The main purpose of clinical decision support (CDS) is to provide clinicians and patients timely health information to best inform clinical decisions at the point of care.

Most clinicians aim to practice evidence-based medicine, yet many are challenged in remembering the specific care recommendations that might apply to an individual patient. For this reason, CDS tools can alert clinicians to patient-specific care needs, providing customizable order sets, easy access to disease guidelines, reminders for chronic or preventive care, safety alerts, patient-specific treatment recommendations, or even advanced predictive analytics that assess a patient’s risk of high-cost complications.

The best point-of-care tools provide valuable information beyond rules and alerts. First-generation diabetes point-of-care tools in outpatient settings, for instance, focused on prompts and reminders which improved test ordering but did not track intermediate outcomes of care such as glucose, blood pressure, or lipid levels. More sophisticated diabetes point-of-care tools use EMR data to provide patient-specific advice on medication use based on previous treatment, distance from goal, and evidence-based algorithms. These tools also organize clinical data in a thoughtful manner that facilitates decision-making.

**TIPS TO IMPROVE THE VALUE AND USE OF POINT-OF-CARE TOOLS**

- Convene a core group dedicated to point-of-care tools. This team will review the content of the tools up front, review the guidelines as a group, and then decide together how to implement them.

- Focus practice resources and tools on care processes that will have the greatest population impact to avoid risk of alert fatigue.

- Ensure point-of-care tools align with organizational practice guidelines to avoid confusion.

- Create workflows that allow team members to manage certain alerts by practicing to the “top of their license.” (Caution: States have different guidelines on what registered nurses, licensed practical nurses, or medical assistants can do with standing orders versus direct physician orders.)

- Aim to reduce “clicks” by consolidating all information into a single-screen display.

- Consider incorporating these tools in patient-provider communications, such as patient portals, shared decision-making aids, or after-visit summaries.

- Remember that tools must save time for providers and be perceived as valuable in increasing the quality of care.

- Make certain that data is timely and accurate and creates a feedback process to improve data quality. False positives and negatives will undermine provider confidence and therefore reduce the effectiveness of these tools.

- Create a process to assess the usage and effectiveness of the tools.
DIABETES REVIEW LIST

1. Verify if patient has an active problem of diabetes.
2. Verify if patient has co-morbid conditions and transition the diabetes if needed.
   a. Renal disease-add or transition to E11.29 (diabetes mellitus with chronic kidney disease)
   b. Retinal disease-add or transition to E11.39 (diabetes mellitus with ophthalmic manifestations)
   c. Neuropathy- add or transition to E11.40 (diabetes mellitus with neurologic manifestations)
   d. PVD-add or transition to E11.59 (diabetes mellitus with peripheral circulatory disorder)
   e. HTN-add or transition to E11.69 (diabetes mellitus associated with complication)
   f. Is patient on insulin?- add Z79.4 (current use of insulin)
3. Verify when patient was last seen and if future appointment is scheduled.
   a. If overdue for appt (DM appt every 3 months), call patient to schedule.
4. Verify if retinal eye exam done in past year.
   a. If done, verify result was data pointed. (attach eye report if the results needs data pointed)
   b. If positive for retinopathy, add E11.39 to problem list if not already done.
   c. Order retinal eye exam if not already done
   d. Add eye doctor/facility to the patient care team
   e. If retinal eye exam not done, call patient to set up
5. Verify HgbA1c done within past 3 months.
   a. If not done, verify if order placed. Place order if not already done.
   b. Call patient to set up
6. Verify micro albumin done within past 12 months.
   a. If not done, verify order placed. Place order if not already done.
   b. Call patient to set up
7. Any patient refusals send a task to the site’s nurse navigator.
**TOOL: DIABETES MEDICATION REFILL AND VISIT FREQUENCY GUIDELINES**

**MERITER-UNITYPOINT HEALTH**

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## Diabetes Update – 2015

**MMG Diabetes Medication Refill and Visit Frequency Guidelines**

Care Team actions: During most patient contacts and for chart prep, review the following:

- Review most recent A1c
- Verify that meds are filled and check medication response/tolerance
- Check standing/future lab orders and create standing orders as needed (A1c, LDL, serum creatinine, urine micro-albumin) if needed
- Reinforce home glucose monitoring if patient is monitoring
- Assure next visit is scheduled

<table>
<thead>
<tr>
<th>Last A1c</th>
<th>Refills</th>
<th>Visit frequency</th>
<th>Additional Care Team Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. New medication regardless of A1c</td>
<td>60 days max</td>
<td>Office visit within 30 days</td>
<td>• Contact every 2 weeks via phone or MyChart</td>
</tr>
<tr>
<td>2. Last A1c &gt;6 months ago</td>
<td>30 day refill</td>
<td>Office visit within 30 days</td>
<td></td>
</tr>
<tr>
<td>3. A1c typically less than 7</td>
<td>6 month refill</td>
<td>Every 6 months</td>
<td>• Screen for hypoglycemia</td>
</tr>
<tr>
<td>4. A1c 7.0 to 7.9</td>
<td>3 month refill</td>
<td>Every 3 months</td>
<td></td>
</tr>
<tr>
<td>5. A1c 8 - 9</td>
<td>3 month refill</td>
<td>Every 3 months</td>
<td>• If A1c ≥ 8 for 6 months pend order to DCT and/or pharmacists</td>
</tr>
</tbody>
</table>
| 6. A1c >9                                | 1-3 month refill based on compliance, comorbidities, home blood glucose monitoring | Visits every 6 weeks | • Contact every 2 weeks via phone or MyChart  
  • Monitor blood glucose checks via MyChart or phone outreach  
  • Pend order to DCT |

List of useful DM related smart phrases (type “Diabetes” to view full list)

- Lastdiabetes3ref (last 3 diabetes lab results)
- Medrfd (last office visit DM labs/refill info)
- Diabetetc (review DM teaching book/glucometer)
- DM foot exam
Accessing Diabetes CareGuides

- Within your note, click the “Problem” icon on the “Clinical Toolbar”

- Highlight any “Diabetes” diagnoses (if you click the icon that looks like a note, you are “assessing” it, if you just want to access the CareGuide, highlight the words) on the left in the “Active Problems” list, then click the “CareGuide: CHC Diabetes....” button on the menu bar at the bottom.
Accessing Diabetes CareGuides
Diabetes CareGuide

Quality Metric Orderables (corresponding metric is not satisfied until order is...
- HGB A1C
- LC001453 Hemoglobin A1c
- LC221010 Lipid Panel w/Total Chol 221010
- LC303756 Lipid Panel
- Microalbumin (Lab)

Quality Metric Screens, Follow-Up Plans and Counseling
- *QM - Depression Screen, Result and Follow-Up Plan
- *QM - BMI Follow-Up Plan
- *QM - BP Screen and Follow-Up Plan
- *QM - Depression Result and Follow-Up Plan (for Patient Point Screens)
- *QM - Fall Risk Screen
- *QM - Tobacco Cessation Counseling

Quality Metric Resultables (Please obtain hard copy for outside results)
- *QM - A1C Last Done
- *QM - Diabetic Eye Exam Last Done
- *QM - Diabetic Foot Exam Last Done
- *QM - LDL Last Done
- *QM - Microalbumin Last Done

Quality Metric Deferrals
- *QM - Deferrals / Exclusions (for vaccine deferrals, also defer in QBM window)

Immunizations
- Hepatitis B
- Influenza
- Pneumo (Pneumovax)

Follow-ups and Referrals
- Referrals
  - Ophthalmology Consult
  - Podiatry (Foot/Ankle) Consult
**Patient Dashboard**

**Care Actions**
- DM Eye exam near due: 03/30/2015
- DM Urine albumin screening near due: 04/06/2015
- DM Lipid panel near due: 04/06/2015
- DM Foot exam up-to-date: 10/14/2015
- DM HbA1c up-to-date: 6%, 10/14/2015
- Prev Flu immunization given within current flu season: 10/14/2015
- Prev Pneumonia vaccination given after age 50: 10/17/2015
- Prev Pneumonia vaccination given after age 65: 10/17/2015
- Prev Tdap/Td vaccination up-to-date: 04/24/2015
- Prev Zoster vaccination administered after age 50: 10/27/2015

**Health Goals**
- Prev BP: S ≥ 120 and < 140 and/or D ≥ 80 and < 90: 129 / 68 mmHg, 10/14/2015
- DM HbA1c < 7: 6%, 10/14/2015

**Appointments**
- Next appointment of type PE 20

**Populations**
- "Chronic Kidney Disease"
- "Hypertension"
- "Diabetes"
- "Neuropathy"
TOOL: HEALTH MAINTENANCE

Best Practice Alerts/Health Maintenance

Best Practice is an alert that gives information on what a patient needs due to:
- A diagnosis (e.g. diabetes)
- Age related immunization or procedure (e.g. mammogram at intervals)

Health Maintenance (HM) is a preventative health tracking system and means of tracking the status of the best practice alerts. Health maintenance items may be satisfied at a ThedaCare site or at external clinics which is “abstracted” into the patient’s chart.

View Patient’s Health Maintenance (HM)

1. GoTo patient’s Snapshot activity

Or

Patient Header

Or

Health Maintenance activity

Click blue links to see results or scanned document that satisfied the modifier

Due Dates are in Date Order
**HEALTH MAINTENANCE** (CONTINUED)

**THEDACARE PHYSICIANS**

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**Health Maintenance** – Document that the alerts were satisfied. The patient had these done at either a Thedacare facility or an external clinic.

Health maintenance items will be marked “satisfied” automatically when done at a Thedacare site.

1. **GoTo Health Maintenance** activity (see step 1 above)

2. Click the appropriate procedure that was satisfied at an external clinic.

3. **Click [Override]**

4. Fill in the Date completed, type **Done**, add Comment (e.g. Name of clinic, provider, and results). **Click [Accept]**.

5. **The health maintenance plan is satisfied.**

   | 09/07/2019 | ADULT TETANUS | 09/07/2009 Done |
Add Patient Modifiers

Some patient modifiers are automatically applied for a patient, for example, immunizations or PAP. You may add or remove a patient from the health maintenance plan. For example, a patient is diabetic and the diabetic modifier is added to the patient’s chart.

1. GoTo Health Maintenance activity

2. Click Edit Modifiers button

3. The Health Maintenance Modifiers screen appears. Click the spyglass on a blank row to see available modifiers.

4. Double click the modifier. Click [Accept] to add it to the patient’s health maintenance list.
**TOOL: HEALTH MAINTENANCE (CONTINUED)**

THEDACARE PHYSICIANS

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**View/Print Patient’s Health Maintenance Report**

1. From the Health Maintenance activity, click [Report].

2. The Health Maintenance Report displays. Click [Close] to close the report.

---

**Health Maintenance Summary**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Status</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNEUMOVAX IMM</td>
<td>Overdue</td>
<td>3/19/2001</td>
</tr>
<tr>
<td>COLONOSCOPY(EVERY 10 YEARS)</td>
<td>Overdue</td>
<td>3/19/1986</td>
</tr>
<tr>
<td>ADULT TETANUS</td>
<td>Overdue</td>
<td>3/19/1951</td>
</tr>
<tr>
<td>DIABETES-ANNUAL EYE EXAM</td>
<td>Overdue</td>
<td>3/19/1936</td>
</tr>
<tr>
<td>DIABETES-6 MONTH HGB A1C</td>
<td>Overdue</td>
<td>3/19/1936</td>
</tr>
<tr>
<td>DIABETES-ANNUAL CREATINININE</td>
<td>Overdue</td>
<td>3/19/1936</td>
</tr>
<tr>
<td>DIABETES-ANNUAL NEPHROPATHY</td>
<td>Overdue</td>
<td>3/19/1936</td>
</tr>
<tr>
<td>CHECK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLU SHOT</td>
<td>Next Due</td>
<td>10/1/2010</td>
</tr>
<tr>
<td>DIABETES-ANNUAL LIPID PANEL</td>
<td>Next Due</td>
<td>9/3/2010</td>
</tr>
<tr>
<td></td>
<td>Done</td>
<td>9/3/2009</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LIPID PANEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LIPID PANEL</td>
</tr>
</tbody>
</table>

**Health Maintenance Modifiers**

- Diabetic

**Patient Information**

**Patient Demographics**

<table>
<thead>
<tr>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

You can also print the report.