This product was developed by the Proyecto Vida Saludable at the Holyoke Health Center, Inc. in Holyoke, MA. Support for this product was provided by a grant from the Robert Wood Johnson Foundation® in Princeton, New Jersey.

Holyoke Health Center

Chronic Care Teams February 2005

Holyoke Health Center

- Located in the center of downtown Holyoke Massachusetts
- Patient population 15,000
- Population Served
 - 1051 patients with diabetes
 - 1263 patients with Asthma
 - 703 patients with depression
 - 182 patients with HIV

Asthma Team

- Dr. Jackie Spain, MD, Physician Champion
- Ruthie Sustache, CMA
- Hilda Rosario, RN, BSN
- Martha Fisk,RN,BSN
- Iris Lopez, Data Entry Specialist
- Angela Scibelli, MIS

Depression Team

- Megan Mistry, MD, Physician Champion
- Alejandro Esparza, MD
- Nancy DiMattio, RN, MSN, MPH, CS
- Hilda Rosario, RN, BSN, Care Manager
- Marybeth Manning, RN
- Myrna Pedrosa, MA
- Tracy Santana-Seager, LPN, Data Entry Specialist

Diabetes Team

- Dawn Heffernan, RN,MS Diabetes Program Manager
- Cathy Korey, MD, Physician Champion
- Donna LaRoque, LPN
- Maly Kentish, MA
- Jennifer Kennedy, RD
- Diana Soto Lifestyles Coordinator
- Tracy Santana-Seager, LPN

HIV/AIDS Team

- Alejandro Esparza, MD, Physician Champion
- Norman Deschaine, RN, Case Manager
- Marybeth Manning, RN
- Brenda Encarnacion, MA
- Jesenia Fontanez, MA
- Gail Gramarossa, MPH, CHES

Organizational Aim:

 Our goal is to improve the care of our patients with chronic disease by redesigning our delivery system and implementing the components of the Chronic Care Model. We will accomplish this by maintaining a functional patient registry, fostering patient self-education and increasing provider awareness of guidelines for asthma, diabetes, depression, and HIV care.

Asthma: Key Measures

	Goal	Results
 Patients with persistent asthma on anti- inflammatory meds 	>95%	60%
 Average number of symptom free days 	>10	11
 Asthma patients with severity assessment 	90%	81%

Asthma: Self- Management

- Asthma Action Plans are written with patients during visits and given to them to keep at home
- Weekly asthma education and support groups for six weeks; average attendance 13 patients
- Asthma outreach worker conducts home assessment for asthma triggers and develops a trigger reduction plan with the family

Asthma: Community

- Conducted bi-weekly health screenings at Our Lady of Guadalupe Church for 3 months
- Conducted health screening at a local food pantry
- Team participates in the Pioneer Valley Asthma Coalition

Asthma: Healthcare Organization

- Our asthma case manager is available to visit families of children with asthma who have missed follow up appointments.
- An asthma case manager was hired to provide outreach and improve provider access to families reticent to engage in our health care system.
- Weekly Asthma Team meetings

Asthma: Decision Support

- When payers identify a patient as having severe asthma, pharmacy utilization information is provided, the chart is reviewed and the information forwarded to the primary provider.
- Primary Care Provider utilizes this information to further educate the patient and family about asthma management techniques.

Asthma: Decision Support

Implemented into our Delivery System

 The registry data entry form includes a short version of asthma guidelines to help guide severity assessment and medication management.

Asthma: Clinical Information System

- The PECS registry is being analyzed to provide more accurate feedback to providers. When this process is complete, providers will receive their individual data.
- Our asthma case manager is now obtaining from PECS a list of all families with a child with moderate or severe persistent asthma and contacting them to offer them home assessments and teaching on indoor asthma trigger exposure reduction. Previously this service was offered only if the patient was referred by a provider.

Asthma: Delivery System Design

Implemented into our Delivery System

- All nurses and medical assistants are trained to offer teaching in use of peak flow meters and medication delivery devices to asthma patients during visits.
- A case manager is trained in home assessments for indoor asthma trigger recognition and reduction.

Depression: Self Management

- Chronic Disease Self Management Group attended by patients with depression and co-led by the Care Manager
- Education and self management assistance provided to patients by the Care Manager who utilizes educational materials about depression and other co-morbidities
- Care Manager helps to develop, document and monitor patient self-management goals through the use of the Patient Action Plan
- Care Manager utilizes community and health center resources to assist patients in achieving self-management goals

- Care manager attends team meetings with Mass.
 Consortium on Depression in Primary Care once a month.
- Depression Team attends a training with the Mass.
 Consortium on Depression in Primary Care every 3 months.
- Care manager meets with psychiatrist for supervision and case review once a month.

- Psychiatrist meets with Depression Team for case review once a month and is open to all providers
- Depression Care Management Tools Manual is available to the care manager and includes educational materials utilized with patients such as a Patient Action Plan, medication information and educational handouts
- Care Manager trained to become a facilitator of Chronic Disease Self Management groups

Implemented into our Delivery System

 Depression Care manager has developed and implemented a depression care manual which includes educational materials in English and Spanish for patients of all learning abilities

Depression: Clinical Information System

- Conducted several meetings with our management information specialist to clarify questions about PECS registry information and accurate data entry
- Recently completed chart reviews of patients screened for depression to verify the validity of our data gathered to date
- Monthly Pecs reports generated to verify the accuracy of the data

Depression: Delivery System Design

- Care manager provides depression screening at the clinic once a week
- 122 patients screened for depression
- Care manager trained all medical assistants in the adult clinic to screen patients utilizing the PHQ9
- Nursing staff schedules patients into the care manager's daily schedule

Depression: Healthcare Organization

- Holyoke Health Center administration continues to supports weekly depression team meetings
- Contracted psychiatrist attends the depression team meeting for clinical case review and consultation once a month – this meeting is open to all providers
- Holyoke Health Center has contracted with two psychiatrists who are available by phone for consultation to all providers
- Care manager attended Chronic Care Self
 Management training and facilitates groups for patients with chronic diseases

Depression: Healthcare Organization

Implemented into our Delivery System

 Nine health center Chronic Disease Self-Management (CDSM) Trainers facilitate ongoing groups for patients with chronic diseases including depression. Depression care manager is one of the CDSM trainers at the Holyoke Health Center

Depression: Community

- Organized several meetings with local mental health providers who serve our patients to maximize our opportunities for referrals to Spanish and English speaking psychiatrists and therapists
- Care manager attends community meetings with mental health organizations to share information about our program

- Care manager has developed a list of community resources and provides this to our patients with depression
- Care manager encourages patients to participate in education classes and support groups both within our facility and in the community

Diabetes Key Measures

•	<u>Diabetes</u>	Goal	Result
•	Average HA1C	<7%	7.7%
•	Patients with 2 HbA1C's in last year	>90%	63.5%
	(at least 3 months apart)		
•	Documentation self management goal setting	>70%	20%
•	Patients with BP < 130/80	>40%	33.9%
•	Patients with LDL <100	>70%	50.%
•	Aspirin or other antithrombotic agent use	>80%	42.7%
•	Comprehensive foot exam in past year	>90%	55.9%
•	Flu Vaccination	>50%	28%
•	Microalbuminuria in last year	>50%	47.7%
•	Dental	>70%	21.9%

Diabetes: Self-Management

Chronic Disease Self-Management Program Master
Trainers conducted a four day Leaders workshop to train
seven additional HHC staff including three promotoras,
one nurse, one nutritionist, and life styles coordinator.
The newly trained CDSM leaders now conduct the six
week Chronic Disease Self-Management Training
Program for patients with a various chronic illnesses
including diabetes

Diabetes: Self-Management

 Provided a two hour lecture for patients with diabetes and hypertension. The presenter was a local nephrologists, Dr. Slater. A nutritious balanced lunch was provided to patients in recommended portion sizes. The plate method was utilized when serving patients and half the plate contained a cabbage/greens salad.

Diabetes: Self-Management

Implemented into our Delivery System Design

- Breakfast Club (with supermarket tour 11wks)
- Snack Club
- Diabetes Education Classes (with supermarket tour 11wks)
- Exercises Classes (Walking, aerobics and yoga 5days/wk)
- Chronic Disease Self-Management Classes
- Promotoras

Diabetes: Community

- Participated in the Diabetes Detection Initiative evaluation group
- Conducted two flu clinics at the War Memorial in Holyoke in November and December
- Participated in several community events including Festival de La Familia and Celebrate Holyoke

Diabetes: Community

Implemented into community

 HHC Chronic Care Teams participate in community activities such as the Farmers Market where EBT is available for residents to purchase local produce using food stamp system. The Center offers offsite diabetes detection and screening and participates in community flu clinics on a yearly basis.

Diabetes: Organization of HealthCare

Diabetes Chronic Care Team meets weekly

 Regular meetings and reports with the Chronic Care Team Senior Leader

 Executive director and marketing director attended Diabetes Detection Initiative debriefing in Washington DC.

Diabetes: Organization of Healthcare

Implemented into our delivery system

- Senior Leaders continued support of the Chronic Care Model: Diabetes Chronic Care Team meets on a weekly basis
- Example Executive Director and Marketing Director traveled to Washington DC for the Diabetes Detection Initiative debriefing meeting

Diabetes: Decision Support

- Monthly in-services to update the clinical and support staff and providers on new diabetes information
 - Dr. Mulhern, local nephrologist, presented a conference to the nurses and providers on medical management of patients with hypertension and diabetes
 - Dr. Slater provides medical update on medications and the treatment of hypertension
- Extensive training for the diabetes program staff
- Diabetes Program Policy and Procedure Manual developed

Diabetes: Decision Support

Implemented into decision support

- Diabetes: Regular staff training to update staff about current diabetes management and self-management strategies
- Ongoing review and update of policies and procedures

Diabetes: Clinical Information

- The PECS registry is utilized to print out the individual providers outcomes and combined provider data. Physician champion discusses outcome data with providers on a monthly basis
- Registry is utilized to identify and follow-up with patients who have not been seen by their providers in the last four months
- Registry data is utilized to identify patients newly diagnosed with diabetes

Diabetes: Clinical Information

Implemented into clinical information

 Data entry specialist inputs all PECSs data for diabetes patients, significant improvements in accuracy of data

 Monthly review and analysis of registry data to improve clinical outcomes

Diabetes: Delivery System Design

- Hypertension clinic for patients with diabetes every Tuesday morning
- Clinic for patients newly diagnosed with diabetes. Initial treatment plan is started and patients are referred to a primary care provider and diabetes programs
- Promotoras and nurses provide ongoing follow-up for patients with diabetes who have not had an appointment in the clinic with the provider in the last 4 months

Diabetes: Delivery System Design

Implemented into Delivery System

- Diabetes: Dr. Angelo, endocrinologist provides care and consultation to patients every other week one day per week
- Hypertension clinic for patients with diabetes is offered on a weekly basis
- Diabetes Clinic for newly diagnosed patients offered on a weekly basis

HIV/AIDS Goals and Achievements

Key measure Visit every 3 months	<u>Goal</u> 95%	<u>Jan 2005</u> 64%
Adherence teaching at last visit	95%	96%
Viral Load < 75	75%	60%
Flu Shot every year	95%	73%
Cervical Pap every year	60%	53%
PPD placed and read every year	50%	40%

Self-Management: HIV

- Continued with procedure that all HIV+ patients on HAART therapy or having difficulty with adherence are being enrolled in MAP (Medication Adherence Program) and receive more intensive counseling and education from the Nurse Case Manager
- Continued bi-weekly support group (2nd and 4th Tuesday of the month) for HIV+ patients; attendance averaged 4-8 persons per session and topics addressed included: depression; substance abuse; nutrition; and relapse prevention

Self-Management: HIV

 Continued procedure that all new patients receive Medication/ ID Information Cards consistently provided to all POF patients and updated on each visit basis

 Medication Beepers continually distributed to all new HV+ patients in order to improve and facilitate adherence to HAART

Self-Management: HIV

Implemented into our delivery system

- Medication cards and patient information packets given to all new HIV+ patients
- New patients started on HART followed by medication adherence program (MAP)
- Patients with medication problems are referred to MAP program by HIV specialist

Community: HIV

- Conducted community outreach, media placements and special events to observe "National Latino AIDS Awareness Day" on October 15th. Offered free HIV counseling and testing to patients and local residents. Provided testing to 30 persons at Holyoke and Chicopee sites; 100% returned for their results 2 weeks later
- Planned and conducted staff and consumer "remembrance tree" event for World AIDS Day on December 1st

Community: HIV

Implemented into our delivery system

 HIV/AIDS services staff team will coordinate outreach events for the National Latino AIDS Awareness Day (October 15th) and World AIDS Day (Decemebr 1st) each year

Healthcare Organization: HIV

- HIV Collaborative continued to meet weekly on Tuesdays from 1-2 pm. In addition, the HIV clinical team meets bi-monthly on Fridays.
- RN Case Managers meet with providers monthly and are in a daily contact at HHC for Continuity of Care.
- HIV team members met with local provider of mental health care and HIV/AIDS legal services staff to expand knowledge of resources and increase referrals.

Healthcare Organization: HIV

Implemented into our delivery system

 All HHC providers and nurses utilize standardized data input forms to collect all pertinent information for quality primary care for patients with HIV

Decision Support: HIV

- Worked with agency QI program and regional Ryan White III partnership primary care sites to update guidelines (based on revised federal standards) and finalize policies on HIV treatment and care.
- Planned and conducted an in-service for staff on HIV clinical trails available to patients in our geographic area.

Decision Support: HIV

- Collaborated with New England AIDS Education and Training Center (NEAETC) to sponsor on-site HIV/AIDS primary care provider training seminars every other month; held sessions on Opioid Dependence Treatment and HIV Care in Cambodia in October and December, 2004.
- All new staff members attend orientation and are trained by Nurse Case Manager in current HIV/AIDS therapy guidelines. Staff orientation includes session on the principles and practice of the Chronic Care Model and ongoing Collaboratives at the Center.

Decision Support: HIV

Implemented into our delivery system

 All providers have access to state-of-the-art guidelines on HIV/AIDS treatment via updated notebooks in each exam room

Clinical Information Systems: HIV

- Began PDSA cycle to improve consistency of providers completing HIV patient visit note and submitting it to data coordinator for data entry
- Installed upgraded HIV database to meet reporting requirements for federal and state funders; trained all staff in new database features
- Developed means to more easily retrieve data from database for quarterly and annual reports.
- Data Coordinator is responsible for updating database with visit information on a daily basis

Clinical Information Systems: HIV

Implemented into our delivery system

- Patient visit form sent to data coordinator for daily data entry; all sites use upgraded patient registry database
- Quarterly review and analysis of registry data proves to be an effective tool to improve clinical outcomes

Delivery System Design: HIV

- Continued New Client intake process implemented and utilized by RN Case Managers.
- Continued PDSA cycle to increase referrals and facilitate access to dental care for HIV+ patients.
 Dental Department is asked to send a list of all HIV+ patients seen each month to Data Entry Manager for updating in database. An internal referral for a dental screening exam is made for all new HIV+ patients.

Delivery System Design: HIV

Implemented into our delivery system design

- All new HIV+ patients are referred for an initial dental exam and meeting with onsite mental health counselor as part of intake
- HIV case managers assist patients with completing Dental Registration, Ombudsman Application, Mass Health and HDAP program applications at initial visit

Redefin: Access

- CurrentlyTesting:
 - Patient calls for advice and/or same day appointments to Primary Care Team rather than Same Day Care Team

Redefin: Implemented Changes

- Appointments reserved for PCP patients with short term follow-up needs.
- Pharmacy Fax Form for Refills
- Single person assigned to Front Desk duties.
 Other MA cross trained.
- Float MA to assist with high volume phone times, referrals, no-shows, etc.

Redefin: Implemented Changes

- Protocol for handling DNKA's
- Process for New Patients to meet with Financial Counselor for enrollment into free care, sliding fee, etc.
- Encounters reviewed by front desk and returned immediately to providers for completion

Redefin: Implemented Changes

 One billing clerk assigned to microsystem for feed back

Redefin: Challenges

- Training of staff
- Staffing shortages due to LOAs
- Complexity of insurance programs and continued changes in MassHealth and Uncompensated Care Pool
- Linkages between finance and operations still not fully developed

Redefin: Successes

- Change in team roles resulting in fewer registration and billing errors
- Scheduling of New Patients with Financial Counselor to complete all uncompensated care pool and sliding fee applications resulting in enhanced revenue collection
- Pharmacy refill process resulting in better utilization of nursing time and greater patient satisfaction

Redefin: Successes

- Review of patient encounters at clinic site before forwarding to billing resulting in fewer returned encounters
- Spread of all implemented changes from microsystem to secondary primary care team

Successful Spread Strategies

- Nurse and promotoras working together to follow-up on patients who have not been seen in the clinic by their providers in over four months
 - Nurses send a letter to patients to call the clinic
 - Patients who do not respond to the patient are referred to the promotoras
 - Promotoras send letters, make phone calls, and provide home visits to attempt to find patients

If we had a magic wand.....

- Our HIV+ patients ongoing issues with longterm substance abuse, homelessness and chronic poverty would be resolved
- Patients would have access to all their medical supplies and medications that they need

We could use help with.....

- Scientifically valid program models using incentives and behavioral risk reduction/harm reduction strategies for our HIV+ patients
- Health information on Chronic Diseases for Latino, low-literacy audiences
- Low cost medical supplies

A Patient's Story

• Patient had not been in to the health center in over four months. A promotora was sent to his home for an outreach. Patient reported that he had just returned from Puerto Rico where ha had been for several months. He had necrotic foot ulcer and had been out of his insulin medication for several months. He was brought in by taxi to the health center to same day care and was then admitted to the hospital for blood sugar control and surgery for removal of his toe.