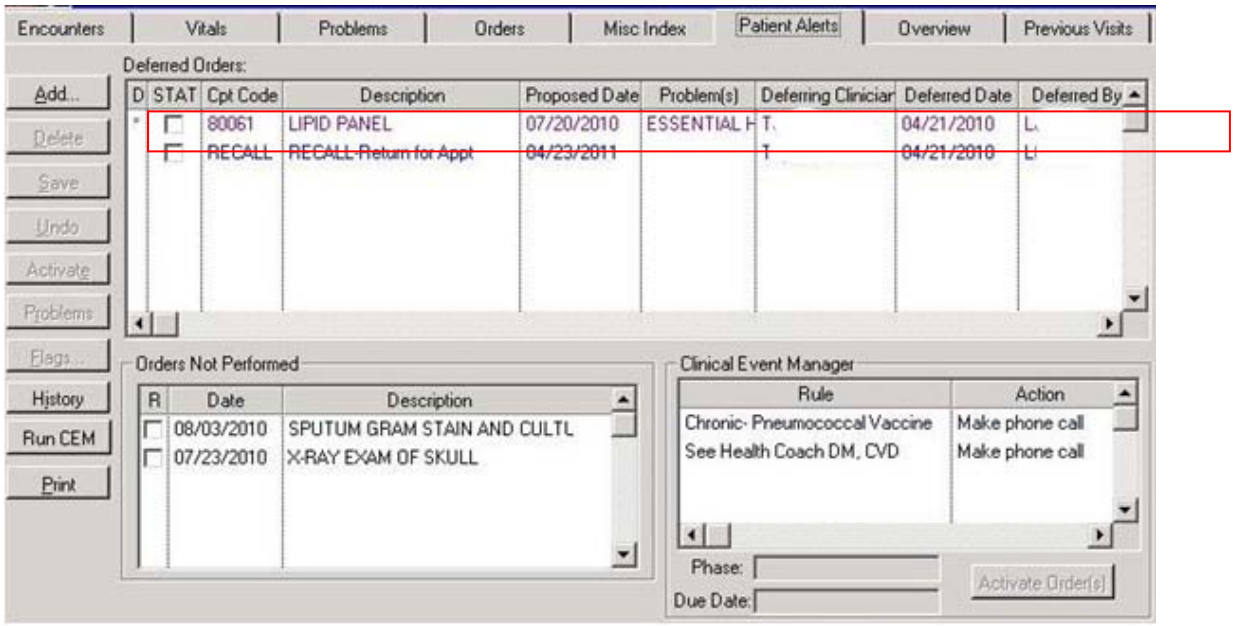
# PPC2: Patient Tracking and Registry Functions

## Element F: Use of System for Population Management

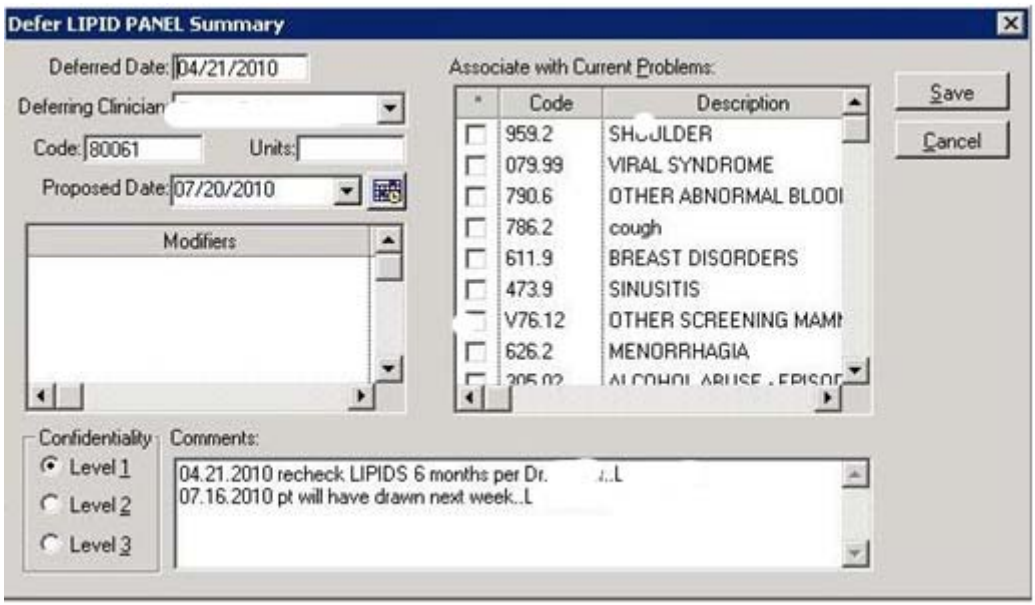
At CHC-B we use our EMR, clinical event manager, and the ad hoc reporting system (Business Objects) for a multi-pronged approach for population management. Clinical Event Manager and Business Objects allow us to link decision rules to the relevant patient-specific data, such as diagnosis, age, procedure codes, medication, test results, and clinical data (i.e. blood pressure, BMI, A1c value, etc)

1. **Patients needing pre-visit planning (obtaining tests prior to visit, etc)**
Providers enter deferred orders for lab and other tests that are to be obtained prior to the next visit. This is date sensitive and would "pop up" on the provider and staff organizer when due. Here is a lipid panel deferred for a patient with hypertension from 4/21/10 to 7/20/10. Because it is purple, it is past due and staff should be attempting patient notification.




2. **Patients needing clinician review or action.** Each month population reports and corresponding lists are generated and distributed to providers for patients whose

condition is uncontrolled.




**Federal Health Plan Goal - HYPERTENSION (BP Control)**

**Increase the % of patients age 18-85 with hypertension whose last blood pressure measurement is <140/90 from 62% to 69%**

**DUE 7/31/2010**

**07/31/2010** **Baseline 6/3_/08 = 60%**

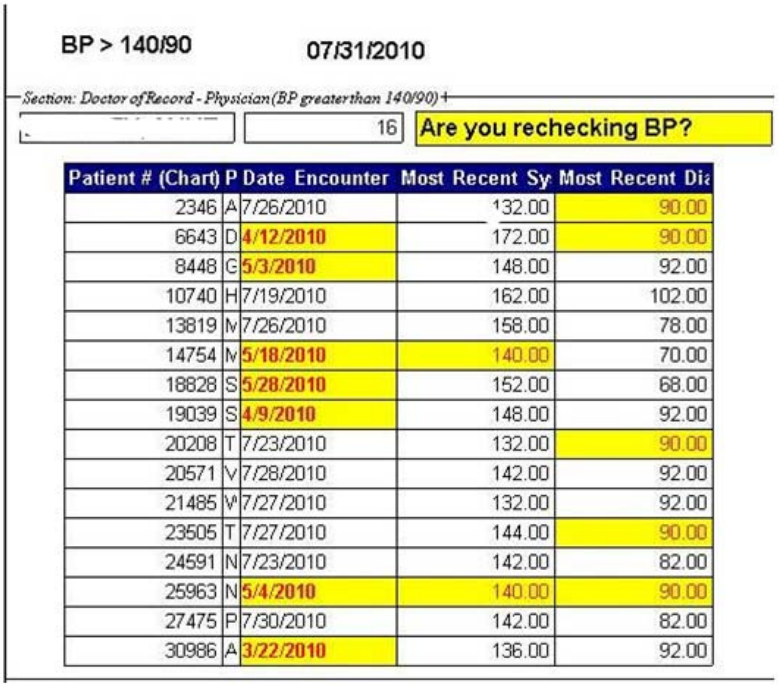
| | | | |
|---|---|---|---|
| HTN Patients 18-85 | 909 | Current HPC | GOAL |
| Patients with BP <140/90 | 682 | 75% | 69% |

| PCP | # of Pts | % |
|---|---|---|
| Other | 1 | |
| S[illegible] | 212 | 83% |
| B[illegible] | 213 | 78% |
| T[illegible] | 64 | 78% |
| H[illegible] | 51 | 75% |
| [illegible] | 87 | 72% |
| S[illegible] | 169 | 69% |
| C[illegible] | 22 | 68% |
| G[illegible] | 90 | 64% |

| PCP | # of Pts | % |
|---|---|---|
| Other | 1 | |
| Satellite POD | 515 | 78% |
| Main POD | 393 | 72% |

**Comparisons:**
State CHC's 72%
National CHC's 70%

Provider list – highlighted if patient not seen in the last 3 months.



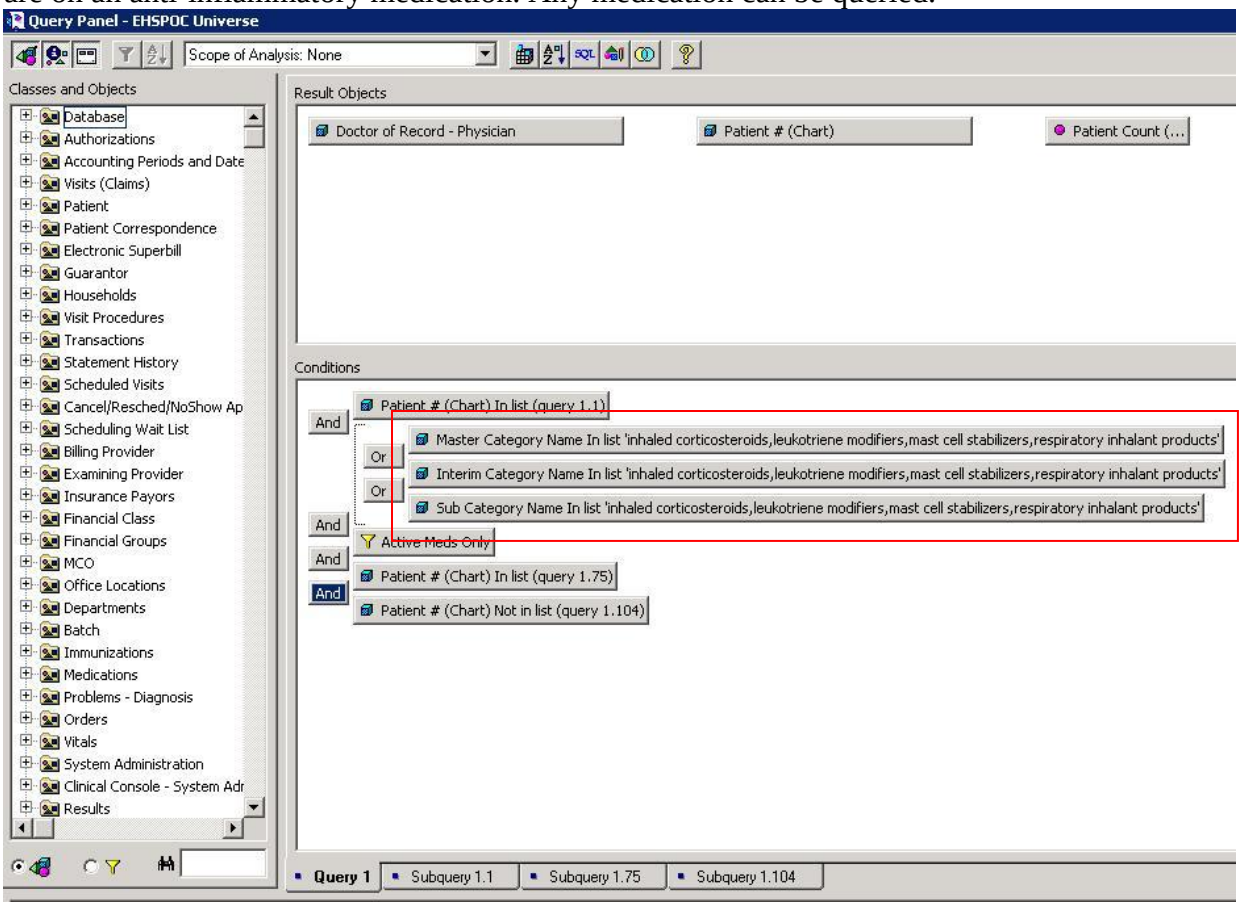
BP > 140/90 07/31/2010

*Section: Doctor of Record - Physician (BP greater than 140/90)*

16 Are you rechecking BP?

| Patient # (Chart) | P | Date Encounter | Most Recent Sy | Most Recent Dia |
|---|---|---|---|---|
| 2346 | A | 7/26/2010 | 132.00 | 90.00 |
| 6643 | D | 4/12/2010 | 172.00 | 90.00 |
| 8448 | G | 5/3/2010 | 148.00 | 92.00 |
| 10740 | H | 7/19/2010 | 162.00 | 102.00 |
| 13819 | M | 7/26/2010 | 158.00 | 78.00 |
| 14754 | M | 5/18/2010 | 140.00 | 70.00 |
| 18828 | S | 5/28/2010 | 152.00 | 68.00 |
| 19039 | S | 4/9/2010 | 148.00 | 92.00 |
| 20208 | T | 7/23/2010 | 132.00 | 90.00 |
| 20571 | V | 7/28/2010 | 142.00 | 92.00 |
| 21485 | W | 7/27/2010 | 132.00 | 92.00 |
| 23505 | T | 7/27/2010 | 144.00 | 90.00 |
| 24591 | N | 7/23/2010 | 142.00 | 82.00 |
| 25963 | N | 5/4/2010 | 140.00 | 90.00 |
| 27475 | P | 7/30/2010 | 142.00 | 82.00 |
| 30986 | A | 3/22/2010 | 136.00 | 92.00 |

3. **Patients on a particular medication.** Business Objects allows us to build reports for specific medications. For Asthma, we use a report to see if patients with persistent asthma are on an anti-inflammatory medication. Any medication can be queried.



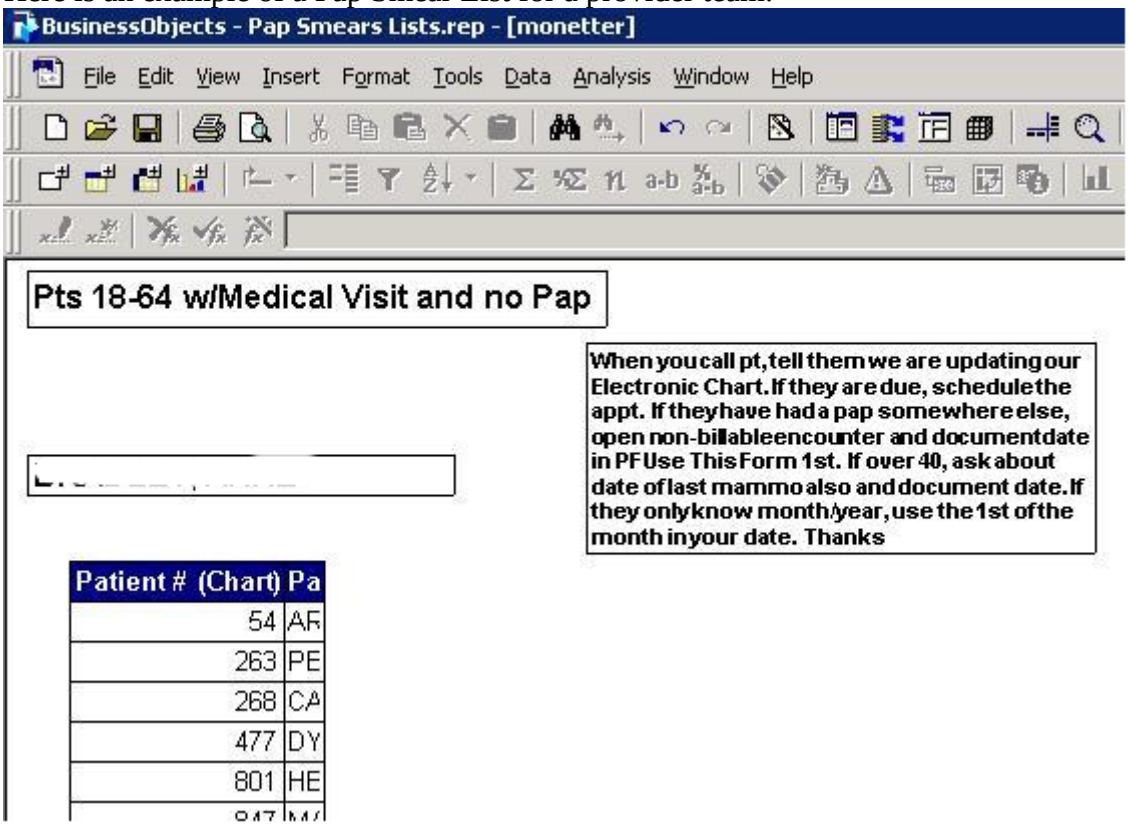
Example of a list of Asthma patients on Anti-Inflammatory Medication:

## Detailed Listing of Asthma Patients - Anti-Inflammatory Medication

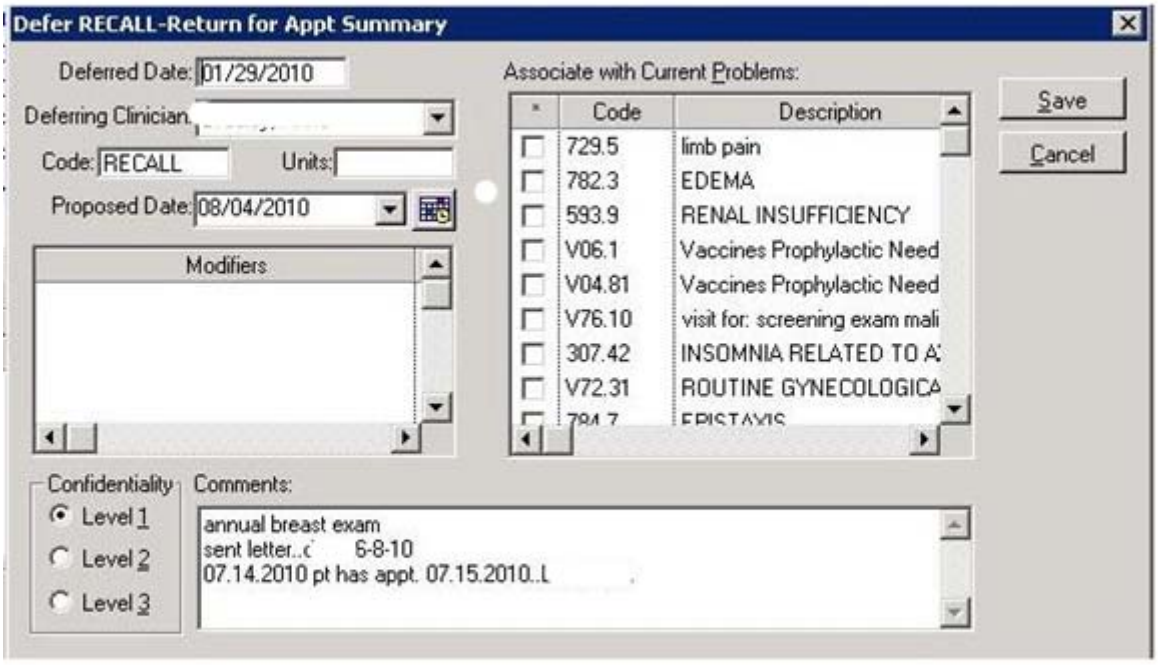
| Patient # | Pa | Date Prescribed | Medication |
|---|---|---|---|
| 1040 | LE | 8/14/2009 | Azmacort |
| 1804 | TA | 7/22/2009 | Flovent |
| | | 7/22/2009 | Intal Inhaler |
| 2394 | MA | 5/29/2009 | Flovent |
| 2824 | AR | 8/28/2009 | Advair Diskus |
| 3749 | BC | 9/6/2007 | Pulmicort Flexhaler |
| | | 4/23/2009 | Pulmicort Flexhaler |
| | | 4/23/2009 | Singulair |
| 5426 | CL | 3/23/2009 | Advair Diskus |
| 6427 | DE | 11/26/2008 | Advair Diskus |
| 6501 | DI | 2/6/2009 | Advair Diskus |
| | | 6/5/2009 | Singulair |
| 6711 | DC | 9/4/2007 | Flovent |
| 6967 | EC | 6/2/2009 | Advair Diskus |
| 6996 | MC | 5/1/2009 | Azmacort |
| 7886 | FR | 10/16/2008 | Azmacort |
| 8162 | GA | 1/17/2008 | Azmacort |
| | | 3/13/2008 | Singulair |
| | | 8/18/2008 | Azmacort |
| 8372 | GA | 1/17/2009 | Flovent |

**4. Patients needing reminders for preventative care.** Business Objects allows us to build queries for patients needing well child exams, immunizations, pap smears, mammograms, etc. Providers and PF's also enter deferred orders for well exams and when the order is due it populates to their organizer. Staff then attempt phone calls and send system generated reminder letters that can be accessed from the patient's chart. Also patient alerts are built to pop up when you access a patient's chart to remind staff of preventative care that is delinquent.

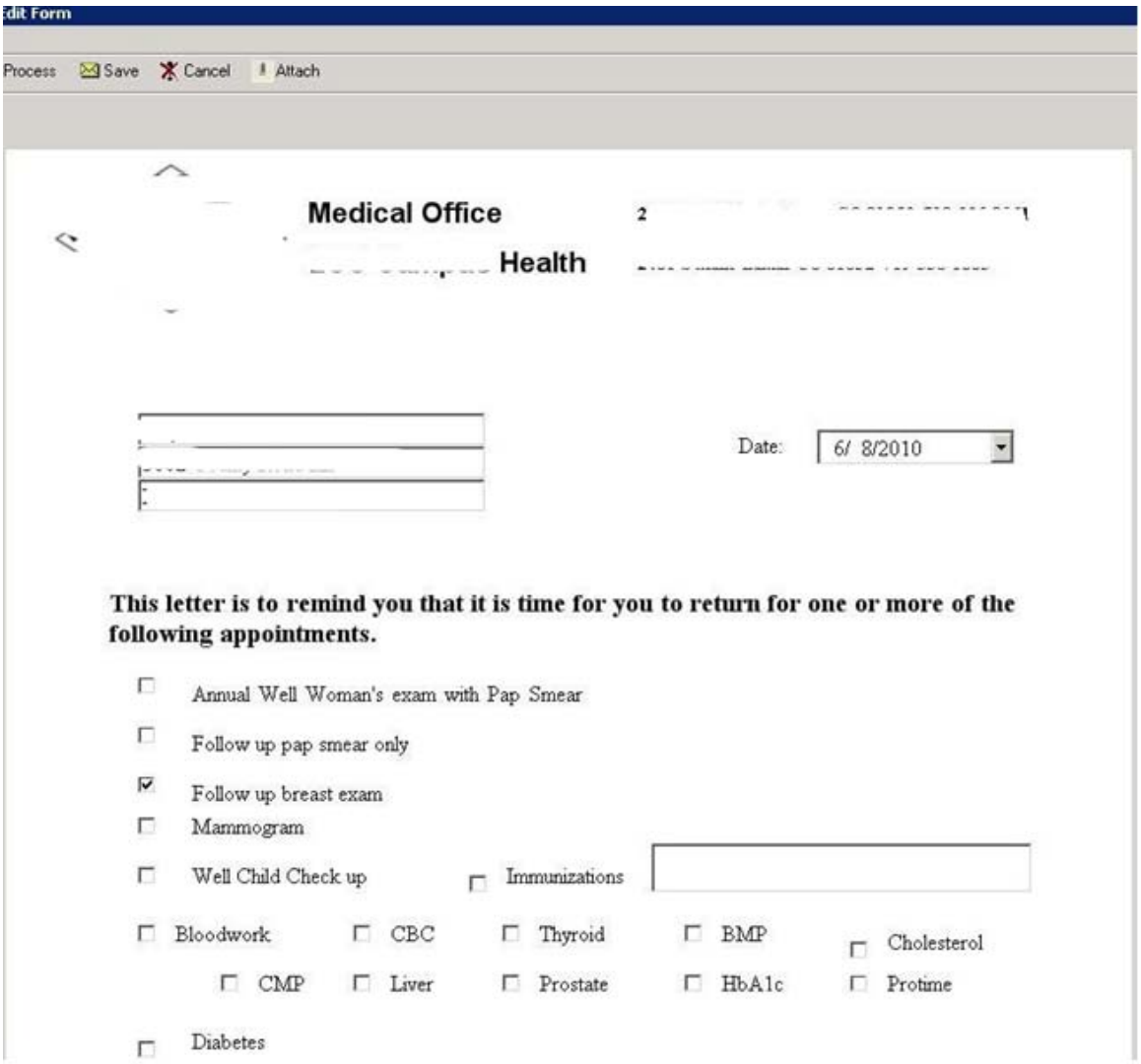
Here is an example of a Pap Smear List for a provider team:



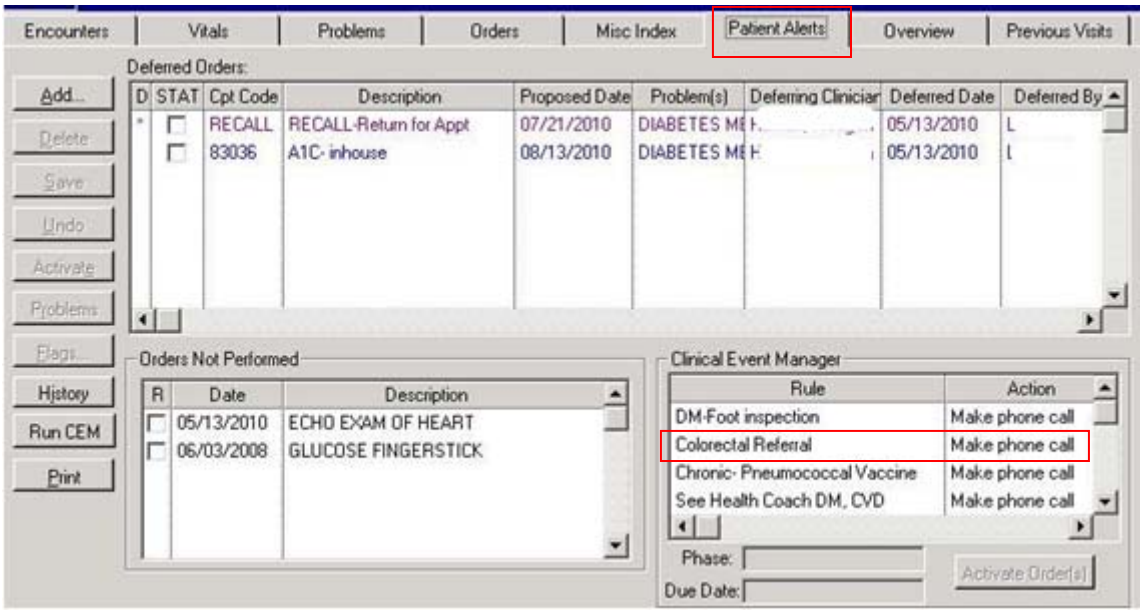
Example of a deferred order for an annual breast exam & the letter sent:



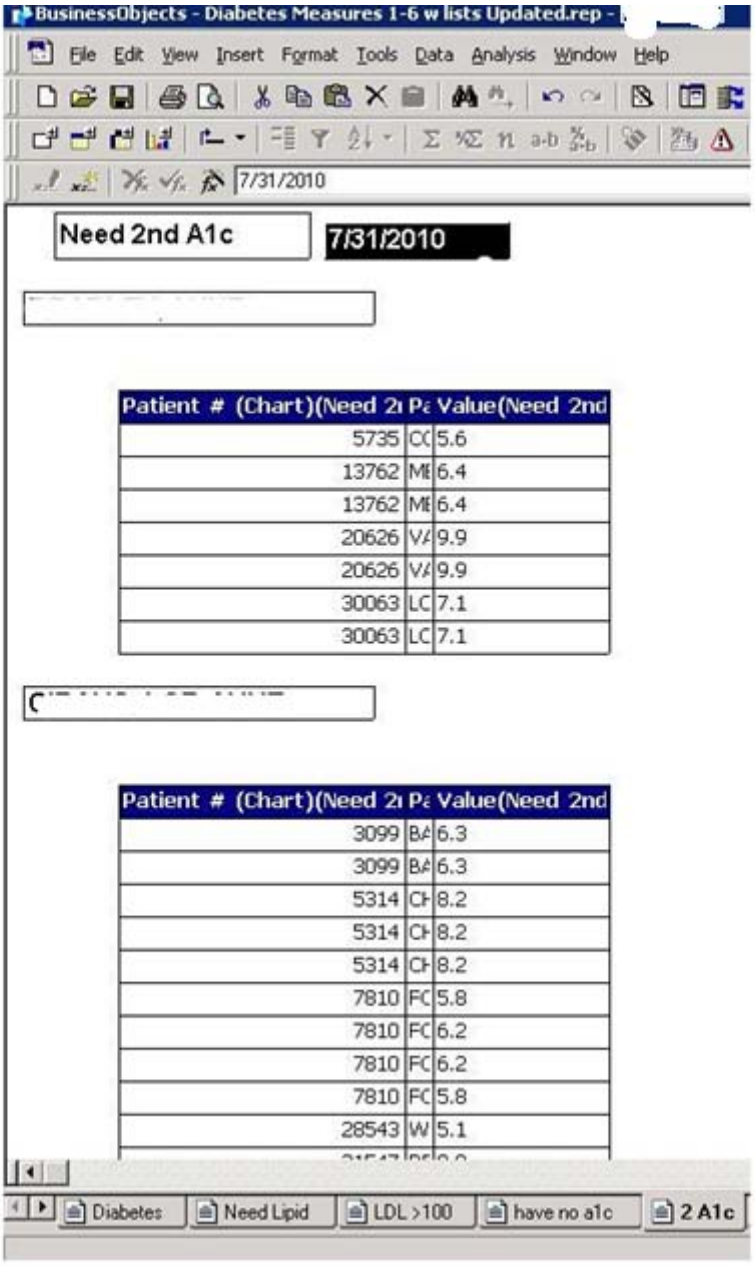
System generated letter for patient reminders (bottom is cut off due to screen shot):



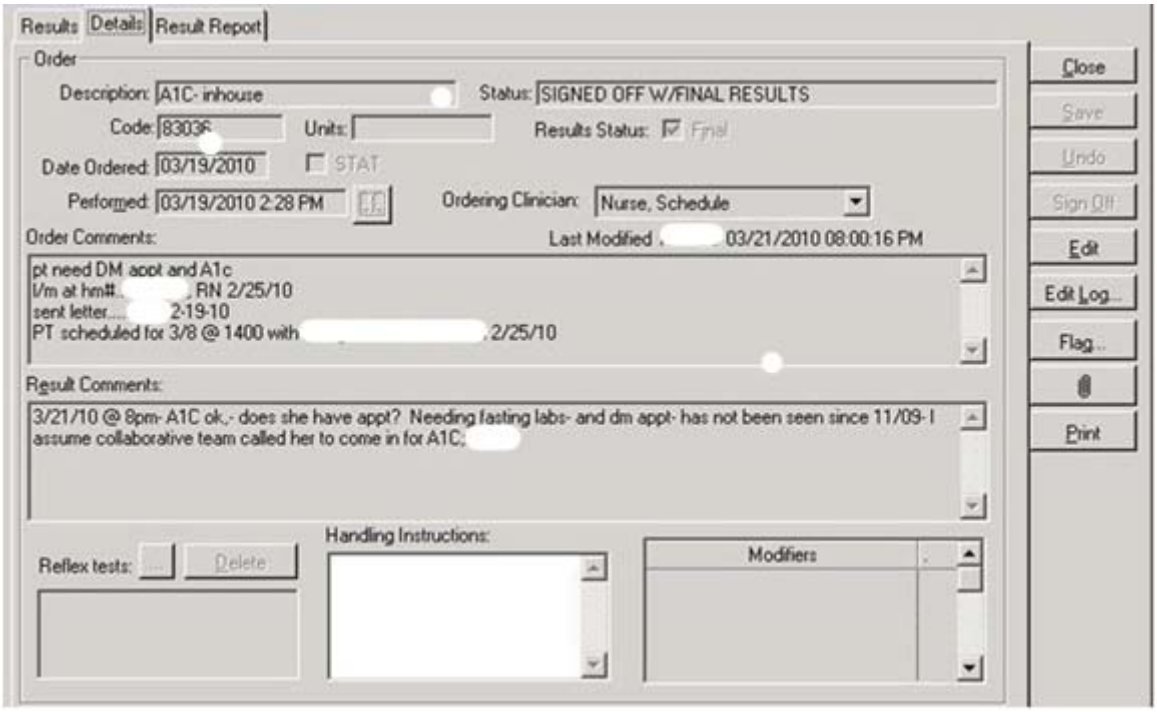
Patient alert for colorectal referral:



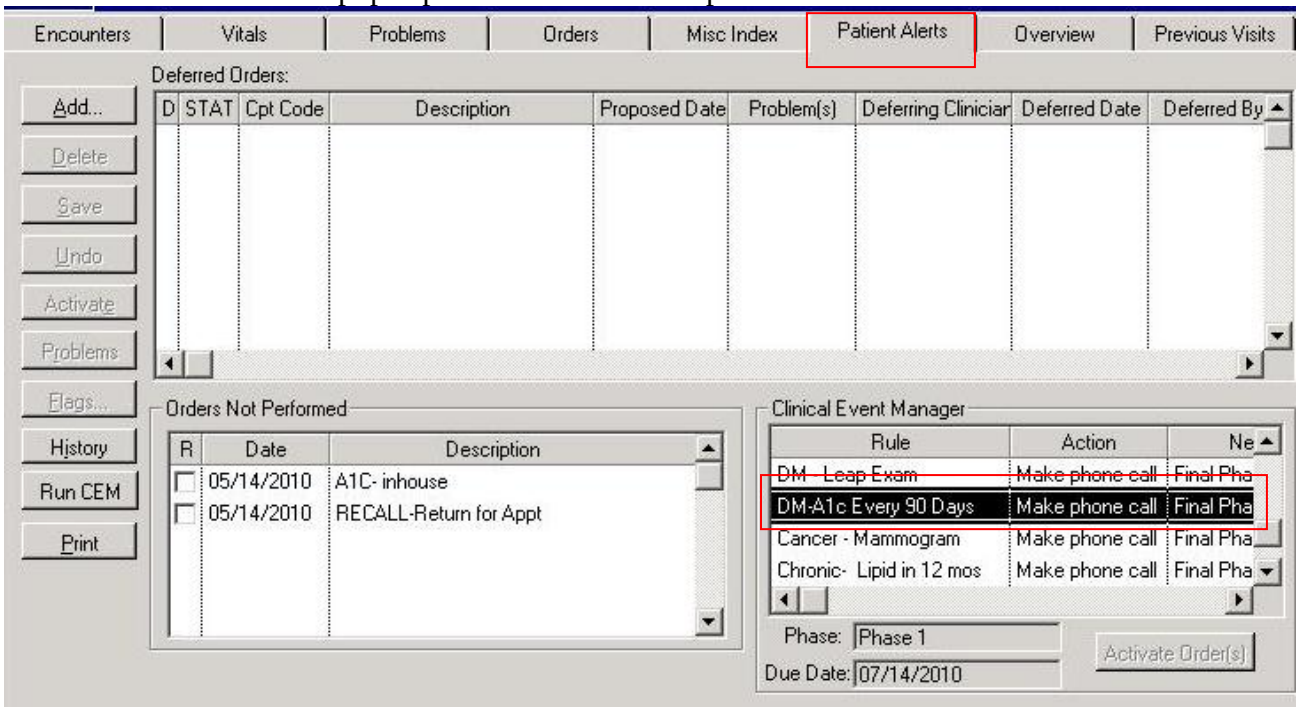
**5. Patients needing reminders for specific tests.** Again, we utilize Business Objects to generate lists, deferred orders to provide a list of patients in organizer for follow up, and patient alerts to remind staff when they access the patient's chart. PF's and the Patient Navigator would call the patients on the list to get them in for the A1c and other needed care. Here is a sample list of diabetic patients who need their second A1c.



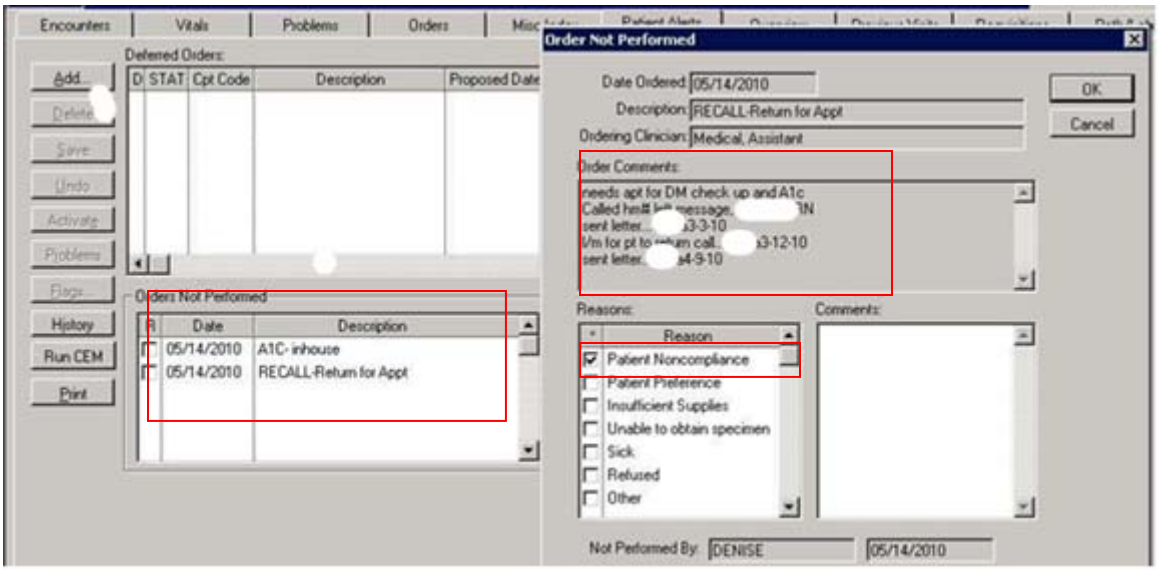
Documentation of staff working to get patient in for A1c:




Patient Alert for A1c that pops up when we access the patient chart:



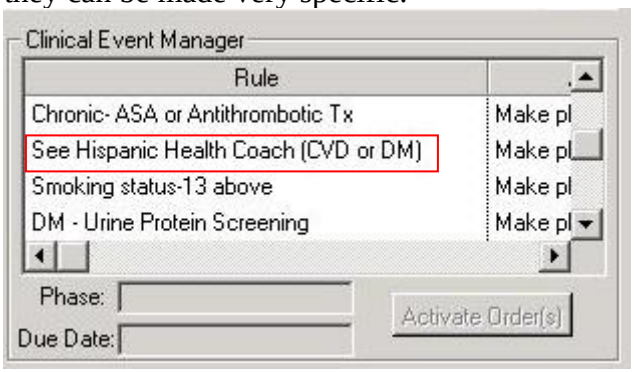
**6. Patients needing reminders for follow-up visits such as for a chronic condition.** Again, we utilize Business Objects to generate lists, deferred orders to provide a list of patients in organizer for follow up, and patient alerts to remind staff when they access the patient's chart. PF's and the Patient Navigator would call the patients on the list to get them in for the chronic condition and other needed care. (See an example above, as the same process is used). This deferred order for DM follow up shows staff attempts to get the patient in for a DM check up. Per health disparities guidelines, we mark the patient "UNABLE TO CONTACT FOR ALERTS" after at least 3 attempts to contact the patient. The recall for the appointment then is marked "not performed" with a reason. The order with the notes still remains on the Patient Alerts page and would pop up any time the chart is accessed. If the patient eventually comes in, staff would check all alerts on this page for items the patient needs.



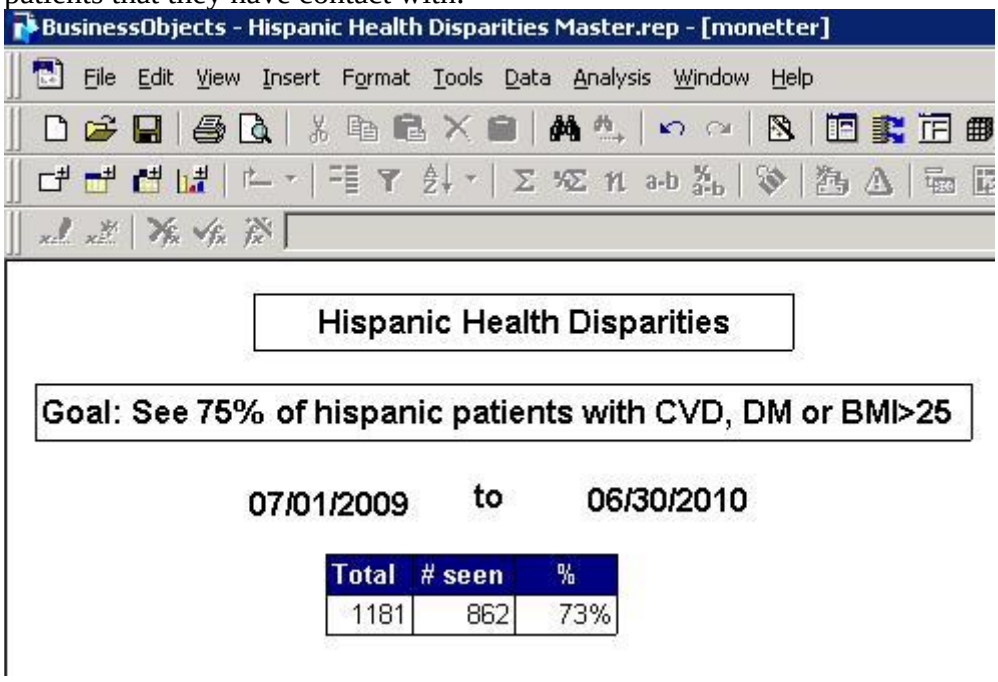

When the patient is marked "UNABLE TO CONTACT" this note pops up throughout the system i.e. when the patient is accessed for scheduling, charting, phone calls, etc. to alert the staff member that the patient has alerts that are past due:

| Date | Originated By | Modified Date | Modified By | Note Type | Note Text |
|---|---|---|---|---|---|
| | | 04/21/2010 | | Patient | PT HAS HAD 3 CONTACT ATTEMPTS OR HAS REFUSED ALERTS. SEE ENCOUNTERS FOR DETAILS. IF PT DOES ALERTS, PLEASE REMOVE THIS STATUS IN PAM |

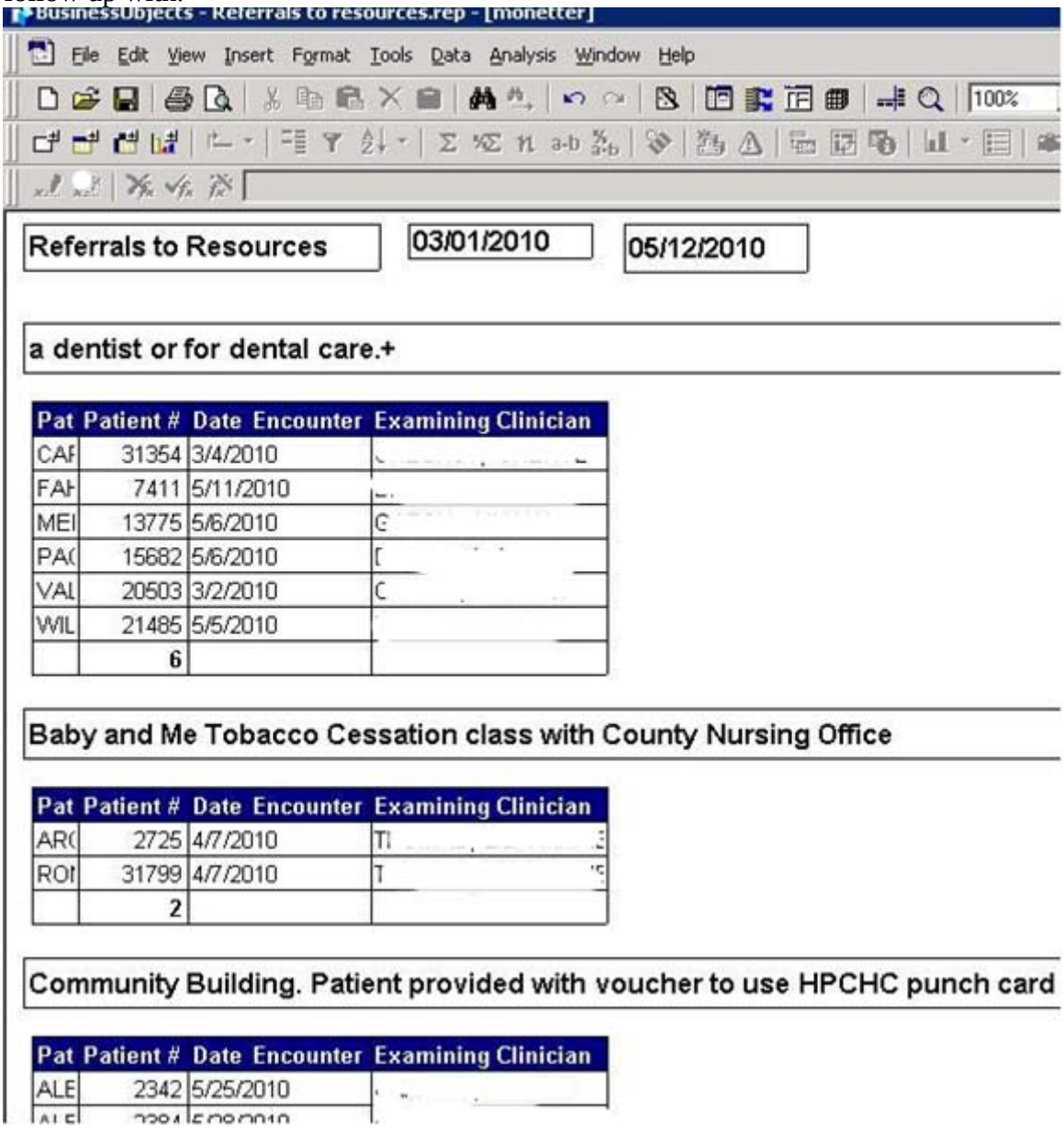
**7. Patients who might benefit from care management support.** We have four health coaches supported by grants that focus on patients with cardiovascular disease, diabetes, and BMI > 25. Two are bi-lingual and concentrate their efforts on our Hispanic population. We have a Patient Navigator who helps patients access care (calls lists) and helps with barriers such as transportation, the cost of medications, and specialty care. We have an SBIRT Health Educator who assists patients with substance abuse or risky substance use. We utilize the Clinical Event Manager in our EMR to create alerts for patients in these identified populations who need to see the health coach or SBIRT. These alerts can be customized based on race, diagnosis, age, insurance, patient status, etc. so they can be made very specific:




Health Coaches also work a "Master List" using phone calls and letters to engage patients in lifestyle changes, behavior modification, increased activity, improved nutrition, tobacco cessation, and our free classes. We then track the percentage of their target patients that they have contact with:



We have many resources internally and in the community that we refer patients to for self management support. Any staff member can mark the referral to resource in the patient's chart and then we run a BO report for health coaches, patient navigator or SBIRT to follow up with.



BusinessObjects - Referrals to resources.rep - [monetter]

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Referrals to Resources | 03/01/2010 | 05/12/2010

a dentist or for dental care.+

| Pat | Patient # | Date Encounter | Examining Clinician |
|---|---|---|---|
| CAF | 31354 | 3/4/2010 | |
| FAH | 7411 | 5/11/2010 | |
| MEI | 13775 | 5/6/2010 | |
| PA( | 15682 | 5/6/2010 | |
| VAL | 20503 | 3/2/2010 | |
| WIL | 21485 | 5/5/2010 | |
| | 6 | | |

Baby and Me Tobacco Cessation class with County Nursing Office

| Pat | Patient # | Date Encounter | Examining Clinician |
|---|---|---|---|
| AR( | 2725 | 4/7/2010 | |
| ROI | 31799 | 4/7/2010 | |
| | 2 | | |

Community Building. Patient provided with voucher to use HPCHC punch card

| Pat | Patient # | Date Encounter | Examining Clinician |
|---|---|---|---|
| ALE | 2342 | 5/25/2010 | |