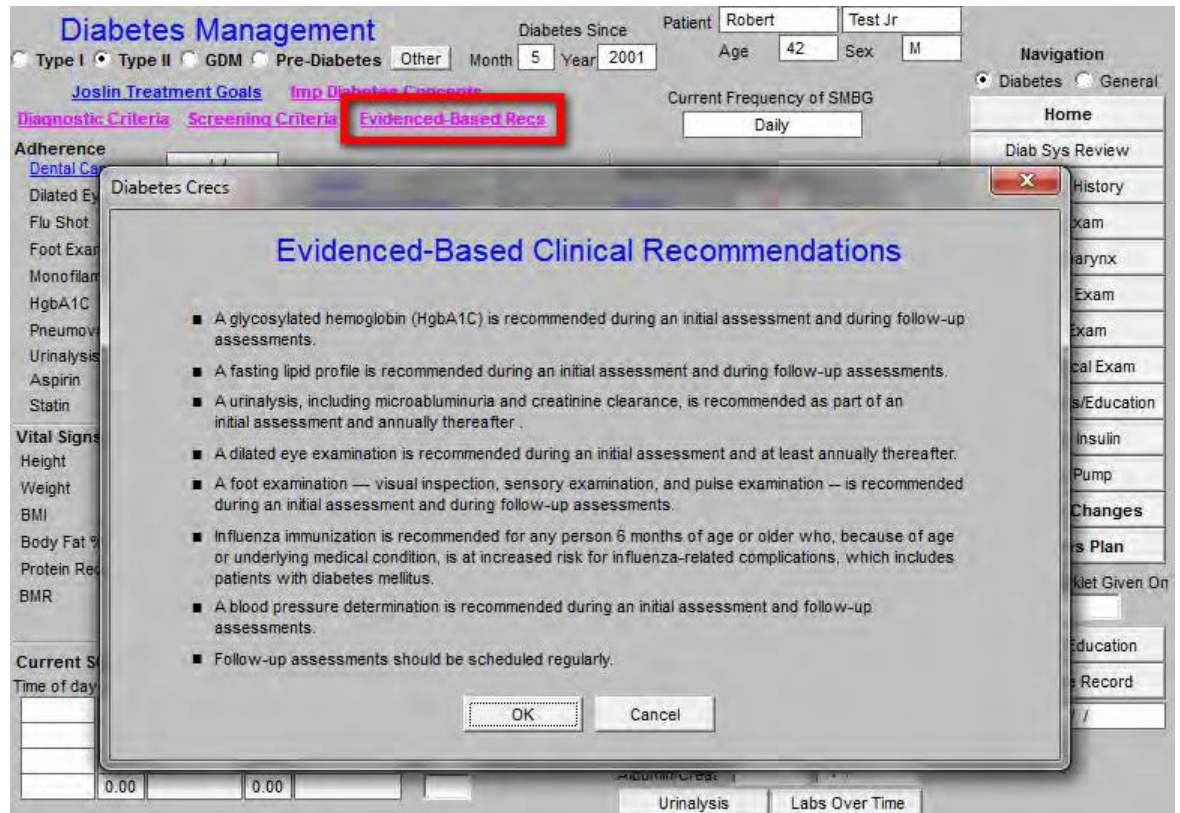
Important Concepts

- Type 2 diabetes is a progressive disease – almost all patients will ultimately need insulin if not aggressively treated to preserve beta cell function and to treat insulin resistance.
- Monotherapy is usually inadequate – a majority of primary care physicians continue to manage diabetes with monotherapy despite the data documenting the failure of that approach.
- To achieve an optimal HgbA1C it is necessary to control pre- and post-prandial glucose levels.

OK Cancel

e. **Evidenced-Based Rec** – this launches a pop-up on which 8 evidence-based recommendations are made for successful diabetes management. Those recommendations are:

1. A glycosylated hemoglobin is recommended during an initial assessment and during follow-up assessments.
2. A fasting lipid profile is recommended during an initial assessment and during follow-up assessments.
3. A urinalysis, including microalbuminuria and creatinine clearance, is recommended as part of an initial assessment and annually thereafter.
4. A dilated eye examination is recommended during an initial assessment and at least annually thereafter.
5. A foot examination – visual inspection, sensory examination and pulse examination – is recommended during an initial assessment and during follow-up assessments.
6. Influenza immunization is recommended for anyone 6 months of age and older, who because of age or underlying condition is at increased risk for influenza related complications, which includes patients with diabetes.
7. A blood pressure determination is recommended during an initial assessment and during follow-up assessments.
8. Follow-up assessments should be scheduled regularly.



Beneath these two lines, the Diabetes Master Template is organized into three columns; the first column has two columns within itself:

Column 1:

Part A

Compliance – Ten elements are documented which are key to the proper treatment of diabetes. The date of last performance is listed at the side of each element. The nine elements are:

- **Dental** – It has been found that an annual dental examination promotes improved diabetes management.
- **Dilated Eye Exam** – An annual dilated eye examination is one of the standards of care for diabetes.
- **Flu Shot** – All patients with diabetes should receive a flu shot annually.
- **Foot Examination Including Monofilament Exam** – A foot exam including a 10 gram monofilament sensory examination should be part of EVERY visit.
- **HgbA1C** – Should be performed at each visit and at least three times a year.
- **Pneumovax** – All patients with diabetes should receive a pneumovax.
- **Urinalysis** – Annual UA is the standard of care for diabetes.
- **Aspirin** – All patients with diabetes who are not allergic to aspirin, on coumadin or have had a bleeding episode should be on aspirin.
- **Statin** – All patients with diabetes and the metabolic syndrome should be on a statin and all patients with diabetes probably should be on a statin.

A quick review of these 10 elements of compliance will indicate what care is deficient in this patient and will therefore guide the provider in instructing the patient.

The screenshot displays a comprehensive Diabetes Management interface for a patient named Robert Test Jr. The interface is organized into several key sections:

- Header & Patient Info:** Includes patient name (Robert Test Jr), age (42), sex (M), and diabetes onset (Month 5, Year 2001). It also features navigation tabs for Diabetes and General.
- Adherence Section (highlighted with a red box):** A table tracking the completion of ten key elements:

Element	Last Performance Date
Dental Care	//
Dilated Eye Exam	06/16/2008
Flu Shot	11/04/2011
Foot Exam	02/07/2011
Monofilament	02/07/2011
HgbA1C	02/22/2012
Pneumovax	03/02/2011
Urinalysis	//
Aspirin	<input type="radio"/> Yes <input type="radio"/> No
Statin	<input type="radio"/> Yes <input type="radio"/> No
- Vital Signs:** Displays physical metrics such as Height (72.00), Weight (210.00), BMI (28.48), Blood Pressure (130/85), and other measurements.
- Most Recent Labs:** A table showing recent laboratory results:

Lab Test	Value	Date
HgA1C	8.0	02/22/2012
Previous HgA1C	8.2	01/01/2012
eAG	182	//
Mean Plasma Glucose	207.5	Insulin
C-Peptide	//	//
Fructosamine	//	//
Cholesterol	212	11/15/2012
LDL	111	11/15/2012
HDL	63	11/15/2012
Triglycerides	118	11/15/2012
Trie/HDL Ratio	1.87	//
Glucose (Fasting)	//	//
Insulin	//	//
U Microalbumin	//	//
Albumin/Creat	//	//
- Current SQ Insulin Dose:** A table for recording insulin doses by time of day and type.
- Navigation & Tools:** Includes buttons for Home, Diab Sys Review, Diabetic History, Eye Exam, Nasopharynx, Cardio Exam, Foot Exam, Neurological Exam, Complications/Education, Initiating Insulin, Insulin Pump, Lifestyle Changes, Diabetes Plan, Education Booklet Given On, Diabetes Education, Telephone Record, and Last DE.

Vital Signs – In two columns 12 aspects of the patient’s vital signs, body habitus and metabolism are documented, including:

- Height
- Weight
- BMI
- Body Fat %
- Protein Requirement
- BMR
- Waist
- Hips
- Chest
- Abdomen
- Ratio
- BER

Diabetes Management Patient: Robert Test Jr. Age: 42 Sex: M

Diabetes Since: Month 5 Year 2001

Current Frequency of SMBG: Daily

Vital Signs

Height	72.00	Waist	40.00
Weight	210.00	Hips	42.00
BMI	28.48	Chest	42.00
Body Fat %	22	Abdomen	44
Protein Req	114	Ratio	0.95
BMR	2945	BER	3150

Current SQ Insulin Dose as of: //

Time of day	Units	Type	Units	Type	Blood Sugars mg/dl
	0.00		0.00		
	0.00		0.00		
	0.00		0.00		
	0.00		0.00		

Finally, there is the information on the current SQ Insulin Dose:

- There is a box where the most recent update of the insulin dose is documented
- There are four boxes where the insulin type, units, and time of day are documented. Beside row of boxes is another box with the heading Blood Sugars mg/dl where the blood sugar trigger for any sliding scale dose can be documented.
- Insulin changes and updates are not made on this template but on the Plan Template. (see below)

Diabetes Management Patient: Robert Test Jr. Diabetes Since: Month 5 Year 2001 Age 42 Sex M

Type I Type II GDM Pre-Diabetes Other

[Joslin Treatment Goals](#) [Imp Diabetes Concepts](#)
[Diagnostic Criteria](#) [Screening Criteria](#) [Evidenced-Based Recs](#)

Adherence: Dental Care //
 Dilated Eye Exam: 06/16/2008
 Flu Shot: 11/04/2011
 Foot Exam: 02/07/2011
 Monofilament: 02/07/2011
 HgbA1C: 02/22/2012
 Pneumovax: 03/02/2011
 Urinalysis: //
 Aspirin: Yes No
 Statin: Yes No

Smoker: E-mail + -
 Metabolic Syndrome: + -
 Framingham Risk Scores:
 10-Year General Risk: 7.9 %
 10-Year Stroke Risk: 2 %
 Global Cardio Score: 4.4 pts

[Weight Management](#) [Lipids Management](#)
[HPT Management](#) [Immunizations](#)

Current Frequency of SMBG: Daily

Most Recent Labs:
 HgA1C: 8.0 (02/22/2012) Previous: 8.2 (01/01/2012)
 eAG: 182
 Mean Plasma Glucose: 207.5 Insulin
 C-Peptide: //
 Fructosamine: //
 Cholesterol: 212 (11/15/2012)
 LDL: 111 (11/15/2012)
 HDL: 63 (11/15/2012)
 Triglycerides: 118 (11/15/2012)
 Trig/HDL Ratio: 1.87
 Glucose: Fasting //
 Insulin: //
 HOMA-IR: //
 Na: // K: // Magnesium: // BUN: // Creatinine: // U Microalbumin: // Albumin/Creat: //

Vital Signs: Height 72.00 Weight 210.00 BMI 28.48 Body Fat % 22 Protein Req 114 BMR 2945
 Waist 40.00 Hips 42.00 Chest 42.00 Abdomen 44 Ratio 0.95 BER 3150
 Finger Stick Glucose: // Pulse: // Blood Pressure: 130 / 85

Current SQ Insulin Dose as of: //

Time of day	Units	Type	Units	Type
	0.00		0.00	
	0.00		0.00	
	0.00		0.00	
	0.00		0.00	

 Blood Sugars mg/dl: //

Navigation: Diabetes General

Lifestyle Changes

 Education Booklet Given On: //

 Last DE: //

Blood Sugar Diary

Next to the Insulin Dose is a button entitled **Diary**

Diabetes Management Patient: Robert Test Jr. Diabetes Since: Month 5 Year 2001 Age 42 Sex M

Type I Type II GDM Pre-Diabetes Other

[Joslin Treatment Goals](#) [Imp Diabetes Concepts](#)
[Diagnostic Criteria](#) [Screening Criteria](#) [Evidenced-Based Recs](#)

Adherence: Dental Care //
 Dilated Eye Exam: 06/16/2008
 Flu Shot: 11/04/2011
 Foot Exam: 02/07/2011
 Monofilament: 02/07/2011
 HgbA1C: 02/22/2012
 Pneumovax: 03/02/2011
 Urinalysis: //
 Aspirin: Yes No
 Statin: Yes No

Smoker: E-mail + -
 Metabolic Syndrome: + -
 Framingham Risk Scores:
 10-Year General Risk: 7.9 %
 10-Year Stroke Risk: 2 %
 Global Cardio Score: 4.4 pts

[Weight Management](#) [Lipids Management](#)
[HPT Management](#) [Immunizations](#)

Current Frequency of SMBG: Daily

Most Recent Labs:
 HgA1C: 8.0 (02/22/2012) Previous: 8.2 (01/01/2012)
 eAG: 182
 Mean Plasma Glucose: 207.5 Insulin
 C-Peptide: //
 Fructosamine: //
 Cholesterol: 212 (11/15/2012)
 LDL: 111 (11/15/2012)
 HDL: 63 (11/15/2012)
 Triglycerides: 118 (11/15/2012)
 Trig/HDL Ratio: 1.87
 Glucose: Fasting //
 Insulin: //
 HOMA-IR: //
 Na: // K: // Magnesium: // BUN: // Creatinine: // U Microalbumin: // Albumin/Creat: //

Vital Signs: Height 72.00 Weight 210.00 BMI 28.48 Body Fat % 22 Protein Req 114 BMR 2945
 Waist 40.00 Hips 42.00 Chest 42.00 Abdomen 44 Ratio 0.95 BER 3150
 Finger Stick Glucose: // Pulse: // Blood Pressure: 130 / 85

Current SQ Insulin Dose as of: //

Time of day	Units	Type	Units	Type
	0.00		0.00	
	0.00		0.00	
	0.00		0.00	
	0.00		0.00	

 Blood Sugars mg/dl: //

Navigation: Diabetes General

Lifestyle Changes

 Education Booklet Given On: //

 Last DE: //

- This is a function where the patient’s home diary can be manually put into the computer.
- When the button entitled Diary is clicked, a new screen is displayed.

Blood Sugar History

1. Does the patient indicate they are taking their medications as indicated in the EHR? Yes No

2. Has the patient experienced hypoglycemia with the past three months? Yes No

3. Has the patient been hospitalized due to diabetes since their last appointment? Yes No

4. What is the source of the information in this log?

5. Enter the start date of the log.

Return
Print

Date	Breakfast		Lunch		Dinner		Bedtime	Night	Ketones
	Pre	Post	Pre	Post	Pre	Post			
//									<input type="radio"/> Yes <input type="radio"/> No
//									<input type="radio"/> Yes <input type="radio"/> No
//									<input type="radio"/> Yes <input type="radio"/> No
//									<input type="radio"/> Yes <input type="radio"/> No
//									<input type="radio"/> Yes <input type="radio"/> No
//									<input type="radio"/> Yes <input type="radio"/> No
//									<input type="radio"/> Yes <input type="radio"/> No
//									<input type="radio"/> Yes <input type="radio"/> No
//									<input type="radio"/> Yes <input type="radio"/> No
//									<input type="radio"/> Yes <input type="radio"/> No
//									<input type="radio"/> Yes <input type="radio"/> No
//									<input type="radio"/> Yes <input type="radio"/> No
//									<input type="radio"/> Yes <input type="radio"/> No
//									<input type="radio"/> Yes <input type="radio"/> No

Comments

- At the top of the screen you should ask the patient to answer the questions about medications, hypoglycemia and hospitalization and document their response.
- At the bottom of the screen, you can enter up to 14 days of blood sugar history for the patient. All of the values are not required for each date you chose, but you should enter as much data as the patient has available.
- At the far right of each date, you can also indicate the presence or absence of ketones if the patient is monitoring them.

By clicking on “return,” you will be taken back to the Diabetes Master Template.

Column I

Part B

At the beginning of Part B of the first column are 9 hyperlinks which take you to other tools needed for optimal diabetes care; they are:

- **Smoker** – There are check boxes for documenting whether the patient is a smoker or not. If the patient history has been filled out for “**Current Habits**,” this will automatically populate. By clicking on the word “Smoker,” you are taken to the Smoking Cessation template, which should have already been completed through the LESS Initiative. There is also a button entitled “E-mail.” This creates an electronic tickler file for reminding you to call the patient in one month about their success in stopping smoking.
- **Metabolic Syndrome** – There are check boxes for documenting whether the patient has the metabolic syndrome or not. By clicking on the words “Metabolic Syndrome,” you will be taken to the Metabolic Syndrome Suite of Templates’ Assessment Template. This will be automatically populated with the vital signs and laboratory work and an automatic conclusion will be drawn as to whether the patient has the Metabolic Syndrome. At that point, the “yes” or “no” boxes next to Metabolic Syndrome on the Diabetes Master Template will be updated appropriately.
- **Framingham CVD 10-Year Risk** – There is a box for the Framingham CVD Risk assessment to be documented. When you click on the hyperlink, you are taken to the Framingham function and given directions for its completion.
- **Framingham Stroke 10-Yr Risk** – same as for the CVD Risk.
- **Global Cardio Risk** – This is a recently developed risk assessment for stratification of cardiovascular risk. It is built on the Framingham data but with the non-modifiable risk factors eliminated.

NOTE: The **Framingham CVD 10-Year Risk**, **Framingham Stroke 10-Yr Risk**, and **Global Cardio Risk** draw their results from a **SINGLE** Framingham Assessment

- **Weight Management** – this takes you to the weight management suite of templates. Weight management is a key aspect of excellent diabetic care.
- **Hypertension Management** – this takes you to the hypertension management suite of templates. Blood pressure control is as important and maybe more important than glucose control in diabetes.
- **Lipids Management** – this takes you to Lipid suite of templates. Reduction of cardiovascular risk in diabetes is dependent upon rigorous cholesterol control.
- **Immunizations** – all patients with diabetes must have routine immunizations for flu and pneumonia.

Diabetes Management Patient: Robert Test Jr. Diabetes Since: Month 5 Year 2001 Age 42 Sex M

Type I Type II GDM Pre-Diabetes Other

[Joslin Treatment Goals](#) [Imp Diabetes Concepts](#) [Diagnostic Criteria](#) [Screening Criteria](#) [Evidenced-Based Recs](#)

Adherence: Dental Care // Dilated Eye Exam 06/16/2008 Flu Shot 11/04/2011 Foot Exam 02/07/2011 Monofilament 02/07/2011 HgbA1C 02/22/2012 Pneumovax 03/02/2011 Urinalysis // Aspirin Yes No Statin Yes No

[Smoker](#) E-mail + - [Metabolic Syndrome](#) + - [Framingham Risk Scores](#)

10-Year General Risk 7.9 %
 10-Year Stroke Risk 2 %
 Global Cardio Score 4.4 pts

[Weight Management](#) [Lipids Management](#) [HPT Management](#) [Immunizations](#)

Vital Signs: Height 72.00, Weight 210.00, BMI 28.48, Body Fat % 22, Protein Req 114, BMR 2945, Waist 40.00, Hips 42.00, Chest 42.00, Abdomen 44, Ratio 0.95, BER 3150, Finger Stick Glucose, Pulse, Blood Pressure 130 / 85, BP in Diabetics, Vitals Over Time

Current SQ Insulin Dose as of // Blood Sugars mg/dl

Time of day	Units	Type	Units	Type	Blood Sugars mg/dl
	0.00		0.00		
	0.00		0.00		
	0.00		0.00		
	0.00		0.00		

Most Recent Labs: HbA1C 8.0 (02/22/2012), Previous 8.2 (01/01/2012), eAG 182, Mean Plasma Glucose 207.5, Insulin, C-Peptide //, Fructosamine //, Cholesterol 212 (11/15/2012), LDL 111 (11/15/2012), HDL 63 (11/15/2012), Triglycerides 118 (11/15/2012), Trig/HDL Ratio 1.87, Glucose Fasting //, Insulin //, HOMA-IR //, Na //, K //, Magnesium //, BUN //, Creatinine //, U Microalbumin //, Albumin/Creat //, Urinalysis, Labs Over Time

Navigation: Diabetes General
 Home, Diab Sys Review, Diabetic History, Eye Exam, Nasopharynx, Cardio Exam, Foot Exam, Neurological Exam, Complications/Education, Initiating Insulin, Insulin Pump, Lifestyle Changes, Diabetes Plan, Education Booklet Given On //, Diabetes Education, Telephone Record, Last DE //

Beneath these hyperlinks are 5 additional functions related to Diabetes Care; they are:

- **Finger Stick Blood Glucose** – this is manually entered by the nurse.
- **Pulse** – this is auto filled from the nursing template.
- **Blood Pressure** – this is auto filled from the nursing template.
- **BP in Diabetics** – this is a treatment protocol for hypertension in the patient with diabetes.
- **Vitals over Time** – this enables you to review the patient’s vital signs over time.

Diabetes Management Patient: Robert Test Jr. Diabetes Since: Month 5 Year 2001 Age 42 Sex M

Type I Type II GDM Pre-Diabetes Other Current Frequency of SMBG: Daily

[Joslin Treatment Goals](#) [Imp Diabetes Concepts](#)
[Diagnostic Criteria](#) [Screening Criteria](#) [Evidenced-Based Recs](#)

Adherence
 Dental Care: Dilated Eye Exam 06/16/2008, Flu Shot 11/04/2011, Foot Exam 02/07/2011, Monofilament 02/07/2011, HgbA1C 02/22/2012, Pneumovax 03/02/2011, Urinalysis //, Aspirin Yes No, Statin Yes No

Smoker E-mail + -
 Metabolic Syndrome + -
 Framingham Risk Scores: 10-Year General Risk 7.9%, 10-Year Stroke Risk 2%, Global Cardio Score 4.4 pts

[Weight Management](#) [Lipids Management](#)
[HPT Management](#) [Immunizations](#)

Vital Signs
 Height 72.00, Weight 210.00, BMI 28.48, Body Fat % 22, Protein Req 114, BMR 2945
 Waist 40.00, Hips 42.00, Chest 42.00, Abdomen 44, Ratio 0.95, BER 3150

Finger Stick Glucose
 Pulse
 Blood Pressure 130 / 85
 BP In Diabetics
 Vitals Over Time

Most Recent Labs

HgA1C	8.0	02/22/2012
Previous	8.2	01/01/2012
eAG	182	
Mean Plasma Glucose	207.5	Insulin
C-Peptide		//
Fructosamine		//
Cholesterol	212	11/15/2012
LDL	111	11/15/2012
HDL	63	11/15/2012
Triglycerides	118	11/15/2012
Trig/HDL Ratio	1.87	
Glucose		//
Fasting		//
Insulin		//
HOMA-IR		//
Na		//
K		//
Magnesium		//
BUN		//
Creatinine		//
U Microalbumin		//
Albumin/Creat		//

Urinalysis Labs Over Time

Current SQ Insulin Dose as of //

Time of day	Units	Type	Units	Type	Blood Sugars mg/dl
	0.00		0.00		
	0.00		0.00		
	0.00		0.00		
	0.00		0.00		

Diary

Navigation
 Diabetes General
 Home, Diab Sys Review, Diabetic History, Eye Exam, Nasopharynx, Cardio Exam, Foot Exam, Neurological Exam, Complications/Education, Initiating Insulin, Insulin Pump, Lifestyle Changes, Diabetes Plan, Education Booklet Given On //, Diabetes Education, Telephone Record, Last DE //

Column 2

This displays the **Most Recent Labs** and the date the test was done. The button entitled “**Check for New Labs**” when depressed will search for any newer labs than the ones displayed.

The lab tests which are displayed are:

- **HgA1C** –
- **Estimated Average Glucose (eAG)** – The eAG has been found to correlate with the HgA1c better than the Mean Plasma Glucose. Therefore when the patient is self monitoring and with their diabetes plan of care showing them the correlation, they can better predict what their HbA1c is.
- **Mean Plasma Glucose** – this is a calculation based on the HgA1C

Note: Launched from the Help Button entitled “**Insulin**” which is next to the mean Plasma Glucose is a document entitled “Summary of Treat-to-Target Trial: Randomized Addition of Glargine (Lantus) or Human NHP Insulin to Oral Therapy of Type 2 Diabetic Patients”

- **C-Peptide** – by clicking on the name, a document will launch which tells how the C-peptide is used clinically.
- **Fructosamine** – this test gives an estimate of the plasma blood glucose for the past 30 days.
- Cholesterol
- LDL
- HDL
- Triglycerides
- **Trig/HDL Ratio** – this ratio reflects the presence of insulin resistance if the ratio is above 2.
- Glucose
- Glucose Fasting
- **Insulin** – this should always be a fasting level.
- **HOMA-IR** – the Homeostasis Model Assessment of Insulin Resistance is a calculation based on the Fasting Insulin and Fasting Plasma Glucose. If the HOMA-IR is above 2, the patient is insulin resistant.
- Sodium
- Potassium
- Magnesium
- BUN
- Creatinine
- U Micoalbumin
- Albumin/Creatinine Ratio
- **Urinalysis Button** – this displays all of the elements of the urinalysis
- **Labs Over Time Button** – this shows the diabetes labs over time.

Diabetes Management

Diabetes Since Patient Robert Test Jr
 Type I Type II GDM Pre-Diabetes Other Month 5 Year 2001 Age 42 Sex M

Navigation: Diabetes General

Home
 Diab Sys Review
 Diabetic History
 Eye Exam
 Nasopharynx
 Cardio Exam
 Foot Exam
 Neurological Exam
 Complications/Education
 Initiating Insulin
 Insulin Pump
 Lifestyle Changes
 Diabetes Plan
 Education Booklet Given On
 Diabetes Education
 Telephone Record
 Last DE

Current Frequency of SMBG: Daily

Most Recent Labs Check for New Labs

HgA1C	8.0	02/22/2012
Previous	8.2	01/01/2012
eAG	182	
Mean Plasma Glucose	207.5	Insulin
C-Peptide		//
Fructosamine		//
Cholesterol	212	11/15/2012
LDL	111	11/15/2012
HDL	63	11/15/2012
Triglycerides	118	11/15/2012
Trig/HDL Ratio	1.87	
Glucose		//
Fasting		//
Insulin		//
HOMA-IR		//
Na		//
K		//
Magnesium		//
BUN		//
Creatinine		//
U Microalbumin		//
Albumin/Creat		//

Urinalysis Labs Over Time

Vital Signs

Height	72.00	Waist	40.00	Finger Stick	
Weight	210.00	Hips	42.00	Glucose	
BMI	28.48	Chest	42.00	Pulse	
Body Fat %	22	Abdomen	44	Blood Pressure	130 / 85
Protein Req	114	Ratio	0.95	BP In Diabetics	
BMR	2945	BER	3150	Vitals Over Time	

Adherence

Dental Care //
 Dilated Eye Exam 06/16/2008
 Flu Shot 11/04/2011
 Foot Exam 02/07/2011
 Monofilament 02/07/2011
 HgbA1C 02/22/2012
 Pneumovax 03/02/2011
 Urinalysis //
 Aspirin Yes No
 Statin Yes No

Smoker E-mail + -
 Metabolic Syndrome + -
 Framingham Risk Scores
 10-Year General Risk 7.9 %
 10-Year Stroke Risk 2 %
 Global Cardio Score 4.4 pts

Weight Management Lipids Management
 HPT Management Immunizations

Current SQ Insulin Dose as of //

Time of day	Units	Type	Units	Type	Blood Sugars mg/dl
	0.00		0.00		
	0.00		0.00		
	0.00		0.00		
	0.00		0.00		

Diary

Column 3

The screenshot shows the 'Diabetes Management' software interface. The patient information at the top includes 'Patient: Robert Test Jr', 'Age: 42', and 'Sex: M'. The 'Navigation' bar on the right is highlighted with a red box and contains the following items:

- Diabetes (selected) / General
- Home
- Diab Sys Review
- Diabetic History
- Eye Exam
- Nasopharynx
- Cardio Exam
- Foot Exam
- Neurological Exam
- Complications/Education
- Initiating Insulin
- Insulin Pump
- Lifestyle Changes
- Diabetes Plan
- Education Booklet Given On: //
- Diabetes Education
- Telephone Record
- Last DE: //

This column is entitled Navigation and presents SETMA’s Navigation Bar for the Diabetes Suite of Templates. The first function is the choice between the **Diabetes templates** the **General Templates**.

If the check box beside the **General** is clicked, the following General Templates from the Master GP Suite of Templates will be displayed:

- **Chief/Chronic** – this is the chief complaint and Chronic conditions from the Master GP Suite of Templates.
- **HPI** – this is the History of Present Illness from the Master GP Suite of Templates.
- **History** – this is the History Template from the Master GP Suite of Templates.
- **System Review** – this is the Systems Review from the Master GP Suite of Templates
- **Physical Examination** – this is the Physical Examination from the Master GP Suite of Templates

Diabetes Management Patient: Robert Test Jr. Diabetes Since: Month 5 Year 2001 Age 42 Sex M

Type I Type II GDM Pre-Diabetes Other Current Frequency of SMBG: Daily

[Joslin Treatment Goals](#) [Imp Diabetes Concepts](#)
[Diagnostic Criteria](#) [Screening Criteria](#) [Evidenced-Based Recs](#)

Adherence
 Dental Care: //
 Dilated Eye Exam: 06/16/2008
 Flu Shot: 11/04/2011
 Foot Exam: 02/07/2011
 Monofilament: 02/07/2011
 HgbA1C: 02/22/2012
 Pneumovax: 03/02/2011
 Urinalysis: //
 Aspirin: Yes No
 Statin: Yes No

Smoker: E-mail: + -
 Metabolic Syndrome: + -
 Framingham Risk Scores:
 10-Year General Risk: 13.2 %
 10-Year Stroke Risk: 4 %
 Global Cardio Score: 4.4 pts

[Weight Management](#) [Lipids Management](#)
[HPT Management](#) [Immunizations](#)

Vital Signs
 Height: 72.00 Waist: 40.00 Finger Stick Glucose: //
 Weight: 210.00 Hips: 42.00 Pulse: //
 BMI: 28.48 Chest: 42.00 [Blood Pressure](#): 130 / 85
 Body Fat %: 22 Abdomen: 44
 Protein Req: 114 Ratio: 0.95 BP In Diabetics:
 BMR: 2945 BER: 3150 Vitals Over Time:

Current SQ Insulin Dose as of: // Blood Sugars: //
 Time of day Units Type Units Type mg/dl
 // // // // //
 // // // // //
 // // // // //
 // // // // //

Most Recent Labs Check for New Labs
 HgA1C: 8.0 02/22/2012
 Previous: 8.2 01/01/2012
 eAG: 182
 Mean Plasma Glucose: 207.5 Insulin
 C-Peptide: //
 Fructosamine: //
 Cholesterol: 212 11/15/2012
 LDL: 111 11/15/2012
 HDL: 63 11/15/2012
 Triglycerides: 118 11/15/2012
 Trig/HDL Ratio: 1.87
 Glucose: //
 Fasting: //
 Insulin: //
 HOMA-IR: //
 Na: //
 K: //
 Magnesium: //
 BUN: //
 Creatinine: //
 U Microalbumin: //
 Albumin/Creat: //

Urinalysis: Labs Over Time:

Navigation
 Diabetes General
 Chief/Chronic
 HPI
 Histories
 System Review
 Physical Exam

Insulin Pump
 Education Booklet Given On: //
 Diabetes Education
 Telephone Record
 Last DE: //

If the check box beside Diabetes is checked, the Diabetes Suite of Templates will be displayed. There are 15 functions here; they are:

Diabetes Management Patient: Robert Test Jr. Diabetes Since: Month 5 Year 2001 Age 42 Sex M

Type I Type II GDM Pre-Diabetes Other Current Frequency of SMBG: Daily

[Joslin Treatment Goals](#) [Imp Diabetes Concepts](#)
[Diagnostic Criteria](#) [Screening Criteria](#) [Evidenced-Based Recs](#)

Adherence
 Dental Care: //
 Dilated Eye Exam: 06/16/2008
 Flu Shot: 11/04/2011
 Foot Exam: 02/07/2011
 Monofilament: 02/07/2011
 HgbA1C: 02/22/2012
 Pneumovax: 03/02/2011
 Urinalysis: //
 Aspirin: Yes No
 Statin: Yes No

Smoker: E-mail: + -
 Metabolic Syndrome: + -
 Framingham Risk Scores:
 10-Year General Risk: 7.9 %
 10-Year Stroke Risk: 2 %
 Global Cardio Score: 4.4 pts

[Weight Management](#) [Lipids Management](#)
[HPT Management](#) [Immunizations](#)

Vital Signs
 Height: 72.00 Waist: 40.00 Finger Stick Glucose: //
 Weight: 210.00 Hips: 42.00 Pulse: //
 BMI: 28.48 Chest: 42.00 [Blood Pressure](#): 130 / 85
 Body Fat %: 22 Abdomen: 44
 Protein Req: 114 Ratio: 0.95 BP In Diabetics:
 BMR: 2945 BER: 3150 Vitals Over Time:

Current SQ Insulin Dose as of: // Blood Sugars: //
 Time of day Units Type Units Type mg/dl
 // // // // //
 // // // // //
 // // // // //
 // // // // //

Most Recent Labs Check for New Labs
 HgA1C: 8.0 02/22/2012
 Previous: 8.2 01/01/2012
 eAG: 182
 Mean Plasma Glucose: 207.5 Insulin
 C-Peptide: //
 Fructosamine: //
 Cholesterol: 212 11/15/2012
 LDL: 111 11/15/2012
 HDL: 63 11/15/2012
 Triglycerides: 118 11/15/2012
 Trig/HDL Ratio: 1.87
 Glucose: //
 Fasting: //
 Insulin: //
 HOMA-IR: //
 Na: //
 K: //
 Magnesium: //
 BUN: //
 Creatinine: //
 U Microalbumin: //
 Albumin/Creat: //

Urinalysis: Labs Over Time:

Navigation
 Diabetes General
 Home
 Diab Sys Review
 Diabetic History
 Eye Exam
 Nasopharynx
 Cardio Exam
 Foot Exam
 Neurological Exam
 Complications/Education
 Initiating Insulin
 Insulin Pump
 Lifestyle Changes
 Diabetes Plan
 Education Booklet Given On: //
 Diabetes Education
 Telephone Record
 Last DE: //

- **Home** – this navigates you back to the AAA Home template
- **Diabetes Systems Review** – this is a ROS which is targeted for diabetes. All of the fields in this ROS interact with the ROS on the Master GP Suite of Templates' Review of Systems.

Diabetes Review of Systems

Constitutional	Neg	Pos	Eyes	Neg	Pos	Endocrine	Neg	Pos
Headaches	<input type="checkbox"/>	<input type="checkbox"/>	Blurred vision	<input type="checkbox"/>	<input type="checkbox"/>	Polydipsia	<input type="checkbox"/>	<input type="checkbox"/>
Fatigue	<input type="checkbox"/>	<input type="checkbox"/>	Holes in vision	<input type="checkbox"/>	<input type="checkbox"/>	Polyuria	<input type="checkbox"/>	<input type="checkbox"/>
Frequent Infections	<input type="checkbox"/>	<input type="checkbox"/>	Skin			Polyphagia	<input type="checkbox"/>	<input type="checkbox"/>
Impaired Wound Healing	<input type="checkbox"/>	<input type="checkbox"/>	Brittle nails	<input type="checkbox"/>	<input type="checkbox"/>	Hyperkalemia	<input type="checkbox"/>	<input type="checkbox"/>
Pruritis	<input type="checkbox"/>	<input type="checkbox"/>	Bruises	<input type="checkbox"/>	<input type="checkbox"/>	Hypokalemia	<input type="checkbox"/>	<input type="checkbox"/>
Weakness	<input type="checkbox"/>	<input type="checkbox"/>	Decubitus	<input type="checkbox"/>	<input type="checkbox"/>	Hypercalcemia	<input type="checkbox"/>	<input type="checkbox"/>
Weight loss	<input type="checkbox"/>	<input type="checkbox"/>	Lesions	<input type="checkbox"/>	<input type="checkbox"/>	Hypocalcemia	<input type="checkbox"/>	<input type="checkbox"/>
Weight gain	<input type="checkbox"/>	<input type="checkbox"/>	Rashes	<input type="checkbox"/>	<input type="checkbox"/>	Hypernatremia	<input type="checkbox"/>	<input type="checkbox"/>
Neuro			Scars	<input type="checkbox"/>	<input type="checkbox"/>	Hyponatremia	<input type="checkbox"/>	<input type="checkbox"/>
Paralysis	<input type="checkbox"/>	<input type="checkbox"/>	Skin Ulcerations	<input type="checkbox"/>	<input type="checkbox"/>	Peripheral Vascular		
Numbness	<input type="checkbox"/>	<input type="checkbox"/>	Gastrointestinal			Coldness of extremities	<input type="checkbox"/>	<input type="checkbox"/>
Psychological			Constipation	<input type="checkbox"/>	<input type="checkbox"/>	Hair loss on extremities	<input type="checkbox"/>	<input type="checkbox"/>
Anxiety	<input type="checkbox"/>	<input type="checkbox"/>	Diarrhea	<input type="checkbox"/>	<input type="checkbox"/>	Cyanosis	<input type="checkbox"/>	<input type="checkbox"/>
Emotional Lability	<input type="checkbox"/>	<input type="checkbox"/>	Vomiting	<input type="checkbox"/>	<input type="checkbox"/>	Intermittent claudication	<input type="checkbox"/>	<input type="checkbox"/>
Genitourinary			Nausea	<input type="checkbox"/>	<input type="checkbox"/>	Peripheral edema	<input type="checkbox"/>	<input type="checkbox"/>
Sexual Dysfunction	<input type="checkbox"/>	<input type="checkbox"/>	Cardiovascular			Stasis ulcers	<input type="checkbox"/>	<input type="checkbox"/>
			Chest Pain	<input type="checkbox"/>	<input type="checkbox"/>	Varicose veins	<input type="checkbox"/>	<input type="checkbox"/>
			Difficulty Breathing	<input type="checkbox"/>	<input type="checkbox"/>			

- **Diabetes History** – this documents the patient-with-diabetes':

Diabetes History

Family History

Family history of type II diabetes? Yes No

Family history of endocrine disorders? Yes No

List

hyperthyroidism

Additional Family History

Risk Factors for Atherosclerosis

Smoking Obesity

Hypertension Dyslipidemia

Medications

Medications Affecting Glucose

Ketoacidosis

Frequency in last 5 years

Severity

Cause

Hyperkalemia

Frequency in last 5 years

Severity

Cause

1. Family History of Type 2 Diabetes
2. Family History of Other Endocrine Disorders
3. Additional Family History

Diabetes History

Family History

Family history of type II diabetes? Yes No

Family history of endocrine disorders? Yes No

List

Additional Family History

Risk Factors for Astherosclerosis

Smoking Obesity

Hypertension Dyslipidemia

Medications

Ketoacidosis

Frequency in last 5 years

Severity

Cause

Hyperkalemia

Frequency in last 5 years

Severity

Cause

Additional Family History

Family Member	Current Age	Problem	Problem		
				<input type="checkbox"/> Deceased?	<input type="text"/> Age
				<input type="checkbox"/> Deceased?	<input type="text"/> Age
				<input type="checkbox"/> Deceased?	<input type="text"/> Age
				<input type="checkbox"/> Deceased?	<input type="text"/> Age
				<input type="checkbox"/> Deceased?	<input type="text"/> Age
				<input type="checkbox"/> Deceased?	<input type="text"/> Age
				<input type="checkbox"/> Deceased?	<input type="text"/> Age
				<input type="checkbox"/> Deceased?	<input type="text"/> Age
				<input type="checkbox"/> Deceased?	<input type="text"/> Age
				<input type="checkbox"/> Deceased?	<input type="text"/> Age
				<input type="checkbox"/> Deceased?	<input type="text"/> Age
				<input type="checkbox"/> Deceased?	<input type="text"/> Age
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				<input type="checkbox"/> Deceased?	<input type="text"/> Age
				<input type="checkbox"/> Deceased?	<input type="text"/> Age
				<input type="checkbox"/> Deceased?	<input type="text"/> Age
				<input type="checkbox"/> Deceased?	<input type="text"/> Age
				<input type="checkbox"/> Deceased?	<input type="text"/> Age
				<input type="checkbox"/> Deceased?	<input type="text"/> Age

Family History of Type II D No

Family History of Other ER No

List of Endocrine Disor

Family History of Hypertension? Yes No

Family History of Hyperlipidemia? Yes No

Family

- Brother
- Daughter
- Father
- Grandparents
- Half brother
- Half sister
- Maternal Aunt
- Maternal cousin
- Maternal Grandfather
- Maternal Grandmother
- Maternal Uncle
- Mother
- Parents
- Paternal Aunt
- Paternal cousin
- Paternal Grandfather
- Paternal Grandmother
- Paternal Uncle
- Siblings
- Sister
- Son
- Stepfather
- Stepmother

4. Ketoacidosis
5. Risk Factors for Atherosclerosis
 - a. Smoking
 - b. Obesity
 - c. Hypertension
 - d. Dyslipidemia
 - e. Hyperkalemia

6. Medications Affecting Glucose

Diabetes History

Family History

Family history of type II diabetes? Yes No

Family history of endocrine disorders? Yes No

List

Risk Factors for Astherosclerosis

Smoking Obesity

Hypertension Dyslipidemia

Medications

Ketoacidosis

Frequency in last 5 years

Severity

Cause

Hyperkalemia

Frequency in last 5 years

Severity

Cause

- a. Drugs with Well Established Affects on Blood Glucose
 1. Drugs that increase blood sugar
 2. Drugs that decrease blood sugar
- b. Drugs with Less Well Established Affects on Blood Glucose
 1. Drugs that increase blood sugar
 2. Drugs that decrease blood sugar

Document below any of the drugs that the patient is taking which may effect glucose levels.
These values WILL copy forward from visit to visit. Be sure to update and review the selections.

Drugs with Well-Established Effects on Blood Glucose Levels

Drugs That Increase Blood Glucose Levels

Amphetamines Growth hormone

Beta agonists Niacin

Beta-blockers Pentamidine (long-term use)

Cyclosporine (Neoral, Sandimmune) (Nebupent, Pentam 300)

Diazoxide (Hyperstat IV, Proglycem) Quinolones

Diuretics Salicylates (high-dose use)

Ethanol (chronic use) Sympathomimetic agents

Glucagon Tequin

Glucocorticoids

Drugs That Decrease Blood Glucose Levels

Insulin

Oral antihyperglycemic agents

Ethanol (acute use)

Pentamidine (initial use)

Drugs with LESS Well-Established Effects on Blood Glucose Levels

Drugs That Increase Blood Glucose Levels

Caffeine

Calcium channel blockers

Clonidine

Estrogen, progestins

Isoniazid (Laniazid, Nydravid)

Nicotine

Octreotide (Sandistatin, initial use)

Penothiazines

Phenytoin (Dilantin)

Rifampin (Rifadin, Rimactane)

Drugs That Decrease Blood Glucose Levels

Angiotensin-converting enzyme inhibitors

Anabolic steroids

Aspirin (high-dose use)

Disopyramide (Norpace)

Octreotide (long-term use)

Quinine (long-term use)

Saquinavir (Invirase)

Sulfonamides

- **Eye Exam** – this is the eye examination template from the Master GP Suite of templates. It distinguishes between the dilated eye examination and the non-dilated eye exam done in the routine office visit.

Last Dilated Eye Exam Last Eye Exam

Check if Done Today

Eye Exam

General	R	<input type="checkbox"/> Normal	<input type="text"/>	<input type="text"/>	Visual Acuity	
	L	<input type="checkbox"/> Normal	<input type="text"/>	<input type="text"/>		
External	R	<input type="checkbox"/> Normal	<input type="text"/>	<input type="text"/>		With glasses
	L	<input type="checkbox"/> Normal	<input type="text"/>	<input type="text"/>		20 / <input type="text"/> OS
Fundi	R	<input type="checkbox"/> Normal	<input type="text"/>	<input type="text"/>		20 / <input type="text"/> OD
	L	<input type="checkbox"/> Normal	<input type="text"/>	<input type="text"/>		20 / <input type="text"/> OU
Pupil	R	<input type="checkbox"/> Normal	<input type="text"/>	<input type="text"/>	Without Glasses	
	L	<input type="checkbox"/> Normal	<input type="text"/>	<input type="text"/>	20 / <input type="text"/>	
Cornea	R	<input type="checkbox"/> Normal	<input type="text"/>	<input type="text"/>	20 / <input type="text"/>	
	L	<input type="checkbox"/> Normal	<input type="text"/>	<input type="text"/>		
Lid	R	<input type="checkbox"/> Normal	<input type="text"/>	<input type="text"/>		
	L	<input type="checkbox"/> Normal	<input type="text"/>	<input type="text"/>		
Ocular muscles	R	<input type="checkbox"/> Normal	<input type="text"/>	<input type="text"/>		
	L	<input type="checkbox"/> Normal	<input type="text"/>	<input type="text"/>		

Corneal Arcus < 50 years of age

Comments

- **Nasopharynx** – this is the nasopharynx exam from the Master GP Suite of templates.

Nasopharynx Exam

Nose and Sinuses **Normal**

External nose	<input type="checkbox"/>			
Nares	R	<input type="checkbox"/>		
	L	<input type="checkbox"/>		
Mucosa	<input type="checkbox"/>			
Septum	<input type="checkbox"/>			
Sinuses	R	<input type="checkbox"/>		
	L	<input type="checkbox"/>		

Mouth

Teeth - Gums	<input type="checkbox"/>			
Tongue	<input type="checkbox"/>			
Buccal mucosa	<input type="checkbox"/>			

Throat

Palate & Uvula	<input type="checkbox"/>			
Tonsils	<input type="checkbox"/>			
Pharynx	<input type="checkbox"/>			

Jaw

--	--	--

Comments

- **Cardio Exam** – this is the cardiovascular examination from the Master GPSuite of Templates.

Cardiovascular Exam

Auscultation	<input type="checkbox"/> Normal	<input type="text"/>	<input type="text"/>	Location	<input type="text"/>
Murmurs	<input type="checkbox"/> Absent	<input type="text"/>	<input type="text"/>		<input type="text"/>
Palpation	<input type="checkbox"/> Normal	<input type="text"/>	<input type="text"/>		<input type="text"/>
Bruit	<input type="checkbox"/> Absent	<input type="text"/>	<input type="text"/>		<input type="text"/>
JVP	<input type="checkbox"/> Normal	<input type="checkbox"/> JVP distended	<input type="text"/>	cms	
Pulses	<input type="checkbox"/> Normal	Location	Intensity		
			R	L	
		Carotids	<input type="text"/>	<input type="text"/>	
		Brachial	<input type="text"/>	<input type="text"/>	
		Radial	<input type="text"/>	<input type="text"/>	
		Femoral	<input type="text"/>	<input type="text"/>	
		Popliteal	<input type="text"/>	<input type="text"/>	
		Dorsalis Pedis	<input type="text"/>	<input type="text"/>	
		Posterior Tibial	<input type="text"/>	<input type="text"/>	
Peripheral Edema	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Pitting	Bilateral	<input type="radio"/> 1+ <input type="radio"/> 2+ <input type="radio"/> 3+ <input type="button" value="Clear"/>
				RLE	<input type="radio"/> 1+ <input type="radio"/> 2+ <input type="radio"/> 3+ <input type="button" value="Clear"/>
				LLE	<input type="radio"/> 1+ <input type="radio"/> 2+ <input type="radio"/> 3+ <input type="button" value="Clear"/>
Carotid Intima Media Thickening		Right		Left	
Thickening (mm)		<input type="text"/>		<input type="text"/>	
Blockage Present		<input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> No <input type="checkbox"/> Yes	
Percent Blocked		<input type="text"/>		<input type="text"/>	
Comments	<input style="width: 100%; height: 20px;" type="text"/>				
		<input type="button" value="OK"/>	<input type="button" value="Cancel"/>		

- **Foot** – this has three pop-ups which are important:

Normal

Foot Exam

	Right	Left
Pulses		
Femoral	<input type="text"/>	<input type="text"/>
Popliteal	<input type="text"/>	<input type="text"/>
Posterior Tibial	<input type="text"/>	<input type="text"/>
Dorsalis Pedis	<input type="text"/>	<input type="text"/>
Peroneal Artery	<input type="text"/>	<input type="text"/>
Doppler Exam		
Posterior Tibial	<input type="text"/>	<input type="text"/>
Dorsalis Pedis	<input type="text"/>	<input type="text"/>
Peroneal Artery	<input type="text"/>	<input type="text"/>
Direction		
Posterior Tibial	<input type="text"/>	<input type="text"/>
Dorsalis Pedis	<input type="text"/>	<input type="text"/>
Peroneal Artery	<input type="text"/>	<input type="text"/>

Cap Refill Immediate Delayed

Digital Hair Present Absent

Dep Rudor Present Absent

Extremity Exam

Monofilament Exam

Risk Assessment

Thick nails

Ingrown nails

Nails too long

Absence of hair

Abnormal shape in left foot

Abnormal shape in right foot

Skin between toes checked

Skin condition of feet

<input type="text"/>
<input type="text"/>
<input type="text"/>

Comments

Click here if you are unable to complete the foot exam due to medical reasons.
(eg. Patient has bilateral amputation, etc.)

1. Extremity Examination

Extremity Exam

	Location	Intensity				
		R	L			
Pulses	dorsalis pedis	<input type="text"/>	<input type="text"/>			
	posterior tibial	<input type="text"/>	<input type="text"/>			
	femoral	<input type="text"/>	<input type="text"/>			
	popliteal	<input type="text"/>	<input type="text"/>			
Skin lesions	Location	Lesions	Color	Shape	Distribution	Size(cm)
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> Xanthomata <input type="checkbox"/> Tendinous Xanthomata						
Neuro	Location	Touch	Vibratory	Deep tendon reflexes		
	R	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
<input type="checkbox"/> Normal	L	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	

Comments

2. **Monofilament neuro-exam of the foot** – also gives instructions on how to do monofilament examination.

Semmes-Weinstein 5.07 (10 g) Monofilament Examination

Last Performed

Procedures

1. Have the patient look away or close his or her eyes.
2. Hold the filament perpendicular to the skin.
3. Avoiding any ulcers, calluses, or sores, touch the monofilament to the skin until it bends.
4. Hold in place for approximately 1.5 seconds, and then gently remove it.
5. Randomly test the sites listed below.
6. Elicit a response form the patient at each site. Lack of sensation at any site may indicated diabetic neuropathy.

The monofilament may be cleaned with 1:10 sodium hypochlorite solution if contaminated with blood or body fluids.

High Risk Areas (P=sensation present, A=sensation absent, D=sensation diminished)

	Right	Left	Right	Left
Toe Pulp	1 <input type="radio"/> P <input type="radio"/> D <input type="radio"/> A	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A	Heel	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
	2 <input type="radio"/> P <input type="radio"/> D <input type="radio"/> A	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A		<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
	3 <input type="radio"/> P <input type="radio"/> D <input type="radio"/> A	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A		<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
	4 <input type="radio"/> P <input type="radio"/> D <input type="radio"/> A	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A		<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
	5 <input type="radio"/> P <input type="radio"/> D <input type="radio"/> A	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A		<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
Metatarsal Heads	1 <input type="radio"/> P <input type="radio"/> D <input type="radio"/> A	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A	Foot	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
	2 <input type="radio"/> P <input type="radio"/> D <input type="radio"/> A	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A		<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
	3 <input type="radio"/> P <input type="radio"/> D <input type="radio"/> A	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A		<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
	4 <input type="radio"/> P <input type="radio"/> D <input type="radio"/> A	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A		<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A
	5 <input type="radio"/> P <input type="radio"/> D <input type="radio"/> A	<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A		<input type="radio"/> P <input type="radio"/> D <input type="radio"/> A

3. Foot Risk Assessment–

Foot Risk Assessment

1. Intact protective sensation Loss of protective sensation
2. Pedal pulses present Absent pedal pulses
3. No severe deformity Severe foot deformity
4. No prior foot ulcer History of foot ulcer
5. No amputation Prior amputation

<input type="checkbox"/> LOW Risk Visual foot exam every routine diabetes visit Annual complete lower extremity sensory exam Assess & recommend appropriate footwear Provide patient education for preventive self-care	<input type="checkbox"/> HIGH Risk Conduct comprehensive lower extremity exam every 3-6 months Demonstrate preventative self-care of the feet Refer to specialists and diabetes educator as indicated Assess/prescribe appropriate footwear Certify Medicare patients for therapeutic shoe benefits
--	---

- a. This requires documenting the pulses, sensory status, deformity, ulcer, and amputations.

- b. When those entries are made by check boxes, activate the “calculation” button which will execute a plan of care for foot care, particularly important for the diabetic.
 - c. This will print on the chart note.
- **Neurological Exam** – this is the neurological examination from the Master GP Suite of Templates that includes 2 additional pop ups.

Neurological Exam

Mental Status
 Cognitive Abilities Normal Defer to Psychiatric
 Emotional Stability Normal Defer to Psychiatric

Sensory Function
 Coordination Normal
 Fine Motor Skills Normal
 Sensory Response Normal
 Balance & Gait Normal
 Romberg + Romberg - Romberg

Superficial and Deep Tendon Reflex

	Right	Left
Reflexes	<input type="checkbox"/> Normal	<input type="text"/>
Deep Reflexes	<input type="checkbox"/> Normal	<input type="text"/>
Touch	<input type="checkbox"/> Normal	<input type="text"/>
Vibratory	<input type="checkbox"/> Normal	<input type="text"/>

Bicep Absent +1 +2 +3 +4
 Tricep Absent +1 +2 +3 +4
 Patella Absent +1 +2 +3 +4
 Ankle Absent +1 +2 +3 +4
 Babinski Sign + -
 Kernig's Sign + -

Comments

1. **Motor Exam** - this template allows the documentation of a patient's level of strength

Motor Exam

Upper Extremities

	most	Strength							least	Tone
Left	<input type="radio"/> 5/5	<input type="radio"/> 4+5	<input type="radio"/> 4/5	<input type="radio"/> 4-5	<input type="radio"/> 3/5	<input type="radio"/> 2/5	<input type="radio"/> 1/5	<input type="radio"/> 0/5	<input type="text"/>	
Right	<input type="radio"/> 5/5	<input type="radio"/> 4+5	<input type="radio"/> 4/5	<input type="radio"/> 4-5	<input type="radio"/> 3/5	<input type="radio"/> 2/5	<input type="radio"/> 1/5	<input type="radio"/> 0/5	<input type="text"/>	

Lower Extremities

Left	<input type="radio"/> 5/5	<input type="radio"/> 4+5	<input type="radio"/> 4/5	<input type="radio"/> 4-5	<input type="radio"/> 3/5	<input type="radio"/> 2/5	<input type="radio"/> 1/5	<input type="radio"/> 0/5	<input type="text"/>
Right	<input type="radio"/> 5/5	<input type="radio"/> 4+5	<input type="radio"/> 4/5	<input type="radio"/> 4-5	<input type="radio"/> 3/5	<input type="radio"/> 2/5	<input type="radio"/> 1/5	<input type="radio"/> 0/5	<input type="text"/>

2. **Cranial Nerves** - this function helps document the status of a patient's cranial nerves

Cranial Nerves

1 **Olfactory** Intact Not Intact
Each nostril smells familiar odors

2 **Optic** Intact Not Intact
Snellen visual acuity WNL Red/green colour vision unimpaired Rosenbaum near vision WNL Peripheral vision WNL

3 **Oculomotor** Intact Not Intact
PEARLA bilaterally No eyelid ptosis Extraocular eye movements WNL (LR4/SO6)

4 **Trochlear** Intact Not Intact
Eye movement upward and downward WNL

5 **Trigeminal** Intact Not Intact
Corneal reflex brisk bilaterally Facial sensation normal Jaw clench strong Jaw moves against lateral resistance

6 **Abducens** Intact Not Intact
Eyes move laterally

7 **Facial** Intact Not Intact
Sweet/sour/bitter/salty anterior tongue intact Eyebrow elevation symmetrical Frown/smile symmetrical Squeezes eyes shut Shows teeth Able to whistle Puffs out cheeks

8 **Acoustic** Intact Not Intact
Hears whispered voice at 2' distance Hears watch tick at distance similar to the examiner Weber: no lateralization Rinne: air conduction > bone conduction Finger - Nose apposition WNL No postural deviation with feet together

9 **Glossopharyngeal** Intact Not Intact
Uvula elevates at midline Gag reflex intact Perceives touch to pharyngeal tissue

10 **Vagus** Intact Not Intact
Speaks without hoarseness or difficulty No swallowing or breathing difficulty

11 **Accessory** Intact Not Intact
Equal bilateral shrug against resistance Turns head from side to side Opposes resistance against chin

12 **Hypoglossal** Intact Not Intact
Tongue protrudes at midline No tremors, fasciculations of tongue No atrophy of tongue Pronounces R sound without difficulty

OK Cancel

• **Complications/Education –**

1. **The top portion of this template allows for the documentation of five complications of diabetes:**

- a. **Nephropathy** – each of the complications categories allows for the documentation of the degree and nature of the complication via pick lists.
- b. **Neuropathy**
- c. **Retinopathy**
- d. **Cardiovascular**
- e. **Peripheral Vascular**

Diabetic Complications and Education

	Status	Comments	Information	Return
Nephropathy	<input type="text"/>	<input type="text"/>	Nephropathy	
Neuropathy	<input type="text"/>	<input type="text"/>	Neuropathy & Foot Care	
Retinopathy	<input type="text"/>	<input type="text"/>	Retinopathy	
Cardiovascular	<input type="text"/>	<input type="text"/>	Cardiovascular Complications	
Peripheral Vascular	<input type="text"/>	<input type="text"/>		

<p>Diabetic Treatment Standards</p> <p>Diabetic Standards of Care Auto-Print All</p> <p>Sick Day Instructions</p> <p>Glycemic Index</p> <p>Foot Care Instructions</p>	<p>Patient Information</p> <p>Diabetes At A Glance Risk of Developing Type I Auto-Print All</p> <p>General Diabetes Questions Blood Sugar and Exercise</p> <p>Questions To Ask Neuropathy Reversed?</p> <p>Pre-Diabetes Cardiovascular Complications</p> <p>Diabetes Connections Insulin Absorption</p> <p>Insulin Resistance Basal/Bolus Insulin</p> <p>Medication and Meals "Diabetic Diet"</p> <p>Glucose Goals Foot Care Guidelines</p>
--	--

2. The bottom portion of this template provides educational documentation for the patient:

a. Diabetic Standards of Care

1. A glycosylated hemoglobin (HbA1C) is recommended during an initial assessment and during follow-up assessments.
2. A Fasting Lipid Profile is recommended during an initial assessment and during follow-up assessments.
3. A urinalysis, including microalbuminuria and creatinine clearance, is recommended as part of an initial assessment and annually thereafter.
4. A dilated eye examination is recommended during an initial assessment and at least annually thereafter.
5. A foot examination --- visual inspection, sensory examination, and pulse examination -- is recommended during an initial assessment and during follow-up assessments.
6. Influenza immunization is recommended for any person 6 months of age or older who, because of age or underlying medical condition, is at increase risk for influenza-related complications, which includes patients with diabetes mellitus.
7. A blood pressure determination is recommended during an initial assessment and follow-up assessments.
8. Follow-up assessments should be scheduled regularly.
 - Sick Day Instructions
 - Glycemic Index
 - Foot Care Instructions
 - **Auto-Print All** - This will print all 4 of the above documents.

Diabetic Complications and Education

	Status	Comments	Information	Return
Nephropathy			Nephropathy	
Neuropathy			Neuropathy & Foot Care	
Retinopathy			Retinopathy	
Cardiovascular			Cardiovascular Complications	
Peripheral Vascular				

Diabetic Treatment Standards

[Diabetic Standards of Care](#) [Auto-Print All](#)

[Sick Day Instructions](#)

[Glycemic Index](#)

[Foot Care Instructions](#)

Patient Information

Diabetes At A Glance	Risk of Developing Type I	Auto-Print All
General Diabetes Questions	Blood Sugar and Exercise	
Questions To Ask	Neuropathy Reversed?	
Pre-Diabetes	Cardiovascular Complications	
Diabetes Connections	Insulin Absorption	
Insulin Resistance	Basal/Bolus Insulin	
Medication and Meals	"Diabetic Diet"	
Glucose Goals	Foot Care Guidelines	

b. Patient Information

- Diabetes At A Glance
- General Diabetes Questions
- Questions To Ask
- Pre-Diabetes
- Diabetes Connections
- Insulin Resistance
- Medications and Meals
- Glucose Goals
- Risk of Developing Type I
- Blood Sugar and Exercise
- Neuropathy Reversed?
- Cardiovascular Complications
- Insulin Absorption
- Basal/Bolus Insulin
- "Diabetic Diet"
- Foot Care Guidelines
- **Auto-Print All** - This will print all 16 of the above documents.

Diabetic Complications and Education

	Status	Comments	Information
Nephropathy	<input type="text"/>	<input type="text"/>	Nephropathy
Neuropathy	<input type="text"/>	<input type="text"/>	Neuropathy & Foot Care
Retinopathy	<input type="text"/>	<input type="text"/>	Retinopathy
Cardiovascular	<input type="text"/>	<input type="text"/>	Cardiovascular Complications
Peripheral Vascular	<input type="text"/>	<input type="text"/>	

Diabetic Treatment Standards

[Diabetic Standards of Care](#) [Auto-Print All](#)

[Sick Day Instructions](#)

[Glycemic Index](#)

[Foot Care Instructions](#)

Patient Information

[Diabetes At A Glance](#) [Risk of Developing Type I](#) [Auto-Print All](#)

[General Diabetes Questions](#) [Blood Sugar and Exercise](#)

[Questions To Ask](#) [Neuropathy Reversed?](#)

[Pre-Diabetes](#) [Cardiovascular Complications](#)

[Diabetes Connections](#) [Insulin Absorption](#)

[Insulin Resistance](#) [Basal/Bolus Insulin](#)

[Medication and Meals](#) ["Diabetic Diet"](#)

[Glucose Goals](#) [Foot Care Guidelines](#)

- Insulin Pump**– this is a screen which allows you to document details instructions for a patient’s insulin pump if they use one. Completing this template satisfies two goals. First, it ensures that patient knows how their insulin pump should be configured. Second, it allows the patients pharmacists to provide the correct amount of insulin.

Insulin Pump Instructions

Last Reviewed/Updated

Type of Pump <input type="text"/>	Type of Insulin <input type="text"/>	Active Insulin Time <input type="text"/> hours
Upper Limit Goal <input type="text"/> mg/dL	Maximum Basal Rate <input type="text"/> units/hour	
Lower Limit Goal <input type="text"/> mg/dL	Maximum Bolus Volume <input type="text"/> units	

Profile 1 Active?

	Start Time	Stop Time	Rate
1	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour
2	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour
3	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour
4	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour
5	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour
6	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour
7	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour

Carbohydrate Ratios

	Start Time	Ratio
1	<input type="text"/>	<input type="text"/> g/U
2	<input type="text"/>	<input type="text"/> g/U
3	<input type="text"/>	<input type="text"/> g/U
4	<input type="text"/>	<input type="text"/> g/U

Insulin Sensitivity

1	<input type="text"/>	<input type="text"/> mg/dL per U
2	<input type="text"/>	<input type="text"/> mg/dL per U
3	<input type="text"/>	<input type="text"/> mg/dL per U
4	<input type="text"/>	<input type="text"/> mg/dL per U

Profile 2 Active?

	Start Time	Stop Time	Rate
1	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour
2	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour
3	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour
4	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour
5	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour

Profile 3 Active?

	Start Time	Stop Time	Rate
1	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour
2	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour
3	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour
4	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour
5	<input type="text"/>	<input type="text"/>	<input type="text"/> units/hour

- **Initiating Insulin** – this is a tutorial on how to start insulin on a patient. It includes the following functions:
 1. Concepts about insulin
 2. Insulin in Type 2 Diabetes
 3. Phase 1, II and Basal/Bolus
 4. Indications for Insulin Therapy
 5. Management Algorithm
 6. Insulin, Augment and Replace
 7. Immediate Insulin Therapy
 8. Insulin Contraindications
 9. Tips for Initiating Therapy
 10. **Dosing Insulin** – this calculates the beginning insulin doses for you.
 11. S.A.F.E. Insulin
 12. **Starting Glargine (Lantus)** – this calculates the beginning Lanus dosage for you.
 13. Insulin, Onset, Peak, Duration

Initiating Insulin in Type 2 Diabetes

Concepts About Insulin	Print
Insulin in Type II Diabetes	Print
Phase I, II and Basal/Bolus	Print
Indication for Insulin Therapy	Print
Management Algorithm	Print
Insulin: Augment and Replace	Print
Immediate Insulin Therapy	Print
Insulin Contraindications	Print
Tips for Initiating Therapy	Print
Dosing Insulin	Print
S.A.F.E. Insulin	Print
Starting Glargine (Lantus)	Print
Insulin: Onset, Peak, Duration	Print

[Return](#)

Information

- Basal/Bolus Insulin
- Initiating Insulin Therapy

- **Lifestyle Changes** – there are two columns on this template

Column 1 –

1. **Diet type** – a space for the patient’s diet to be displayed.
2. **Principles of Dietary Management for Diabetes** – Six Dietary principles which will help improve glycemic control
3. **Poor Dental Hygiene** – documentation for encouraging the patient with diabetes to maintain their dental health.
4. Across the Bottom there are hyperlinks to:
 - a. Exercise
 - b. Weight Management

- c. Smoking Cessation with an e-mail button for sending an electronic tickler file for smoking cessation.

Diabetes Lifestyle Changes

Diet Type: 1800 Cal ADA

Principles of Dietary Management for Diabetes

- Caloric restriction to achieve weight loss
- Carbohydrate-limited diet
- Uniform distribution of calories throughout the day
- No caloric intake after 6-7 PM
(will result in lower first morning blood sugar levels)
- Very high fat meals may result in delayed hyperglycemia
- Limit alcohol consumption (no more than 2 drinks per day)
- Poor dental hygiene is associated with complications in diabetic patients
 - Encourage patient to clean teeth with flossing daily
 - Encourage annual dental examination and teeth cleaning

[Exercise](#) [Weight Management](#) [Smoking Cessation](#)

Information

Glycemic Information

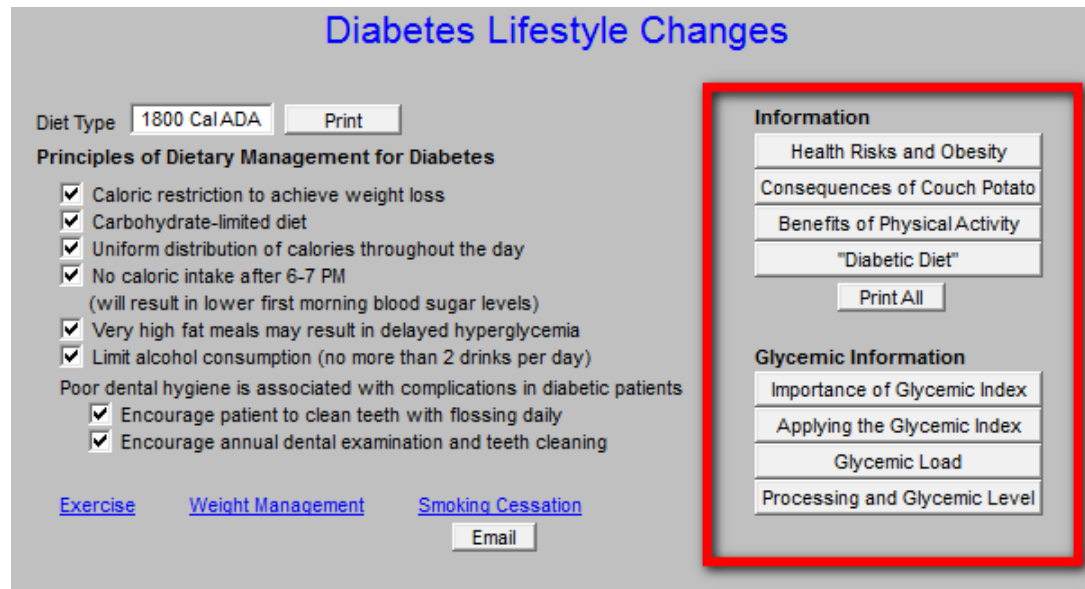
Column 2 –

5. Patient Information

- a. Health Risk and Obesity
- b. Consequences of Couch Potato
- c. Benefits of Physical Activity
- d. "Diabetic Diet"
- e. Print All of the above Button

6. Glycemic Information for Patient

- a. Importance of Glycemic Index
- b. Applying the Glycemic Index
- c. Glycemic Load
- d. Processing Food and Glycemic Index
- e. Button to print all four articles



- **Diabetes Plan** – this is discussed below
- Education Bulletin Given on – this is the last date that SETMA’s Diabetes Education Booklet was given.
- **Diabetes Education Button** – this launches the Diabetes Education Template.
- **Last Diabetes Education** – this indicates when the patient last attended Diabetes Education classes.

Diabetes Plan Template

Because of its importance, this is discussed as a separate section.

At the top of the template are:

- Title Bar
- Menu Bar
- Top Tool Bar
- Title of the Template

For more information on the NextGen Toolbar, [Click Here](#).

To the far right of the Diabetes Plan Template are:

- **Navigation Button** to take you back to Diabetes Master Template
- **Consortium Data Set** – discussed earlier
- **Patient compliance** – discussed earlier
- **Comments** – a place to add additional comments if needed
- **Follow-up Document** – a button to launch the production of a follow-up note which should be given to the patient at every visit. The follow-up note gives the patient key information about how to take care of themselves, about their most recent lab results and about their medications.
- **Document** – this button will generate the Diabetes Chart Note

ACE Roadmap to Achieve Glycemic Goals, Treatment Recommendations Based on Latest

HGA1c

When the diabetes plan template is deployed and if the HbA1c is not to goal, a pop-up will automatically appear which is entitled *ACE Roadmap to Achieve Glycemic Goals, Treatment Recommendations Based on Latest HGA1c*.

The following screen shot of the Diabetes Plan shows the button to launch this function outlined in red.

The screenshot displays the 'Diabetes Plan' interface. At the top, there are sections for 'Meal Requirements' (with a 'Calc' button), 'Management', and 'Follow Up Visit'. The 'Management' section includes options for 'Change Self-Monitoring of Blood Glucose (SMBG)', 'Phone glucose data into our office in 7 day', and 'Refer to eye specialist'. A red box highlights the 'HgbA1C Treat Goals' button in the 'Management' section. Below this, there are sections for 'Medications' (with options to continue or start insulin, aspirin, etc.) and 'Education and Eye Referrals' (with a table for referrals). On the right side, there is a vertical menu with buttons for 'Return', 'Consortium Data Set', 'Patient Adherence', 'Comments', 'Follow Up Document', and 'Document'. At the bottom, there is a 'New SQ Insulin Dose' section with a 'Save' button and a 'Sliding Scale' button. A red note states: 'You MUST click "Save" above after entering new insulin information.' The interface also includes various lab test checkboxes and dates, and a 'Chronic Conditions' section.

The pop-up can be launched automatically if the HbA1c is not to goal or it can be launched by clicking the button entitled, **HbA1c Treat Goal**. The ACE is the American College of Endocrinology.

ACE Road Map to Achieve Glycemic Goals Treatment Recommendations Based on Latest HgbA1C

Patient's Latest HgbA1C %

HgbA1C Range %

ACE Glycemic Goals
 HgbA1C < 6.5%
 Fasting Plasma Glucose < 110 mg/dL
 2 Hour Post Prandial Glucose < 140 mg/dL

Intervention
 ** = Special Situations
 (Click the links for additional info)

[Metformin](#) [Sulfonylurea](#) ** NPH
 [TZDs](#) [Rapid-Acting Insulin Analogs](#) ** [Other Approved Combinations](#)
 [Alpha-Glucosidase Inhibitors](#) [Pre-Mixed Insulin Analogs](#) **
 [Meqlitinides](#) ** Glargine

Continuous Titration of Rx
 (2 to 3 months)

Monitor/Adjust Rx to maximal effective dose to meet ACE glycemic goals.

If HgbA1C <= 6.5% Not Achieved

Intensify or combine Rx, including incretin mimetic (available as exenatide) with sulfonylurea and/or metformin.

The navigation buttons on the Diabetes Plan are outlined in red.

Diabetes Plan

Meal Requirements

Total Daily Dose Total Meal Dose Pre-lunch
 Basal Requirement Pre-breakfast Pre-dinner

Laboratory & Procedures
Ordering Provider XXXXXXXXXX

BMP
 C-Peptide
 Creatinine
 EKG
 Flu Shot
 Fructosamine
 Hepatic Profile
 HgbA1C
 Lipid Profile w/LDL
 Magnesium
 Micral Strip
 Pneumovax
 Spot AC Ratio
 TSH
 Venipuncture

Assessment

Dx1
 Dx2
 Dx3

Management

Change Self-Monitoring of Blood Glucose (SMBG) to

Phone glucose data into our office in 7 days
 Refer to eye specialist

Follow Up Visit

Education and Eye Referrals

Priority	Referring First	Referring Last	Referral
Stat	Norma	Duncan	Rule out

Medications

Continue present insulin and metformin/sulfonylurea/acarbose/pio/rosi/troglitazone regimen
 Continue Aspirin
 Start Aspirin 325 mg

Begin Increase Decrease Stop to mg
 Begin Increase Decrease Stop to mg
 Begin Increase Decrease Stop to mg

New SQ Insulin Dose

You MUST click 'Save' above after entering new insulin information.

From Top to Bottom, the Diabetes Plan Template is organized into three sections.

Top Section:

- This is titled Meal Requirements (Insulin)

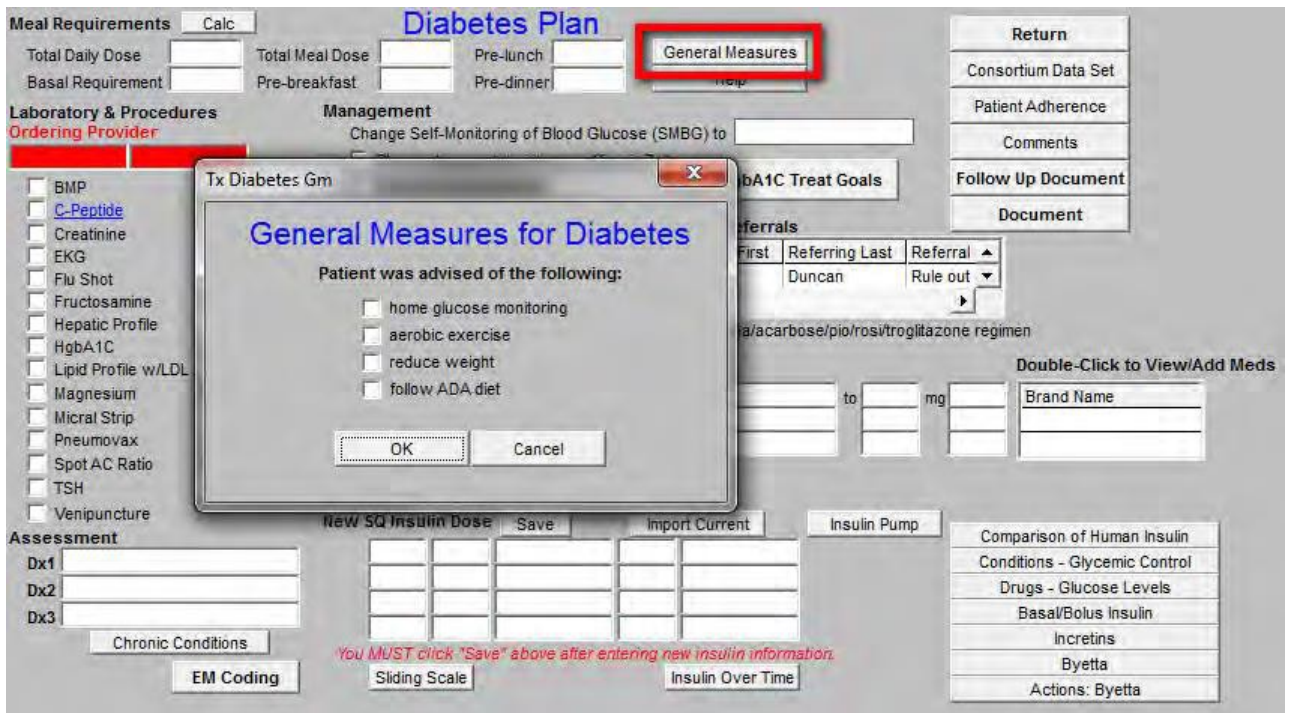
When the New Subq Insulin Dose is completed at the bottom of the screen and the “save” button” is depressed, the following information about the patient’s insulin is automatically generated. This prints on the follow-up note which you will give to the patient.

1. Total Daily Dose
2. Basal Requirements
 - a. Total Meal Dose
 - b. Pre-breakfast
 - c. Pre-lunch
 - d. Pre-dinner

The screenshot displays the 'Diabetes Plan' software interface. The 'Meal Requirements' section is highlighted with a red box and contains the following fields: 'Total Daily Dose', 'Basal Requirement', 'Total Meal Dose', 'Pre-breakfast', 'Pre-lunch', 'Pre-dinner', and 'General Measures'. Other sections visible include 'Ordering Provider', 'Medications', 'New SQ Insulin Dose', and 'Assessment'. A red text warning at the bottom states: 'You MUST click "Save" above after entering new insulin information.' The interface also includes various buttons like 'Calc', 'HgbA1C Treat Goals', 'Save', 'Import Current', and 'Insulin Pump'.

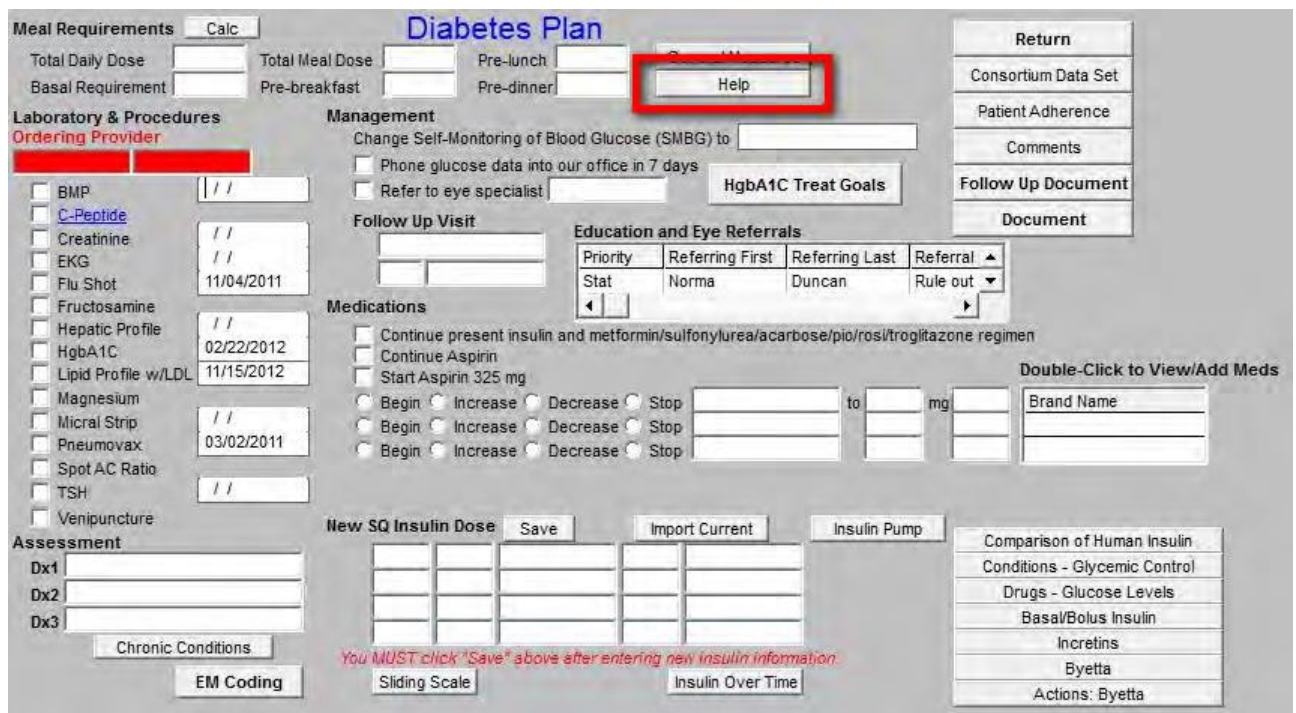
- General Measures -- This launches a pop-up with the ability to order:

1. Home glucose monitoring
2. Exercise
3. Reduce Weight
4. Follow ADA Diet



Any of these that are checked will print on the chart follow-up note which you will give to the patient.

- **Help** – this launches a pop-up entitled “Strategies for Achieving Glycemic Control in Type 2 Diabetes”



The Middle Section contains:

- **Laboratory and Procedures** – it is possible to charge post these studies from the Diabetes

Plan Template. The process is simple:

1. Add the diagnosis to the Assessment box below
2. Check the boxes by the tests you wish to order
3. Click the “Submit Labs” box in the bottom section of this template.

The tests and procedures which can be ordered from the Diabetes Plan template are:

4. BMP
5. C-Peptide
6. EKG
7. Flu Shot
8. Fructosamine
9. Hepatic Profile
10. Magnesium
11. Microalbumin
12. Pneumovax
13. Spot AC Ratio
14. TSH
15. Venipuncture

Note: The date on which the above were last done is noted in the date box to the right of each test or procedure.

The screenshot shows a web-based interface for a Diabetes Plan. The 'Laboratory & Procedures' section is highlighted with a red box. It contains a list of tests with checkboxes and date input fields:

Test/Procedure	Date
<input type="checkbox"/> BMP	//
<input type="checkbox"/> C-Peptide	//
<input type="checkbox"/> Creatinine	//
<input type="checkbox"/> EKG	//
<input type="checkbox"/> Flu Shot	11/04/2011
<input type="checkbox"/> Fructosamine	//
<input type="checkbox"/> Hepatic Profile	//
<input type="checkbox"/> HgbA1C	02/22/2012
<input type="checkbox"/> Lipid Profile w/LDL	11/15/2012
<input type="checkbox"/> Magnesium	//
<input type="checkbox"/> Micral Strip	//
<input type="checkbox"/> Pneumovax	03/02/2011
<input type="checkbox"/> Spot AC Ratio	//
<input type="checkbox"/> TSH	//
<input type="checkbox"/> Venipuncture	//

Other sections visible in the interface include:

- Meal Requirements:** Total Daily Dose, Total Meal Dose, Pre-lunch, Basal Requirement, Pre-breakfast, Pre-dinner, General Measures, Help.
- Management:** Change Self-Monitoring of Blood Glucose (SMBG) to, Phone glucose data into our office in 7 days, Refer to eye specialist, HgbA1C Treat Goals.
- Follow Up Visit:** Date and time input fields.
- Medications:** Continue present insulin and metformin/sulfonylurea/acarbose/pio/rosi/troglitazone regimen, Continue Aspirin, Start Aspirin 325 mg, Begin/Increase/Decrease/Stop options.
- Assessment:** Dx1, Dx2, Dx3, Chronic Conditions, EM Coding, Sliding Scale, Insulin Over Time, Insulin Pump.
- Right Side Panel:** Return, Consortium Data Set, Patient Adherence, Comments, Follow Up Document, Document, Comparison of Human Insulin, Conditions - Glycemic Control, Drugs - Glucose Levels, Basal/Bolus Insulin, Incretins, Byetta, Actions: Byetta.

• **Management Strategies**

1. **Change Self-monitoring of Glucose to (SMBG)** – there is a box with a pick list which allows the following choices: QD, QID, QOD, BID.
2. **Phone Glucose data into our office in 7 days** – there is a check box to activate this so that it prints on the follow-up note.

3. **Refer to Eye Specialist** - when the box next to this function is checked, it allows you to select an Ophthalmologist. In the next line is the referral template can be accessed by double clicking in the space to complete the eye referral.
4. **Follow-up visit** – patients with diabetes ought to be seen at a minimum of three times a year.

The screenshot shows a 'Diabetes Plan' management interface. A red box highlights the 'Management' section, which includes:

- Change Self-Monitoring of Blood Glucose (SMBG) to [input field]
- Phone glucose data into our office in 7 days
- Refer to eye specialist [input field] **HgbA1C Treat Goals**

Other sections visible include:

- Laboratory & Procedures:** Ordering Provider, BMP, C-Peptide, Creatinine, EKG, Flu Shot (11/04/2011), Fructosamine, Hepatic Profile, HgbA1C (02/22/2012), Lipid Profile w/LDL (11/15/2012), Magnesium, Micral Strip, Pneumovax (03/02/2011), Spot AC Ratio, TSH, Venipuncture.
- Medications:** Continue present insulin and metformin/sulfonylurea/acarbose/pio/rosi/troglitazone regimen, Continue Aspirin, Start Aspirin 325 mg (Begin, Increase, Decrease, Stop).
- Assessment:** Dx1, Dx2, Dx3, Chronic Conditions, EM Coding.
- Insulin Dose:** New SQ Insulin Dose, Save, Import Current, Insulin Pump.
- Education and Eye Referrals:** Table with columns: Priority, Referring First, Referring Last, Referral.
- Right Panel:** Return, Consortium Data Set, Patient Adherence, Comments, Follow Up Document, Document, Comparison of Human Insulin, Conditions - Glycemic Control, Drugs - Glucose Levels, Basal/Bolus Insulin, Incretins, Byetta, Actions: Byetta.

- **Medications** – check boxes are present which allows you to document instructions to:
 - a. Continue present insulin and metformin etc.
 - b. Continue Aspirin
 - c. Start Aspirin 325 mg
 - d. Begin, Increase Decrease

Diabetes Plan

Meal Requirements

Total Daily Dose Total Meal Dose Pre-lunch
Basal Requirement Pre-breakfast Pre-dinner

Laboratory & Procedures
Ordering Provider

BMP
 C-Peptide
 Creatinine
 EKG
 Flu Shot 11/04/2011
 Fructosamine
 Hepatic Profile
 HgbA1C 02/22/2012
 Lipid Profile w/LDL 11/15/2012
 Magnesium
 Micral Strip
 Pneumovax 03/02/2011
 Spot AC Ratio
 TSH
 Venipuncture

Management
Change Self-Monitoring of Blood Glucose (SMBG) to
 Phone glucose data into our office in 7 days
 Refer to eye specialist

Follow Up Visit

Education and Eye Referrals

Priority	Referring First	Referring Last	Referral
Stat	Norma	Duncan	Rule out

Medications

Continue present insulin and metformin/sulfonylurea/acarbose/pio/rosi/troglitazone regimen
 Continue Aspirin
 Start Aspirin 325 mg

Begin Increase Decrease Stop to mg
 Begin Increase Decrease Stop to mg
 Begin Increase Decrease Stop to mg

Brand Name

Assessment

Dx1
Dx2
Dx3

New SQ Insulin Dose

You MUST click "Save" above after entering new insulin information.

NOTE: For more information on using the Medication Module, [Click Here](#)

The bottom section of the template contains:

- **Assessment, including**
 1. Three boxes for diagnoses; the top box only has Diabetes ICD-9 codes attached.
 2. **Chronic Conditions** – a button which launches the patient’s chronic condition
 3. **Submit Labs** – a button which submits the lab requests to the lab and the charges to charge posting.
 4. **EM Coding**

The screenshot shows the 'Diabetes Plan' software interface. The 'Assessment' section on the left is highlighted with a red box, containing fields for Dx1, Dx2, and Dx3, along with 'Chronic Conditions' and 'EM Coding' buttons. The 'New SQ Insulin Dose' section in the center is also highlighted with a red box, featuring a table for insulin dosing and buttons for 'Save', 'Import Current', 'Sliding Scale', and 'Insulin Over Time'. A red text warning below the table states: 'You MUST click "Save" above after entering new insulin information.' Other sections include 'Meal Requirements', 'Laboratory & Procedures', 'Management', 'Medications', and 'Education and Eye Referrals'.

- **New SQ Insulin Dose**

1. **Import Current** – this moves the insulin dosing which is displayed on the Master Diabetes Template to the Plan Template
2. **Save** – once any changes are made, this button saves the new insulin dosing and places it in the basal and meal categories at the top of the Diabetes Plan Template.
3. **Sliding Scale** – this allows a sliding scale to be selected based on the patient's insulin sensitivity.
4. **Insulin over time** – this allows you to view the insulin dosing over time.

This screenshot is identical to the one above, showing the 'Diabetes Plan' software interface. The 'New SQ Insulin Dose' section in the center is highlighted with a red box. The interface includes various input fields for meal requirements, laboratory tests, management options, and medication details. A red text warning below the table states: 'You MUST click "Save" above after entering new insulin information.'

- Printable Provider Education Materials on:

1. Comparison of human insulins
2. Conditions – Glycemic Control
3. Drugs – Glucose Levels
4. Basal/Bolus Insulins
5. Incretins
6. Byetta
7. Actions Byetta

The screenshot shows a 'Diabetes Plan' web application. At the top, there are sections for 'Meal Requirements' (with 'Calc' button), 'Management', and 'Laboratory & Procedures'. The 'Management' section includes 'Change Self-Monitoring of Blood Glucose (SMBG) to', 'Phone glucose data into our office in 7 days', and 'Refer to eye specialist'. The 'Medications' section has radio buttons for 'Continue present insulin and metformin/sulfonylurea/acarbose/pio/rosi/troglitazone regimen', 'Continue Aspirin', and 'Start Aspirin 325 mg', with options to 'Begin', 'Increase', 'Decrease', or 'Stop'. The 'Assessment' section has 'Dx1', 'Dx2', and 'Dx3' input fields. A red box highlights a 'Return' button and a list of printable education materials: 'Comparison of Human Insulin', 'Conditions - Glycemic Control', 'Drugs - Glucose Levels', 'Basal/Bolus Insulin', 'Incretins', 'Byetta', and 'Actions: Byetta'.

The last action is to create the Diabetes Follow-up Note, which is the Diabetes Treatment Plan and Plan of Care, and to give it to the patient and then to create the Diabetes Chart Note.

Diabetes Plan

Meal Requirements Calc

Total Daily Dose Total Meal Dose Pre-lunch

Basal Requirement Pre-breakfast Pre-dinner

Laboratory & Procedures

Ordering Provider [Redacted]

- BMP
- C-Peptide
- Creatinine
- EKG
- Flu Shot
- Fructosamine
- Hepatic Profile
- HgbA1C
- Lipid Profile w/LDL
- Magnesium
- Micral Strip
- Pneumovax
- Spot AC Ratio
- TSH
- Venipuncture

Assessment

Dx1

Dx2

Dx3

Chronic Conditions

EM Coding

Management

Change Self-Monitoring of Blood Glucose (SMBG) to

Phone glucose data into our office in 7 days

Refer to eye specialist

HgbA1C Treat Goals

Follow Up Visit

Medications

Continue present insulin and metformin/sulfonylurea/acarbose/pio/rosi/troglitazone regimen

Continue Aspirin

Start Aspirin 325 mg

Begin Increase Decrease Stop to mg

Begin Increase Decrease Stop to mg

Begin Increase Decrease Stop to mg

Education and Eye Referrals

Priority	Referring First	Referring Last	Referral
Stat	Norma	Duncan	Rule out

Double-Click to View/Add Meds

Brand Name

New SQ Insulin Dose Save Import Current Insulin Pump

You MUST click "Save" above after entering new insulin information.

Sliding Scale Insulin Over Time

Return

Consortium Data Set

Patient Adherence

Comments

Follow Up Document

Document

Comparison of Human Insulin

Conditions - Glycemic Control

Drugs - Glucose Levels

Basal/Bolus Insulin

Incretins

Byetta

Actions: Byetta



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SETMA II - 3570 College, Suite 200
Mark Wilson Clinic - 2010 Dowlen
NedPA - 2400 Highway 365, Suite 201
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www.setma.com

Diabetes Follow-Up Note Treatment Plan and Plan of Care

Treatment Goals

HgbA1c	Less than 7.0 %
Blood Pressure	Less than 130/80 mmHg
Cholesterol (LDL)	Less than 100 mg/dL
	Less than 70 mg/dL (if you have cardiovascular disease)
Microalbumin	Less than 30 mcg/mg of creatinine

Patient Robert Test Jr
Date of Birth 03/25/1970
Age 42 years
Ethnicity
Sex M

Encounter Date 11/28/12

The Secret to Diabetes: Learning

Remember, Dr. Joslin, one of the founders of modern care of diabetes said, "He who knows the most about diabetes will live the longest." If you have not been to diabetes self-management education classes in the past two years, ask your provider to give you a referral.

If you control your blood pressure, blood sugar and cholesterol, along with your weight and if you exercise regularly, you can live successfully with diabetes. If you do not, you will be subject to problems with your eyes, kidneys, heart, arteries, nervous system and with your feet and legs.

The screenshot shows a complex medical software interface titled "Diabetes Plan". It is divided into several functional areas:

- Meal Requirements:** Includes input fields for Total Daily Dose, Basal Requirement, Total Meal Dose, Pre-breakfast, Pre-lunch, Pre-dinner, and General Measures. A "Calc" button is present.
- Laboratory & Procedures:** Lists various tests with checkboxes and dates, such as BMP, C-Peptide, Creatinine, EKG, Flu Shot, Fructosamine, Hepatic Profile, HgbA1C, Lipid Profile w/LDL, Magnesium, Micral Strip, Pneumovax, Spot AC Ratio, TSH, and Venipuncture.
- Management:** Contains checkboxes for "Change Self-Monitoring of Blood Glucose (SMBG) to", "Phone glucose data into our office in 7 days", and "Refer to eye specialist". It also includes an "HgbA1C Treat Goals" section.
- Follow Up Visit:** Includes a date field and a "Follow Up Document" button, which is highlighted with a red box.
- Medications:** Features a "Medications" section with checkboxes for "Continue present insulin and metformin/sulfonylurea/acarbose/piro/rositroglitazone regimen", "Continue Aspirin", and "Start Aspirin 325 mg". It also has a "Double-Click to View/Add Meds" section with a "Brand Name" field.
- Assessment:** Includes a "New SQ Insulin Dose" section with "Save", "Import Current", and "Insulin Pump" buttons. Below it is a table for insulin dosing and a "Sliding Scale" section. A red warning message states: "You MUST click 'Save' above after entering new insulin information." There is also an "Insulin Over Time" section.
- Right Side Panel:** A vertical list of buttons including "Return", "Consortium Data Set", "Patient Adherence", "Comments", "Follow Up Document", "Document", "Comparison of Human Insulin", "Conditions - Glycemic Control", "Drugs - Glucose Levels", "Basal/Bolus Insulin", "Incretins", "Byetta", and "Actions: Byetta".



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Mark Wills on Clinic - 2010 Dowlen
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(409) 833-9797
www.setma.com

Diabetes Chart Note

Patient Robert Test Jr
Date of Birth 03/25/1970
Age 42 years
Ethnicity Caucasian
Sex M

Compliance

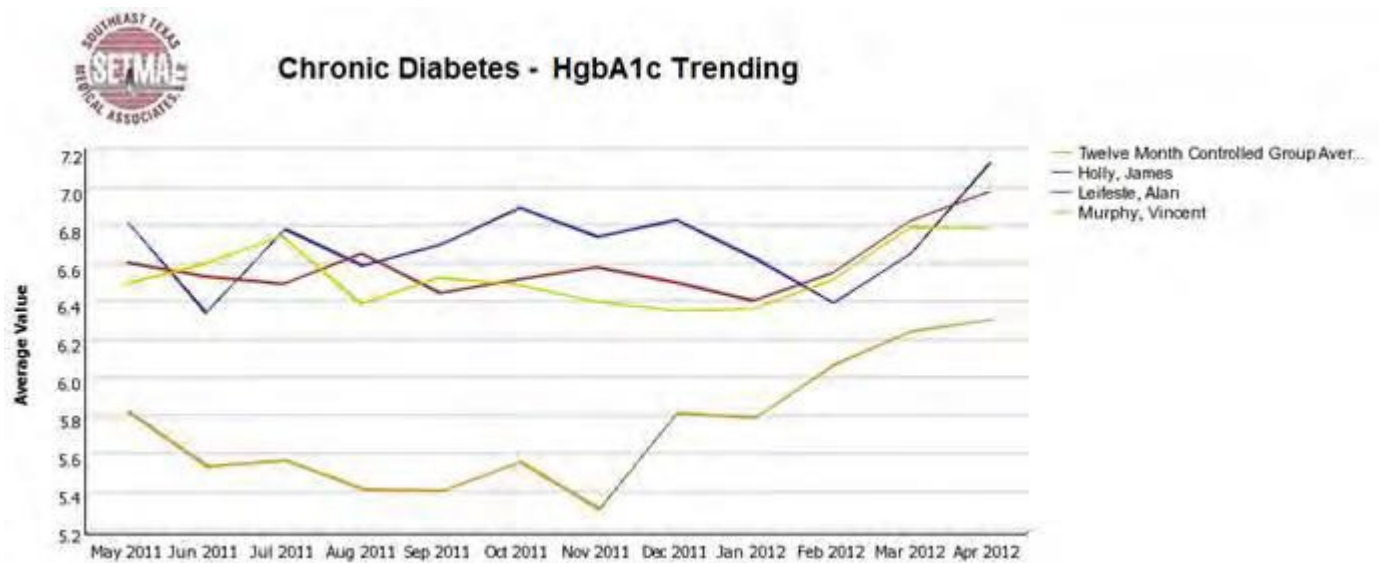
Last Dilated Eye Exam	06/16/2008
Last Flu Shot	05/30/2007
Last Foot Exam	05/19/2009
Last Pneumovax	05/30/2007

Vital Signs

Height	72.00 inches
Weight	210.00 pounds
Body Mass Index (BMI)	28.48 kg/m ²
Body Fat	22 %
Protein Requirement	114 grams/day
Basal Metabolic Rate (BMR)	2945 cal/day
Basal Energy Requirement (BER)	3150 cal/day
Waist	40.00 inches
Hips	42.00 inches
Chest	42.00 inches
Abdomen	44 inches
Blood Pressure	130 / 85 mmHg

Analytics and Diabetes

From the work documented in the Diabetes Disease Management Tool, the following analytics can be done.



Through this longitudinal display, in 2009, we discovered that our patients who were well controlled all year were often losing their control of diabetes in October, November and December. We then did further audits to see if they were being seen less often and being tested less often and they were. In 2010, in September, we sent letters to all 7,000+ patients with diabetes alerting to this fact. We indicated we wanted them to enjoy holiday celebrations but to maintain their exercise and dietary discretion. We had them sign a contract to be seen twice in those three months and to be tested twice. In 2011, our audit showed that this phenomenon had disappeared.



Chronic Diabetes - Measures Comparison (Most Recent 12 Months)

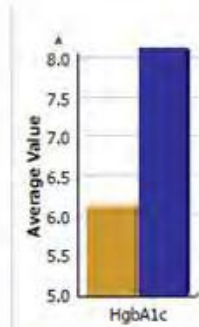
Controlled Group Time Basis: **Prior 12 Months**

Controlled Group Constrained to: **All SETMA**

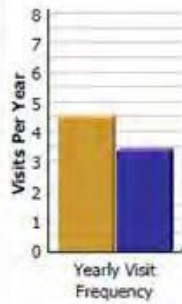
Practice: **SETMA 1, SETMA 2, SETMA West**

Provider: **None**

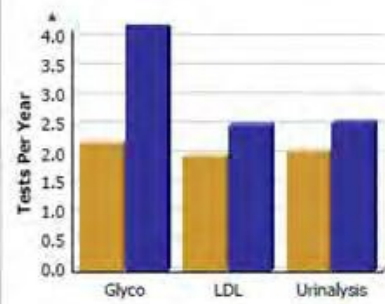
■ Controlled Group
■ Selected Group



	HgbA1c Avg	Standard Deviation
Controlled	6.1	0.7
Selected	8.6	1.6

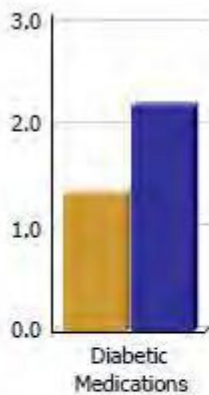


	Visit Frequency
Controlled	4.6
Selected	3.4

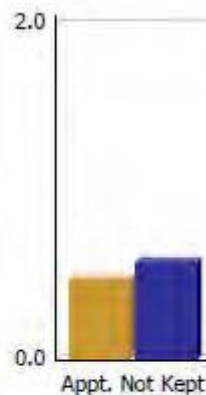


	Yearly Glyco Tests	Yearly LDL Tests	Yearly UA Tests
Controlled	2.2	2.0	2.0
Selected	4.4	2.5	2.5

The above compares the standard deviation of our controlled patients with diabetes (gold) and that of the uncontrolled. We established our goal to be .7 for our diabetes populations. We discovered that our controlled patients were seen 1.2 times more often. This is statistically significant and we saw an opportunity to improve the control of all of our patients by making sure that all patients with diabetes had 4-5 visits a year.

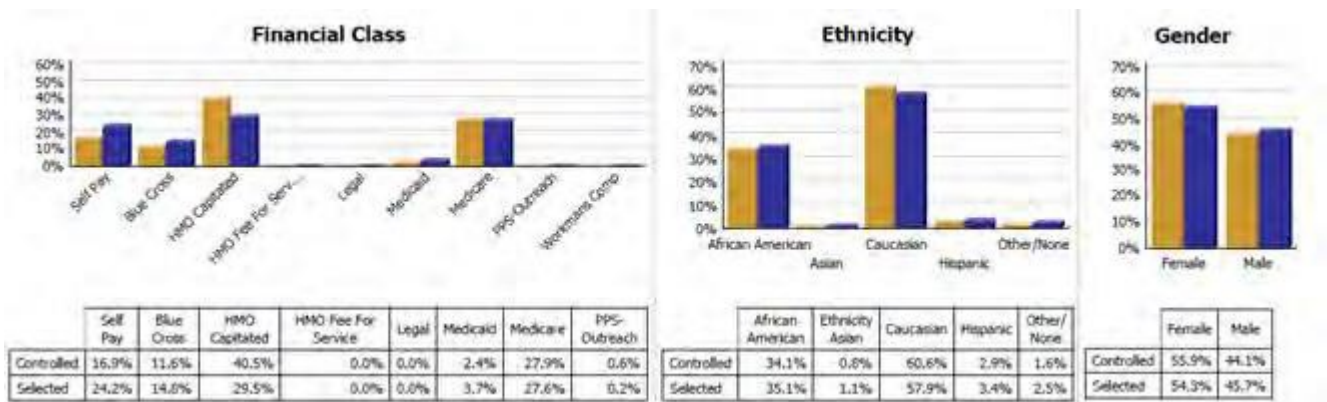


	Diabetic Medications
Controlled	1.3
Selected	2.2

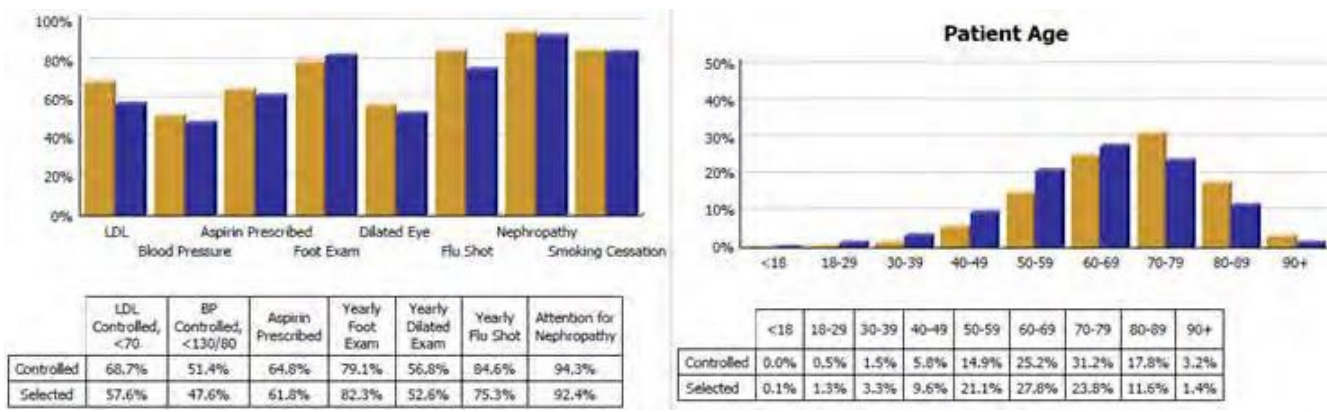


	Appt. Not Kept
Controlled	0.5
Selected	0.6

No leverage points for improvement were found in the data above. (the controlled are gold and are patients with diabetes treated to goal and the selected are the uncontrolled patients in purple)



From the above, we found that our HMO capitated patients who have a zero office co-pay are treated more effectively than Fee-for-Service Medicare allowing the inference that the cost of care for the FFS Medicare patients is a barrier to the effectiveness of care in that when that barrier is removed in a similar population that the care improves. We were able to see that for diabetes we had eliminated ethnic disparities of care.



From the above profile, we were able to see that our older patients have better control of diabetes than our younger patients. Concerned that this might reflect co-morbidities rather than excellence of care, we tested the patients for malnutrition (pre-albumin), weight loss and appetite and found that they were not malnourished but were responding well to increased attention.