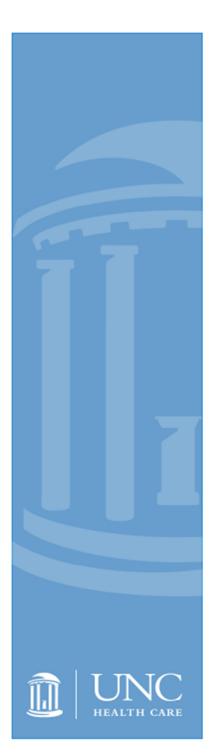


Care Coordination at UNC Health Care

Jennifer Lord, Medical Home Project Manager UNC Practice Quality and Innovation

Enhanced Care Disease Management in UNC's Internal Medicine Clinic

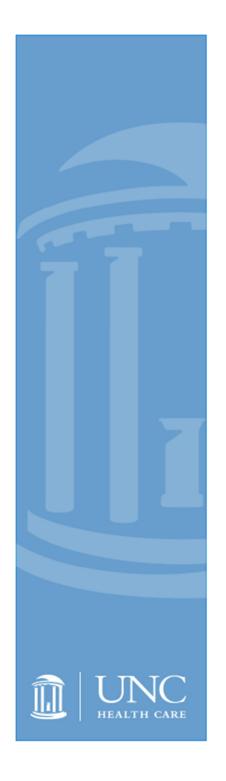
Robb Malone, Pharm.D., CPP Vice President, UNC Practice Quality and Innovation



2/23/2011

Contact information

Jennifer Lord <u>Email: jlord@unch.unc.edu</u> Phone: 919.966.8776



Brief history of our practice

Late 1990's: traditional practice, added mid-level providers Early 2000's: developed population care capability and evidence-based algorithms, proof of concept, rigorous evaluation Mid-2000's: solidified care assistant role, began to integrate throughout the practice Late 2000's: focus on the model for improvement, efficiency and spread, added decision support, additional extenders

Care philosophy today

Key elements

- Patient engagement
- 'Universal precautions' for low literacy
- Multidisciplinary teams
- Population-level data
- Evidence-based care algorithms
- Continuous improvement, guided by data
- Decision support
- Proactive care coordination

Accreditations

- NCQA Level 3 PCMH
- NCQA Diabetes Recognition
- ADA-Approved Diabetes Self-Management Class

Results

www.med.unc.edu/im/files/enhanced-care-files/DiabetesProgramBackground.pdf



Today: Large academic practice with a multi-disciplinary team

Practice staff

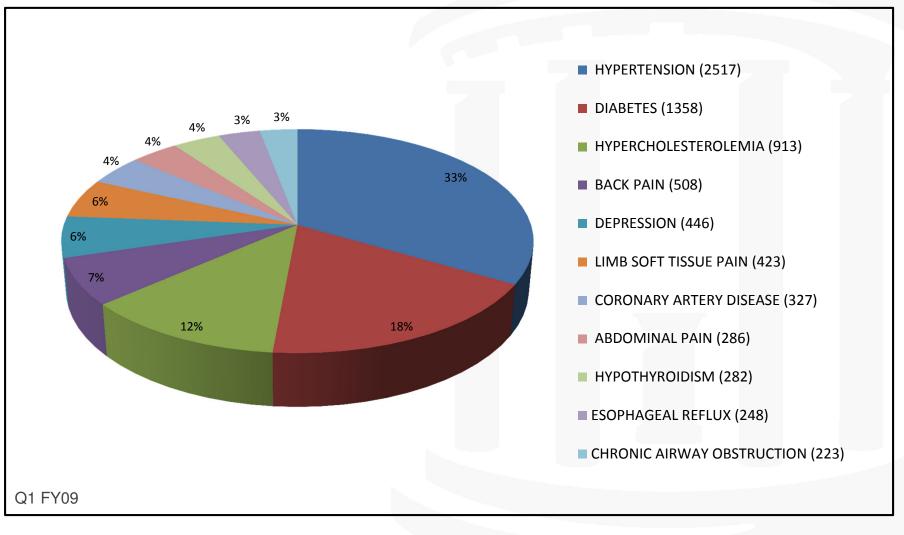
- 125 Physicians (part-time)
 - 25 Attendings
 - 100 Residents
- 12 Nurses
 - 1 RN/Manager
 - 8 LPNs
 - 3 CNAs
 - 1 MOA
- 18 Administrative staff
 - 9 front-desk/registration staff
 - 3 dedicated schedulers
 - 2 referral coordinators (1 specialty, 1 ancillary)

Program staff

- 3 pharmacist practitioners
- 2 physician assistants
- 1 nurse practitioner
- 1 registered dietitian
- 1 social worker
- 3 care assistants
- 1 QI manager
- 1 programmer
- 2 administrative assistants

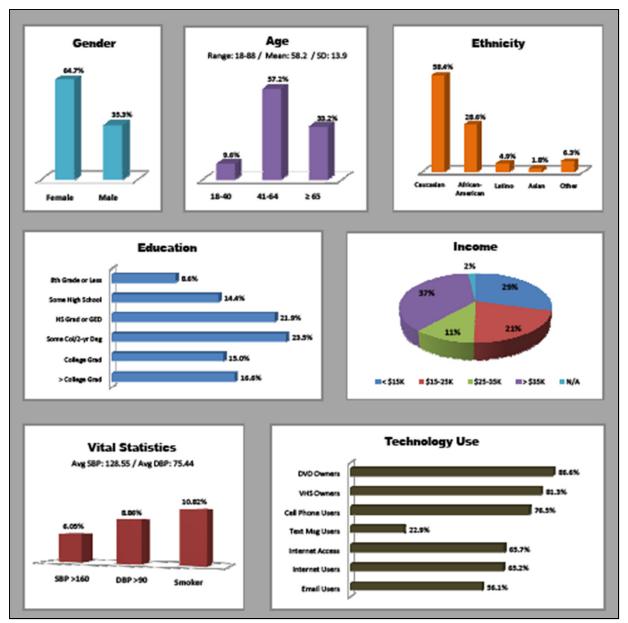


Our patients: Top 10 diagnoses



2/23/2011

Our patients: Key characteristics



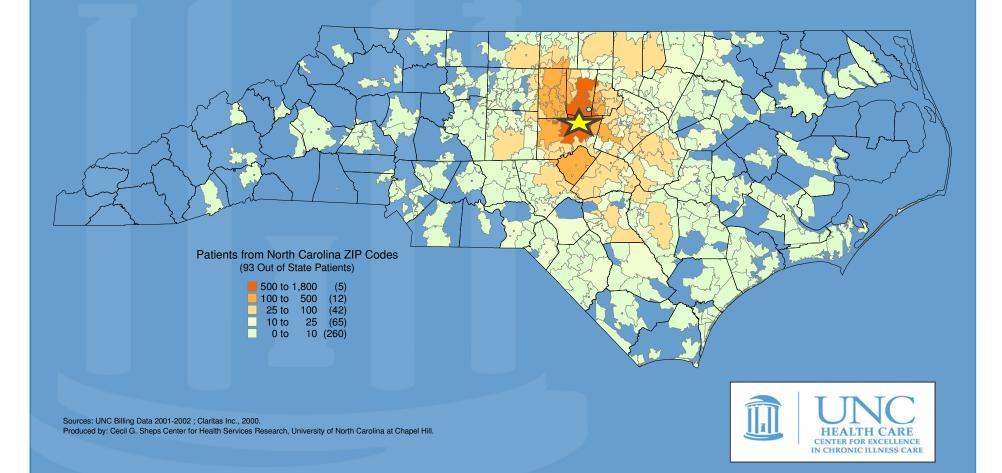
Q1 FY09



Our patients: Where they come from



UNC Internal Medicine Clinic: Patients 2001-2002





Our current 'Enhanced Care' programs

| Active management | Surveillance and prompting |
|-------------------|----------------------------|
| Diabetes | Heart disease |
| Anticoagulation | Colon cancer |
| Chronic pain | Cervical cancer |
| Depression | ?Transitions |
| Decision support | |

All programs grounded in quality improvement efforts

Link to more information: <u>http://www.med.unc.edu/im/staff/clinic/programs</u>



Practice patient breakdown: Every patient receives 'enhanced care'

FY10 Annual Visit Volume: 41,404 (**3215** New / **38,189** Return)

10,056 unique, active patients



What we learned from the early years

A successful program must include:

- Consensus backed by evidence-based algorithms
- A multidisciplinary team
- Care coordination and management
- A registry with decision support for proactive care
- Reporting, reporting, reporting

Persistence and leadership are key

Appropriately designed interventions or systems can overcome patient vulnerability

Continual evolution, change is necessary, an opportunity

Embrace rapid cycle change and the MFI

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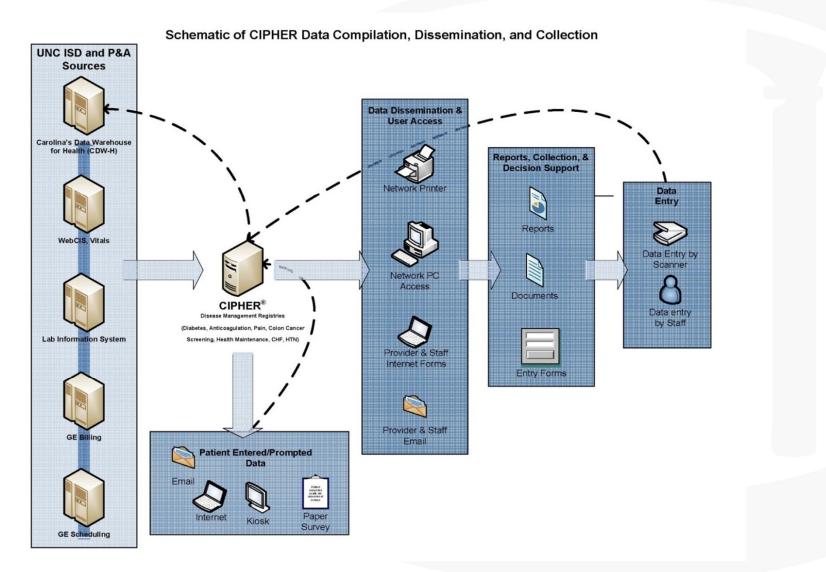


Lessons learned

A registry with decision support for proactive care



Advanced, integrated registry





Lessons learned

 Consensus backed by evidence-based algorithms



Evidence-based algorithms

Our algorithms are:

- Evidence based
- Consensus driven

Algorithms

- Standardize care
- Set expectations
- Facilitate reporting/ improvement
- Enable optimization of the care team

Standing Order: Metformin (Glucophage®) Initiation and Titration Divisions: General Internal Medicine General Internal Medicine Extenders are allowed to initiate and titrate metformin per this standing order. Metformin should be initiated at 500 mg qd or bid. The pharmacists are to call the patient in 10-14 days to obtain at home blood glucose readings and assess possible adverse effects. If the patient is tolerating the medication, average blood sugar is > 140, and there are no unexplainable episodes of blood sugars < 70, the Extender may increase the daily dose of metformin by 500-850 mg. The Extender will reassess the patient in 10-14 days. Metformin current dose 10-14 day phone assessment* No problem Problems The Daily dose by Common side 500-850mg effects** (Max dose in titration scheme = 2000mg/day if Consult with < 65 vo. 1500mg/d if ≥ 65 Continue or refer to vo: if \geq consult M D.) current dose M.D. reassess *Assessment: adverse effects, average blood sugars > 140, and no blood sugars < 70 **Common = diarrhea, nausea, abdominal pain, metallic taste, weight loss; uncommon = nuscle aches, malaise dizziness/lightheadedness, weakness, difficulty breathing/rapid breathing Signature Internal Medicine Clinic Director Updated June 9, 2005

For more information:

www.med.unc.edu/im/staff/clinic/programs/diabetes/protocols



Lessons learned

- A multidisciplinary team
- Care coordination and management



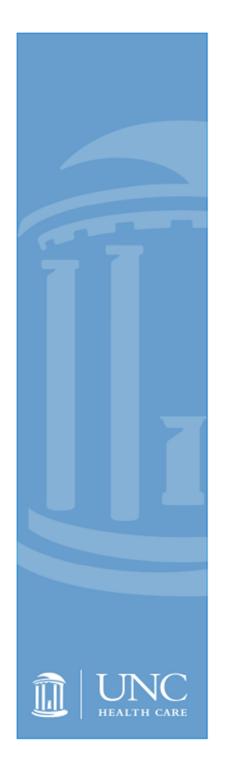
Care Assistant (CA) position

Our multidisciplinary programs are anchored by 'care assistants'

- Graduates considering application to medical school, social work, and/or physician assistant programs
- Full-time employees who participate in direct patient care, program support, and quality improvement work
 - Diabetes Program Care Assistant
 - Chronic Pain Program Care Assistant
 - Depression
 - Transitions care

Link to more information

www.med.unc.edu/im/staff/enhanced-care-programs/CA



The CA role: Diabetes example

Implement Enhanced Care evidence-based algorithms to direct care:

- regular phone calls to patients for reinforcement and intervention
- education, instruction (i.e., glucometer, injections)
- assessment of adherence and progress
- symptom assessment
- patient oriented problem solving
- Patient liaison between clinicians and staff
- medication management (with extender support)
- depression screening follow-up
- smoking cessation counseling



Lessons learned

- Proactive care
- Evolution, change is necessary



Our own evolution- pre-visit, out of clinic

| Interest in Hypothetical Online Patient Portal | | | | |
|---|------------------------------|-------------------------|----------------|--|
| Interested in doing online: | Internet Users n = 122 | Non- Users n = 65 | All n = 187 | |
| Receiving health information from the clinic | 87% | 40% | 71% | |
| Asking PCP questions between visits | 87% | 37% | 70% | |
| Receiving messages from the clinic | 88% | 40% | 71% | |
| Providing information about medical problems before a visit | 88% | 40% | 71% | |
| Discussing medical problems with other patients | 55% | 26% | 45% | |

Surveys and education driven by IT and decision support

Algorithms drive survey delivery

- Patient identification through diagnosis codes
- Demographics
- Branching logic within surveys
- Eligibility
- Data from patients to drive the system
 - Patient specific decision aid delivery
 - Drives care at point of service



Patient Health Survey

Welcome

This is the Internal Medicine Clinic's Patient Health Summary. There are some questions we'd like you to answer.

The information that you give us here will:

- . Help your doctor know how you feel right now and what has been going on since the last time you spoke
- . Help you get the most out of the time with your doctor by providing you with health information on things that are important to you.

To Do Now



Please click on the clipboard to complete your patient health survey. This survey will ask you a few quick questions about how you are feeling right now and about what has been going on since the last time you talked to your doctor.

Other Information You Might Find Interesting



Living Better with Chronic Pain

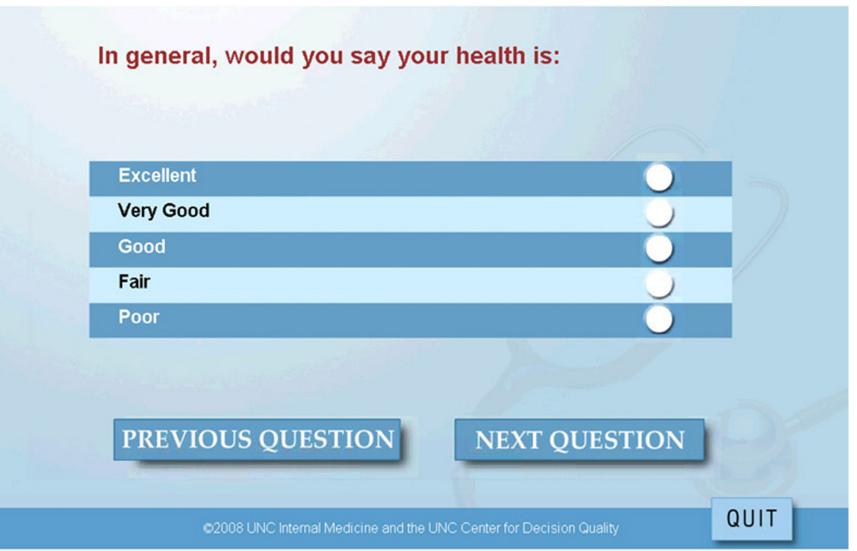
This program presents information for patients living with chronic pain.

EXIT

OUNC Internal Medicine and the UNC Center for Decision Quality



Patient Health Survey





Patient Health Survey

Our records show that you have not seen this video yet. Please press play to start it.



©2008 UNC Internal Medicine and the UNC Center for Decision Quality

| | P FINAL REPORT |
|-----------------------------------|--|
| HEALTH CARE | PREVIOUS SCREENING AND PATIENT REPORTED SYMPTOMS ~Patient Reported Information - collected on: 03/29/2010~ |
| New Patient | PATIENT REPORTED GENERAL HEALTH STATUS: Excellent Health Summary Completed by: PATIENT |
| Patient Record | |
| CPOE 🖸 eChart | :::::::::::::::::::::::::::::::::::::: |
| GICU Flowsheet | :::::::::::::::::::::::::::::::::::::: |
| | : Hip Pain: X : : : : : : : : : : : : : : : : : : |
| Schedules | ++ :Knee Pain: : X : : |
| Activity List | ++ : Diabetes: : X : : |
| Patient Lists Inpatient Census | PATIENT REPORTED SCREENING: Patient DENIES personal history of COLON CANCER |
| Logoff | |
| Reference | : NEVER :OUT OF DATE: UP TO :DECISION: : SCREENED : SCREENING : DATE :SUPPORT : : : : : : : : :ELIGIBLE: |
| Administration | +=====+ :COLON CANCER: X : : : : : |
| Help (919-966-5647) | * Patient accepted decision support material for this topic VIEWING REPORT: Once the patient has completed the decision support material, a report will b |
| | Electronically signed on 03/29/2010 by CRISTIN COLFORD |

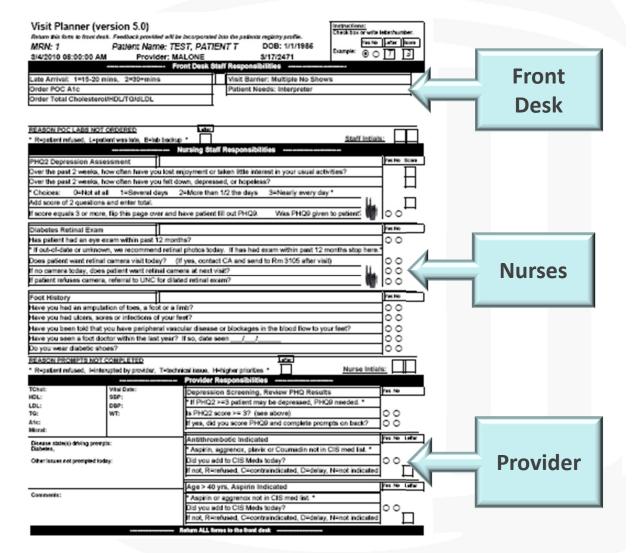


Lessons learned

- A multidisciplinary team
- Care coordination and management
- A registry with decision support for proactive care

The Visit Planner 5.0

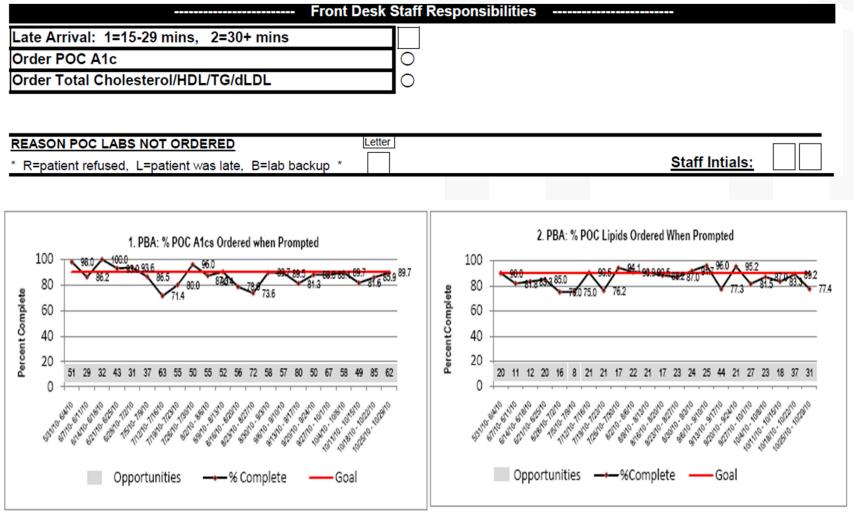
- Introduced in 2008
- Pivotal to planned care approach
- Specific prompts to assess needs
- Coordinate/identify team roles throughout the visit
- Spread interventions among a larger team
- Improve patient care
- Help patients access clinic services



www.med.unc.edu/im/staff/clinic/programs/diabetes/Tools



Front Desk Staff Prompts



www.med.unc.edu/im/staff/QI/reports/



Nursing Prompts

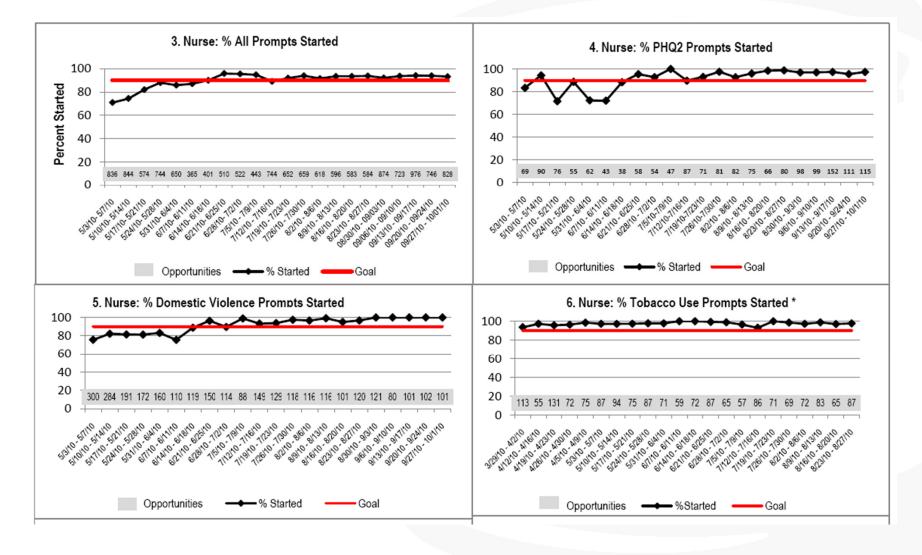
- Nursing Staff Responsibilities --

--No prompts indicated today--

| | Nursing Staff Responsibilities | |
|--|--|--------|
| | Pneumovax Indicated | Yes No |
| | Patient had previous pneumovax?// at UNC or Outside Facility | 00 |
| | If no, given today? | 00 |
| | If not given today, was pneumovax refused? | 00 |
| | If not given today, was pneumovax delayed until next visit? | 00 |
| | If not given today, was it contraindicated? | 00 |
| | Patient Education Indicated | Yes No |
| | * Nurse, ON COMPUTER please open IMC PATIENT EDUCATION link in Internet Explorer FAVORITES MENU. * | İ |
| | * Call Chris or Leslie on the walkie or at 6-0106 with problems. * | 1 |
| REASON PROMPTS NOT COMPLETED | Did you open the website? | 00 |
| * R=patient refused, I=interupted by provider, T=techr | * R=patient refused, I=interrupted by provider, T=technical issue, H=higher priorities * | |
| | DV Screen Indicated | Yes No |
| | Do you feel unsafe in your current relationship? | 00 |
| | In the past year, has your partner hit, kicked or otherwise hurt or threatened you? | 00 |
| | If any answer is 'Yes', contact Beacon Program. Beacon Program contacted? | 00 |
| | If any answer is 'Yes', notify provider. Provider notified? | 00 |
| | Unable to screen * R=pt refuse, N=not in relationship, S=setting inappropriate * | |
| | REASON PROMPTS NOT COMPLETED Letter * R=patient refused, l=interupted by provider, T=technical issue, H=higher priorities * Nurse Intial | s: |



VP prompt response - nurse



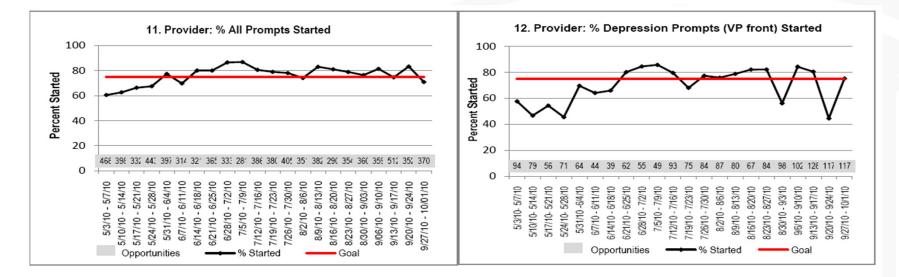


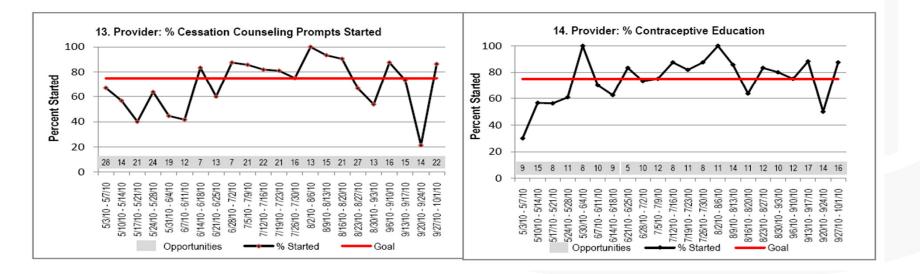
Provider Prompts

| | | | | | Provider Responsibilit | ies | | |
|-------|-------------------------|--|------------------|--------------------------------------|---|---|---------------|--------|
| LDL: | 263 74 164 124 | 2/1/2010 2/1/2010 2/1/2010 2/1/2010 | SBP: 1 DBP: 6 | 68 62.01 | No prompts indicated today | | | |
| | | s) driving promp | | | | | | |
| Comme | ents: | | | | | Provider Responsibilities | | |
| | | TChol HDL: LDL: TG: A1c: Micral | 41 5.4 | 8/26/2009 8/26/2009 10/10/2009 | Vital Date: 7/12/2010 SBP: 120 DBP: 85 WT: 73.4 PHQ Date: PHQ: | Depression Screening, Review PHQ Results * If PHQ2 >=3 patient may be depressed, PHQ9 needed. * Is PHQ2 score >= 3? (see above) If yes, did you score PHQ9 and complete prompts on back? | Yes No | |
| | | Disease state(s) driving prompts: Heart Disease Other issues not prompted today: | | | ts: | Antithrombotic Indicated * Aspirin, aggrenox, plavix or Coumadin not in med list. * Did you add to CIS Meds today? If not, R=refused, C=contraindicated, D=delay, N=not indicated | Yes No Letter | - - |
| | | Comr | ments: | | | Return ALL forms to the front desk | | |



VP prompt response- provider







Examples of other quality reporting



General Internal Medicine Enhanced Care Diabetes Program October 2010 – Run Charts



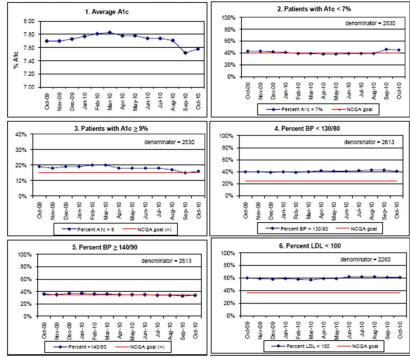
Aim: We aim to improve the care we provide by continually assessing key measures of diabetes care, care processes and the impact of comorbid conditions on glycemic control, cardiovascular risk and complications from diabetes. As a team we will utilize this data to identify areas to improve upon, focus on barriers to optimal care and evaluate the level of care we are providing.

---Key Work/Findings---

Revision of Runchart Data: This month Average A1c was a bit higher, however other measures for A1c, BP and LDL/HDL are fairly consistent. As expected, the Enhanced Care measures (depression screening, pneumovax, foot exams) moved in positive directions due to previously unknown, well-controlled diabetes patients being added to the diabetes registry who are now being provided with additional disease state monitoring.

Patient Follow-up: Care Assistants report that continuity of care has improved. As expected, visit data shows that the number of patient calls has increased as has the number of kipped in clinic visits. The skipped visit increase is due mostly to the increase in well controlled patients added last month. CA-Provider visits for red zone patients and new diagnoses are still pientful as these patients benefit most from the face-to-face case management services. In coming months we should be able to report data on patient interactions by Care Assistant panel.

Current Staffing/FTE: Mid-level providers 0.7, RD 0.25, LCSW 0.5, Program Coordinator .25, Database Programmer 0.5, Admin Asst 0.5, Care Assistants 2.5, QI Coordinator 0.25

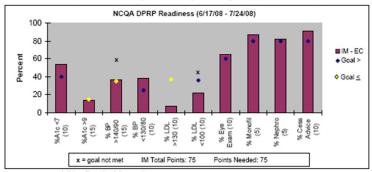


General Internal Medicine Enhanced Care Diabetes Program July 2008 – Quality Improvement Work

See http://www.med.unc.edu/medicine/generalm/guality.html#projects for more details of guality improvement work

| TOPIC | INTERVENTION/CHANGE | STATUS | NOTES |
|---|---|---|--|
| Aspirin Utilization | Project complete. Cleared for publication by IRB. | Final data: 88% patients were contacted for follow up after receiving ASA letter, 46% started ASA due to letter. | Will run query every 6 months to find patients not on ASA and complete letter campaign. Will wor on publication. |
| Statin Utilization/ Email alerts | Will resume email alerts in August. | On hold. | Resume after statin/lipids division meeting 7/31/08. |
| POC Testing | Have front desk staff identify patients for testing from patient yellow sheet stapled to encounter form instead of POC list. | | Majority of missed tests due to missed ordering at front desk. Staff reported that new method was easier than POC list. |
| Statin Medication Utilization/Decision Making | Launched survey to get provider opinions about initiating statins. | Presented current data on patients not taking statins as well as survey results to get division consensus. | Robb to discuss cases w attendings. Resume alert emails. Address non-fasting LDL testing possibilities. |
| Nurse Diabetes Tasks (Monofilament & Smoking Advice) | Continue to track rates of completion based on opportunities. | Monfilament completion rates ranged from 63% to 88% with an average of 78%. Smoking advice was 74%. | Monofilament completion was similar to June. Smoking advice decreased compared to June (80%). |
| Nurse - Diabetes CA follow up (PHQ & cessation counseling) | Continue tracking completion rates for CA follow up when indicated. | and cessation f/u decreased to 53% | CA follow up rates decreased this month. PHQ f/u dropped from 83% to 53%. Cessation f/u from 100% to 53%. |

NCQA Diabetes Physician^A Recognition Program Application Readiness



[^] Attending physicians only

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Next step: alternative care delivery

models <u>http://news.unchealthcare.org/news/2011/January/bcbsnc</u>





HEALTH CARE

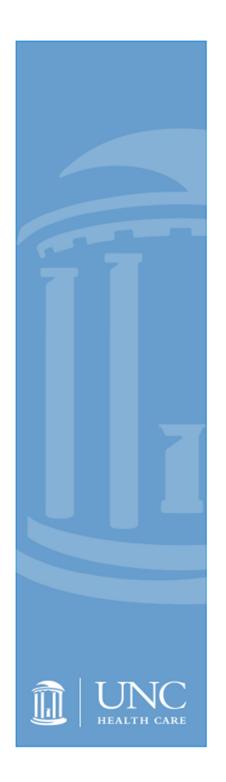
Cross Blue Shield of North Carolina agreement to team up for a model

education and support," said BCBSNC President and CEO Brad Wilson, "We believe this approach will result in improved



Extra Slides

GIM Enhanced Care Diabetes Program Example



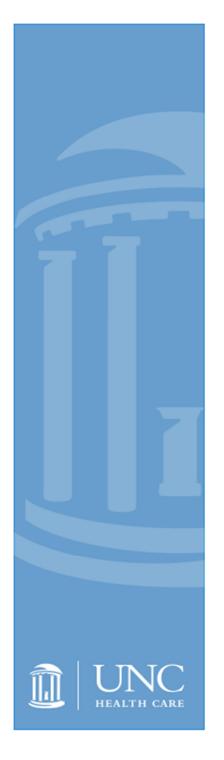
Diabetes services

Education

- Individual sessions and group classes
- Medication education and adjustments
 Insulin teaching
- Glucose meter
 - Teaching, troubleshooting
 - Download in clinic

Retinal Camera

- Patient Follow-up
 - Visits
 - Phone calls



Case management

Care Assistants assigned to group of patients:

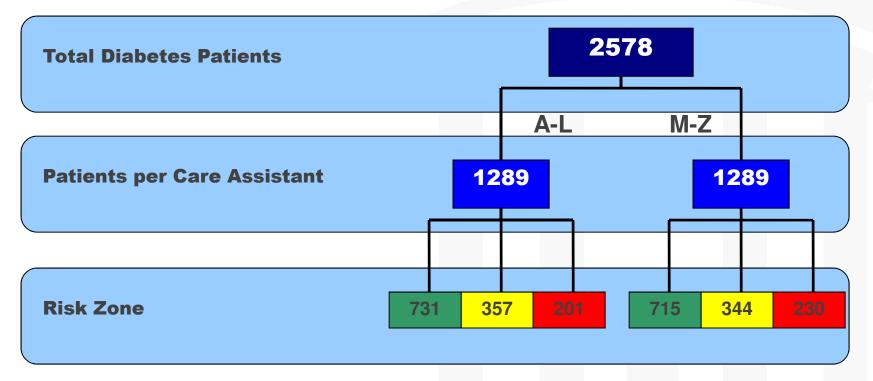
- Improved, personalized communication to create partnership
- Enhanced patient monitoring

Patients that need extra help:

- Proactive phone follow-up (before/after visit)
- Improved visit coordination
- Improved utilization of clinic services
- Improve access to care (transportation and appointment)



GIM diabetes patients

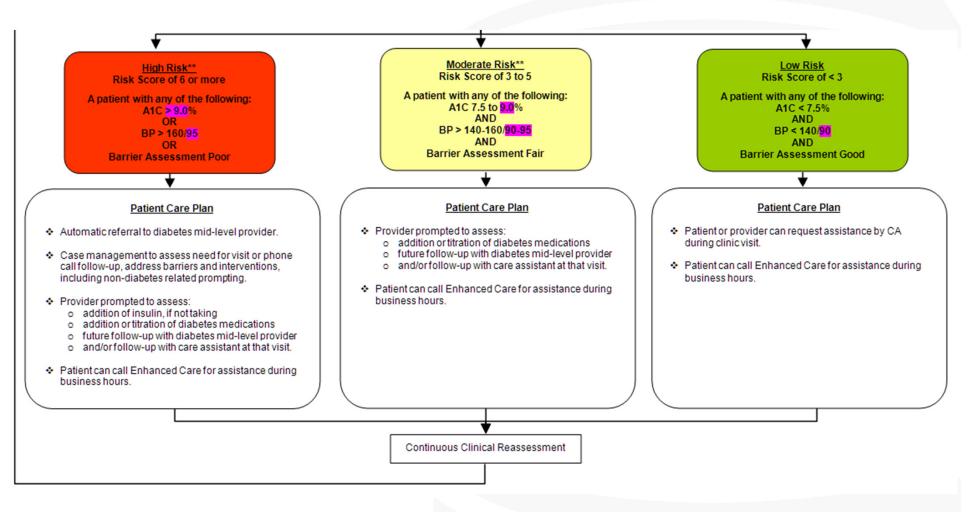


Risk Zone calculation (includes, but not limited to):

- A1c
- Blood Pressure
- Key medication use
- Depression assessment
- Smoking assessment



Diabetes patient zones





High Risk Zone

- Call 2 weeks before visit
- Care Assistant follow-up in clinic
- Call on same day if no-show
- Call within 2 weeks after visit
- Visit coordination for other clinic services





Case Management of High Risk Patients



Pre-clinic call



Postclinic call

Pre-clinic call:

- Not checking blood sugar
- Eye exam out-of-date
- No-show for last appointment

Intervention:

- Assessed appropriate use of medication
- Plan for glucose monitoring
- Confirmed upcoming clinic visit
- Scheduled retinal camera appointment at upcoming visit
- Reminded to bring meter and medicines





In clinic visit:

- Stamped provider schedule
- On arrival, meter downloaded, medication assessed and CA identified that patient had not been taking Metformin
- Communication with provider plan to restart Metformin and begin daily walking routine
- Provided summary sheet with goal, medication changes, follow-up plan and contact information
- Patient taken to retinal camera





Post-clinic call

2 week post-clinic call:

- Medication compliance
- Blood sugar monitoring
- Goal to start daily walking routine
- Patient reported GI distress

Intervention:

- Precepted with Diabetes
 Practitioner
- Adjusted Metformin dose
- Phone follow-up in 1 week



Extra Slides

GIM Enhanced Care Diabetes Program Example



Referral Coordination

| | DICINE |
|--------------------------------------|---|
| | Directories Maps & Directions News Make a Gift Careers |
| Clinic Support \ | Nebsite |
| General Internal Medicine Home | You are here: Clinic Support Website |
| Email Admin | SPECIALTY CLINIC REFERRAL FORM |
| Reporting | Provider/Patient Information |
| Users / Roles Provider List | Provider/Patient Information |
| Logout | Provider ID:(6 digits) 230631 Provider Name: Robb Malone |
| | Provider Email: rmalone@med.unc.edu Pager Number: 216-5736 |
| | Submitted by: Robb Malone Email Address: rmalone@med.unc.edu |
| | Phone: (5 digits) Date Submitted: 02/08/11 |
| | Patient Information: |
| | First Name: MR # (include check digit) |
| | Request Information |
| | Referral type: New to referred clinic Return to referred clinic |
| | Referring to: select one When: Outine Vuthin 2 weeks |
| | Diagnosis/Symptoms: |
| | Reason for Referral: |
| | I have informed the patient that he/she will need to call to schedule this appointment: Yes C No C |
| | Priority tracking takes a lot of effort. See WebCIS Note Date: Please reserve its use for the most important referrals. |
| | Priority referral; needs tracking - Yes: 🔿 No: 🕥 |

- 1 member of clinic staff
- Role defined as:
 - Local expert
 - Liaison with specialty practices
 - Navigating the appointment process
 - Informing the provider of issues
 - Closing the loop