

Problem Analysis: CCCN Diabetes Registry Project

Users

Doctors/provider clinicians

Used to using paper systems – charts, paper lab reports, etc. They work with patients directly in a face-to-face visit. Knowledgeable about diabetes medical conditions and care (can easily interpret results). Have computer skills – use Internet and Word, and....?

Office admins

Have computer skills – use Internet and Word, and....? Familiar with medical terms and office procedures for checking in patients.

Stakeholders

Patient

Receives quality care that improves health and quality of life.

Insurance companies

Lowers probability of patient developing acute diabetes condition.

County healthcare clinics

Clinics who provide a “safety net” for the indigent and uninsured populations

Doctors

Improve the efficiency of their practice – can handle more patients

Diabetes Registry Program User Scenarios

Scenario #1:

Patient(s) are coming into the office today to visit a doctor. Admin pulls the paper charts for each patient on the list, prints out worksheets and attaches the Patient Worksheet to the paper chart. (**Data was entered** for the last office visit, so the admin simply prints out worksheets and attaches them to the patient specific chart.)

- How does the admin know that the data from the last visit was entered? How do they verify?
- What happens to the old visit form? Does the admin throw it away?

Scenario #2

Patient(s) are coming in to visit a doctor in that specific office today. Admin pulls the paper charts for each patient on the list, prints out worksheets and attaches the Patient Worksheet to the paper chart. (**Data was NOT entered** for the last office visit.)

- How does the admin know that the data from the last visit was entered? How do they verify?
- How does the admin resolve the situation of data not entered from last visit and today's visit is about to happen?
- What happens to the old visit form? Does the admin throw it away?

Scenario #3

Patients have left the office. The admin has a stack of charts to file but must update the visit for today's visit. The admin looks up the patient record and begins updating patient visit data. In between phone calls and patient check-ins, the admin updates the patient visit information into the online visit form.

- What happens if the admin is interrupted from data entry and the system times out?
- What if the admin "saves" the data and the entered data becomes an entry in the "history" portion of the form and the oldest of third historical test values has now been eliminated?
- What happens if the admin wishes to return to updating the patient visit data later in the day, or a day or more afterward, but BEFORE the patient checks in for their next office visit?
- Would the admin want to print out a version of the visit worksheet to put in the chart and be ready for the next visit? Would they want to see proof of the update?
- Once the last visit data has been entered, what does the admin do with the handwritten visit worksheet for that day?

Scenario#4

A doctor in the office is seeing a new patient today. Admin prints a blank form that will be filled in by the doctor.

Scenario #5

Patients have left the office. The admin has a stack of new charts to file must enter patient's visit data into the online system. The admin looks up the patient record to verify

that the new patient is not already in the registry database. If the patient is new, the admin:

- 1) fax the form to Don to register the patient into the database,
- 2) adds a new patient through the Add Patient registry user interface,
- 3) simply files the handwritten entries on the blank form in the new chart and postpones dealing with the problem.

If the Add Patient to the registry is successful, the admin begins adding the updates to the online database. In between phone calls and patient check-ins, the admin updates the patient visit information into the online visit form.

Scenario #6

Patients have left the office. The admin has a stack of new charts to file must enter patient's visit data into the online system. The admin looks up the patient record to verify that the new patient is not already in the database. If the patient is new, the admin:

- 1) fax the form to Don to register the patient into the database,
- 2) adds a new patient through the Add Patient registry user interface,
- 3) simply files the handwritten entered blank form in the new chart and postpones dealing with the problem.

If the Add Patient to the registry is successful, the admin adds another new patient until the stack for new patient charts are complete. Later, the admin adds the patient visit data into the database.

Scenario #7

Patients have left the office. The admin has a stack of new charts to file must enter patient's visit data into the online system. The admin looks up the patient record to verify that the new patient is not already in the database. The admin discovers that the patient is already in the registry. In between phone calls and patient check-ins, the admin updates the patient visit information into the online visit form.

Scenario #8

At check-in, the admin finds out that the patient has changed their PCP and/or medical home, and/or insurance. The admin can: 1) fax redlined Update Patient registry form to Don, 2) updates the registry information in the Add Patient user interface.

What happens if the admin doesn't have access to the Update Patient registry user interface?

Scenario #9

Patient informs the admin that they just got (re)married/divorced and have a new last name. Admin can 1) go to the Update Registry user interface and changes the name, 2) fax Don the request to change patient name in the registry.

Scenario #10

Admin runs a report on patients over due for a doctor's visit. After contact the patient they discover the patient has: a) deceased, b) moved, and c) no longer has diabetes. Therefore, the admin can: a) remove the patient from the registry through the Update Patient registry user interface, b) fax Don to have the patient status changed to "inactive."

User Tasks

- Print a single patient worksheet
- Print multiple patients' worksheets
- Print a blank worksheet
- Update patient visit information (into online visit form)
- Access patient data who is seeing a doctor not assigned as their primary care provider (i.e., "Break the glass")
- Add a new patient to the registry
- Modify patient information in the registry
- Print a blank Add new patient to the registry form
- Print data filled Modify patient information in the registry
- Remove patient(s) from the active registry
- Add patient back to the active registry
- View inactive and active registry patients
- Attach a reason for making a patient active or inactive in the registry
- Run reports to identify: a) patients with over due visits, b) patients whose test results require them to see a doctor right away
- Get technical assistance with the Diabetes Registry Application

User Needs

- Quick access to printing individual patient visit worksheets
- Quick way to print patients coming into the office for several doctors
- Print a blank form
- Update online patient visit data (save in intervals)
- Add new patients to the registry without bureaucratic hassle
- Modify patient registry information without bureaucratic hassle
- Contact CCCN to have patients added to the registry
- View reports
- Readable format of paper form for doctor
- Form that will be easily placed in the patient's chart

- Make patient active in the registry database
- Remove patient from the active registry database
- Way to see who is active and inactive in the database
- Print an Add New Patient to registry form
- Print existing Patient registry information form

Issues

- How are patients uniquely identified?
- How do labs uniquely identify patients so that their test results are associated with the registry (name, insurance number, CCCN assigned number?)
- How does an admin provide the new patient registry info to Don if they only access to the online visit form information
- What happens if a patient changes their Medical Home or PCP and the admin doesn't have access to this information?
- What happens if a new patient arrives and the doctor has filled out a blank visit form with new information. Who inputs that data into the database? Does the admin wait until Don sets them up in the registry?
- Is it true that patients **may have** a one to many relationship with a doctor? Would they be listed twice for each of the respective doctors when an admin performs a "find patient" for a specific doctor?