



The Value of Utilization of an Electronic Health Record in the Provision of Services and in Quality and Data Management in a SBHC

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Presenter Disclosures

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No relationships to disclose



Outline

- Community Health of South Florida Inc.
- CHI Collaboration with Health Choice Network
- CHI-School Based Program
- EMR Overview
- EMR Snapshots
- Case Study
- Advantages vs. Disadvantages
- Data Management
- Conclusion
- Questions

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Community Health South Florida Inc.

- CHI
- Federally Qualified Health Center (FQHC)
- 38 years in business
- Population we serve
- Over 65,700 unduplicated users
- Services

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CHI-Population

During 2008, CHI provided integrated health care services to our culturally and linguistically diverse residents of South Miami-Dade County, and the Florida Keys, representing over 335,647 patient care visits.

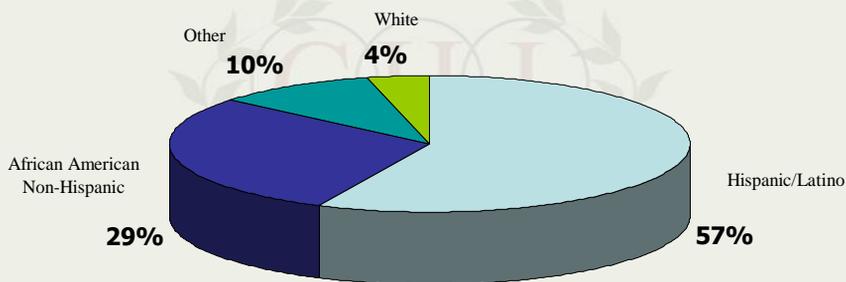
ETHNICITY:

Hispanic or Latino	57%
Black/Non Hispanic	29%
Anglo/Non Hispanic	04%
Other	10%

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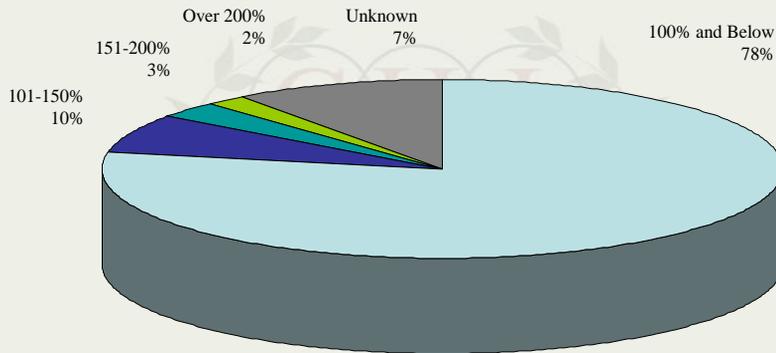
CHI -Population



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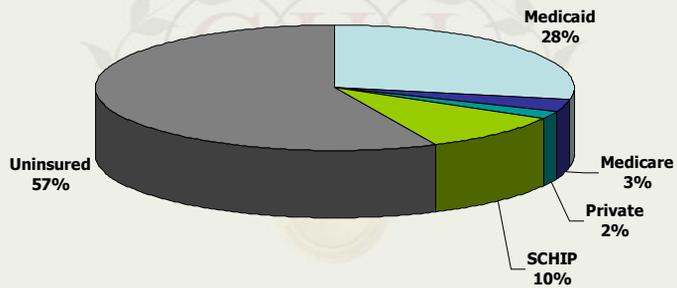
CHI-Population



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CHI-Insurance Status



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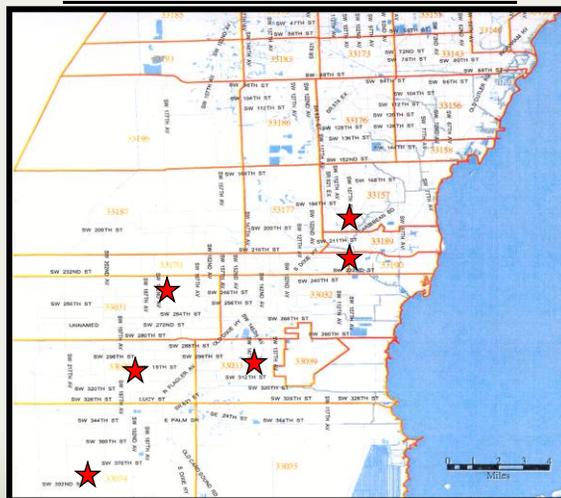


CHI-Services

- Family
- Pediatrics
- Pharmacy
- Immunizations
- Dental
- OB-GYN
- Optometry
- Laboratory
- Radiology
- UCC
- Crisis Intervention
- Detox
- Individual/Group Counseling
- Medication Management
- Family/Children Services
- Substance Abuse



CHI-Catchment Area





CHI-SBC

- Operated School Based Centers (SBC) since 1994
- Currently operating 27 SBC in Miami Dade County
- 26 SBC funded by The Children's Trust (TCT)
- Health Choice Network (HCN) in 2007 – awarded contract to oversee school health services in 78 Miami-Dade underserved schools* HCN in direct contract with TCT

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CHI-SBC

- Dorothy M. Wallace Cope South Center
A full service health center providing primary care, pediatric, dental, OB/GYN services including case management and behavioral health care services to pregnant teens and their infants. Staffing for this SBC service site includes: 1ARNP, 1LPN, 1PCT, 1 PFSS

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CHI-SBC



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CHI-SBC

- Dorothy Wallace Cope South
- G. Holmes Braddock Senior High
- Jane Roberts K-8
- Bowman Foster Ashe Elementary
- John Ferguson Senior High
- West Miami Middle
- Flagami Elementary
- Campbell Drive Elementary
- Campbell Drive Middle
- West Homestead Elementary
- South Dade Senior High
- Robert Russa Moton Elementary
- Colonial Drive Elementary
- William A Chapman Elementary
- HA Ammons Middle

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CHI-SBC

- Southwood Middle
- Perrine Elementary
- Howard D. McMillan Middle
- Royal Green Elementary
- Florida City Elementary
- Redondo Elementary
- Avocado Elementary
- Homestead Middle
- Leisure City K-8
- Airbase Elementary
- Laura C. Saunders Elementary
- Homestead Senior High

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CHI-SBC

- Staffing model per school:
0.5 ARNP, 1 Health Aide and 0.5 Social Worker
- Health Services provided
- Every student will have a comprehensive EMR that will integrate clinical information across the continuum of care to improve care delivery and patient outcomes.
- EMR used by health teams

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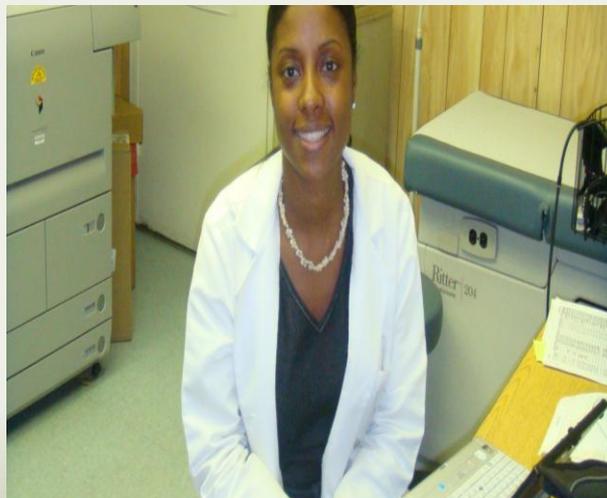
SBC-EMR



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SBC-EMR



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HCN

- HCN is large, integrated network of 54 Community Health Centers
- BOD committed to EMR:
 - Improve Quality of Care
 - Reduce costs
 - Reduce risk
- EMR initiative began in 1996
 - Currently functionalities of EMR across 20+ CHCs

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HCN

- 45+ users in SBC on EMR system
 - Many of whom were new to computers
- Distribution of desktops/ laptops & user licenses
- Wireless set-up in clinics
- HCN development of training manuals and staff training

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SBC-EMR

- Development of SBC EMR forms
- Form development required multi-disciplinary team approach
- Focus group of SBC staff
 - CHC SBC coordinators
 - HCN and CHC Medical Directors, Program Evaluation, Implementations, Informatics, Training, Hardware and Software Support
- Ongoing changes to improve outcomes of EMR

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SBC-EMR

- OmniDoc- A windows- based system that automatically generates progress notes in a user friendly, graphical user interface environment.

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EMR- SBC

- Complaints
- Diagnosis
- Vision/ BMI
- Counseling and education
- Medications
- Lab results
- Socio-demographic information
- Visit history

Electronic Medical Record created either in SBHC or CHC



EMR-SBC

OmniDoc Forms Input - HCN FORM DIRECTORY

HCN FORMS MENU HRSA KEY INDICATORS			TOP DIAGNOSES	
Primary Care ADULT MEDICINE PEDIATRIC WELL WOMAN VISIT HCOS Menu			ALLERGIC RHINITIS HTN ASTHMA HYPERLIPIDEMIA CONTRACEPTIVE VISIT OBESITY DEPRESSION OTITIS DIABETES PREGNANCY HEADACHE URI HIV UTI HYPOTHYROIDISM CARDIO VISIT METABOLIC DISEASES DIAGNOSES	
Specialty Care CARDIOLOGY GASTROENTEROLOGY UROLOGY DERMATOLOGY OB/GYN ENT ORTHOPAEDIC			CLINIC TEAM CLINIC TEAM DISCHARGE ORDERS PROCEDURES/WOUND CARE UCC/AWIS	
Assessment and Care Plan CARDIOVASCULAR RISK ADULT HISTORY PATIENT CARE PLAN LEARNING NEEDS PEDS HISTORY FORM PT EDUC HANDOUTS EXTENSIVE ROS PRE-PROCEDURE FORM DEPRESSION SCREEN EXTENSIVE PMFSH EXTENSIVE PE FORM FUNCTION ASSESSMENT			IMMUNIZATIONS, LABS & IMAGING ORDERS PRIOR IMMUNIZATIONS IMMUN/INJECT ORDERS ADULT IMMUN/INJECT ORDERS PED LABS AND IMAGING ORDERS	
SHORT VISIT FORMS SHORT VISIT NOTE WELL CHILD ATHLETIC COMPETITION IMMUNIZATION(S) PATIENT RECALL MEDICAL CERTIFICATES SCHOOL PHYSICAL CR BEYOND CAPABILITY				



EMR-SBC

OmniDoc Forms Input - HCIOS

ARNP/PA

Social Worker

Nurse

Health Aid

CLINIC TEAM

HCIOS FOLLOW UP

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EMR-SBC

OmniDoc Forms Input - HCIOS VISIT SCREENING NOTE Nurse

Student Info | Screenings | Medications | Visit Information | Visit Problem | Intervention | Education | Outcome

STUDENT ID

GRADE LEVEL

Pre-k Y Kindergarten Y

1st Y 5th Y 9th Y

2nd Y 6th Y 10th Y

3rd Y 7th Y 11th Y

4th Y 8th Y 12th Y

DISABLED Y N // disabled, what type?

Autism Y Behavior disorder Y Physical disability Y

Chronic illness Y Emotional/Behavior Y Vision impairment Y

Mentally challenged Y Learning Disability Y Hearing disorder Y

Unknown Y

HCN FORM DIRECTORY

HCIOS STUDENT FOLLOW UP

Student ID#

Prefix	Modifier	Result	Status	Episode	Onset	Duration	Value	Unit
<input type="text"/>								

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EMR-SBC

OmniDoc Forms Input - HCOS VISIT SCREENING NOTE Nurse

Student Info | Screenings | Medications | Visit Information | Visit Problem | Intervention | Education | Outcome

SCREENINGS

<p>VISIT FOR BMI</p> <p>Height (cm) <input type="text"/></p> <p>Weight (lbs) <input type="text"/></p> <p>BMI (kg/m2) <input type="text"/></p> <p>Percentile <input type="text"/></p> <p>Referral recommended <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p>Referral complete <input type="checkbox"/> Y <input type="checkbox"/> N</p>	<p>VISIT FOR HYPERTENSION</p> <p>Screening exam <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p>Recommended I/u <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p>VISIT FOR DENTAL</p> <p>Dentition In Poor Repair <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p>Recommended I/u <input type="checkbox"/> Y <input type="checkbox"/> N</p>	<p>VISIT FOR IMMUNIZATIONS</p> <p>Recommended I/u <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p>Review Immunizations <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p><input type="checkbox"/> Florida Shots Link</p> <p><input type="checkbox"/> Vaccine Schedule</p>
<p>VISIT FOR VISION</p> <p>Uncorrected</p> <p>Right: 20/___ <input type="text"/></p> <p>Left: 20/___ <input type="text"/></p> <p>Corrected</p> <p>Right: 20/___ <input type="text"/></p> <p>Left: 20/___ <input type="text"/></p> <p>Referral recommended <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p>Referral complete <input type="checkbox"/> Y <input type="checkbox"/> N</p>	<p>VISIT FOR PEDICULOSIS</p> <p>Screening <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p>Lice In The Hair <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p>Nits In The Hair <input type="checkbox"/> Y <input type="checkbox"/> N</p> <p>Recommended I/u <input type="checkbox"/> Y <input type="checkbox"/> N</p>	

HCN FORM DIRECTORY
HCOS STUDENT FOLLOW UP
IMMUNIZATION ORDERS
IMMUNIZATION ADMIN

Visit for: screening for hypertension

Prefix	Modifier	Result	Status	Episode	Onset	Duration	Value	Unit
<input type="text"/>								

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EMR-SBC

OmniDoc Forms Input - HCOS VISIT SCREENING NOTE Health Aid

Student Info | Screenings | Medications | Visit Information | Visit Problem | Intervention | Education | Outcome

PRESCRIPTION MEDICATION ADMINISTRATION

Over the Counter Medications Y N

Prescription Medications Y N

HCN FORM DIRECTORY
HCOS STUDENT FOLLOW UP

Administered medication:

Prefix	Modifier	Result	Status	DTG:	Episode	Onset	Duration	Value	Unit
administered	<input type="text"/>								

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EMR-SBC

OmniDoc Forms Input - HCIDS VISIT SCREENING NOTE Health Aid

Student Info | Screenings | Medications | Visit Information | Visit Problem | Intervention | Education | Outcome

REFERRED BY:		INJURY LOCATION	
Teacher <input type="checkbox"/> Y <input type="checkbox"/>	Student services staff <input type="checkbox"/> Y <input type="checkbox"/>	Classroom <input type="checkbox"/> Y <input type="checkbox"/>	Auditorium <input type="checkbox"/> Y <input type="checkbox"/>
Self <input type="checkbox"/> Y <input type="checkbox"/>	Parent/family member <input type="checkbox"/> Y <input type="checkbox"/>	Cafeteria <input type="checkbox"/> Y <input type="checkbox"/>	Gymnasium <input type="checkbox"/> Y <input type="checkbox"/>
HCioC <input type="checkbox"/> Y <input type="checkbox"/>	Administration/Office <input type="checkbox"/> Y <input type="checkbox"/>	Bus <input type="checkbox"/> Y <input type="checkbox"/>	Dressing Room/Shower <input type="checkbox"/> Y <input type="checkbox"/>
Peer <input type="checkbox"/> Y <input type="checkbox"/>	Other <input type="checkbox"/> Y <input type="checkbox"/>	Restroom <input type="checkbox"/> Y <input type="checkbox"/>	Corridor/Stairs <input type="checkbox"/> Y <input type="checkbox"/>
School health staff <input type="checkbox"/> Y <input type="checkbox"/>		Lockers <input type="checkbox"/> Y <input type="checkbox"/>	Athletic field <input type="checkbox"/> Y <input type="checkbox"/>
		Laboratory <input type="checkbox"/> Y <input type="checkbox"/>	Off Campus <input type="checkbox"/> Y <input type="checkbox"/>
		Economic/Shop <input type="checkbox"/> Y <input type="checkbox"/>	Other school grounds <input type="checkbox"/> Y <input type="checkbox"/>
REASON FOR REFERRAL		INJURY CLASSIFICATION	
Health <input type="checkbox"/> Y <input type="checkbox"/>	Assessment <input type="checkbox"/> Y <input type="checkbox"/>	Accidental <input type="checkbox"/> Y <input type="checkbox"/>	
At-risk <input type="checkbox"/> Y <input type="checkbox"/>	Academic <input type="checkbox"/> Y <input type="checkbox"/>	Non-Accidental <input type="checkbox"/> Y <input type="checkbox"/>	
Behavior <input type="checkbox"/> Y <input type="checkbox"/>	Attendance <input type="checkbox"/> Y <input type="checkbox"/>	Circumstances Known <input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	

HCN FORM DIRECTORY
HCIDS STUDENT FOLLOW UP

Referred here by student services staff

Prefix	Modifier	Result	Status	Episode	Onset	Duration	Value	Unit



EMR-SBC

OmniDoc Forms Input - HEALTH CONNECT MENU

HEALTH CONNECT MAIN MENU

SYMPTOM		
COUGH	DIARRHEA	HEADACHE
DEPRESSION	DIZZINESS	NAUSEA/VOMITING
SICK VISITS		
ADHD	DIABETES	OTITIS
ALLERGIC RHINITIS	DEPRESSION	SCABIES
ASTHMA	GASTROENTERITIS	TONSILLITIS
ATOPIC DERMATITIS	HEADACHE	URI
CONJUNCTIVITIS	OBESITY	UTI
ASSESSMENT AND CARE PLAN		
PATIENT CARE PLAN	PT EDUC HANDOUTS	PATIENT HISTORY FORM
SHORT VISIT FORMS		
SHORT VISIT NOTE	IMMUNIZATION(S)	SCHOOL PHYSICAL
ATHLETIC COMPETITION		

SECTION FORMS

PEDIATRIC PRACTICE MENU	
ANNUAL RISK ASSESSMENT	
PHQ-9	
TB SCREENING QUESTIONNAIRE	
LEAD RISK ASSESSMENT	
DEVELOPMENTAL MILESTONES	
DIAGNOSES PEDIATRICS	
CLINIC TEAM	
INTAKE/TRIAGE	
DISCHARGE NOTE	
VISION & HEARING	
IMMUNIZATIONS	
VACCINATION INFORMATION/FLA SHOTS LINK	
IMMUNIZATIONS ADMINISTRATION	
HCN FORM DIRECTORY	



EMR-SBC

OmniDoc Forms Input - SHORT VISIT SCHOOL PHYSICAL

SCHOOL PHYSICAL SHORT VISIT

Reason for Visit:
 visit for: student physical

Physical Examination
 N (normal)

Assessment
 Y School Physical

Plan
 Y Risks and Benefits of Immunizations

FLORIDA SHOTS LINK
 VACCINE INFORMATION AND REQUIREMENTS
 CHILDHOOD and ADOLESCENT VACCINE SCHEDULE

HCN FORM DIRECTORY
 ADULT MEDICINE MENU
 METABOLIC DISEASES
 LABS AND IMAGING
 SHORT VISIT NOTE
 PATIENT RECALL
 IMMUNIZATION(S)
 WELL CHILD EXAM
 CR BEYOND CAPABILITY
 ATHLETIC COMPETITION
 MEDICAL CERTIFICATES
 PATIENT CARE PLAN
 HEALTH CONNECT MENU

Visit for: student physical

Prefix	Modifier	Result	Status	Episode	Onset	Duration	Value	Unit
				...				



EMR-SBC

OmniDoc Forms Input - HGIOS VISIT SCREENING NOTE Health Aid

Student Info | Screenings | Medications | Visit Information | **Visit Problem** | Intervention | Education | Outcome

VISIT PROBLEM

Gastrointestinal Stomach Ache <input type="checkbox"/> Y <input type="checkbox"/> N Vomiting <input type="checkbox"/> Y <input type="checkbox"/> N Diarrhea <input type="checkbox"/> Y <input type="checkbox"/> N Nausea <input type="checkbox"/> Y <input type="checkbox"/> N	Cardiovascular Fainting <input type="checkbox"/> Y <input type="checkbox"/> N Lightheadedness <input type="checkbox"/> Y <input type="checkbox"/> N Other <input type="checkbox"/> Y <input type="checkbox"/> N	Musculoskeletal Joint Pain <input type="checkbox"/> Y <input type="checkbox"/> N Limb Pain <input type="checkbox"/> Y <input type="checkbox"/> N Seizures <input type="checkbox"/> Y <input type="checkbox"/> N Other <input type="checkbox"/> Y <input type="checkbox"/> N	Disorder (Physical Agents) Heat cramps <input type="checkbox"/> Y <input type="checkbox"/> N Heat exhaustion <input type="checkbox"/> Y <input type="checkbox"/> N Stroke <input type="checkbox"/> Y <input type="checkbox"/> N Electric shock <input type="checkbox"/> Y <input type="checkbox"/> N Recent drowning <input type="checkbox"/> Y <input type="checkbox"/> N Motion Sickness <input type="checkbox"/> Y <input type="checkbox"/> N Cold Injury <input type="checkbox"/> Y <input type="checkbox"/> N
Ear/Nose/Throat Cold Symptoms <input type="checkbox"/> Y <input type="checkbox"/> N Eye symptoms <input type="checkbox"/> Y <input type="checkbox"/> N Ear Symptoms <input type="checkbox"/> Y <input type="checkbox"/> N Sore Throat <input type="checkbox"/> Y <input type="checkbox"/> N Nosebleed <input type="checkbox"/> Y <input type="checkbox"/> N	Gynecological/Obstetrical Menstrual Cramping <input type="checkbox"/> Y <input type="checkbox"/> N Pregnancy <input type="checkbox"/> Y <input type="checkbox"/> N	Neuro Headache <input type="checkbox"/> Y <input type="checkbox"/> N Dizziness <input type="checkbox"/> Y <input type="checkbox"/> N	Psychosocial Symptoms <input type="checkbox"/> Y <input type="checkbox"/> N
Respiratory Asthma <input type="checkbox"/> Y <input type="checkbox"/> N Difficulty Breathing <input type="checkbox"/> Y <input type="checkbox"/> N	Dental Toothache <input type="checkbox"/> Y <input type="checkbox"/> N	Endocrine Symptoms <input type="checkbox"/> Y <input type="checkbox"/> N Blood Glu (mg/dl)	Free Text HPI <input type="checkbox"/> Y <input type="checkbox"/> N Social Hx <input type="checkbox"/> Y <input type="checkbox"/> N
Genitourinary Genitourinary Pain <input type="checkbox"/> Y <input type="checkbox"/> N	Dermatological Rash <input type="checkbox"/> Y <input type="checkbox"/> N Other <input type="checkbox"/> Y <input type="checkbox"/> N	Nutrition/Metabolic Nutrition <input type="checkbox"/> Y <input type="checkbox"/> N	Communicable Diseases Communicable <input type="checkbox"/> Y <input type="checkbox"/> N

Reason for visit abdominal pain

Prefix	Modifier	Result	Status	Episode	Onset	Duration	Value	Unit
Reason for visi				...				



EMR-SBC

OmniDoc Forms Input - HCIDS VISIT SCREENING NOTE Health Aid

Student Info | Screenings | Medications | Visit Information | Visit Problem | Intervention | Education | Outcome

INTERVENTIONS

Health Aid Evaluation Y N
 Health Aid Follow Up Encounter Y N
 Consultation With Parents Y N
 Consultation with School Staff Y N
 Health Education (# of participants) Y N
 Health Education (# of classes) Y N

Body part injury

Head Y N Face Y N
 Mouth Y N Nose Y N
 Neck Y N Arm Y N
 Chest Y N Back Y N
 Leg Y N Knee Y N
 Ankle Y N Foot Y N
 Other Y N

Injury Type

Bleed Y N Cut Y N
 Wound Y N Blister Y N
 Splinter Y N Bite Y N
 Burn Y N Shock Y N
 Bruise Y N Scrape Y N
 Stab/Gun Shot Y N

Other:

Choking Y N
 Chest pain Y N
 Pregnancy Y N
 Seizures Y N
 Fall Y N
 Overdose Y N

HCN FORM DIRECTORY
HCIDS STUDENT FOLLOW UP

Visit for: general multisystem exam Health Aid Evaluation and Intervention

Prefix: Modifier: Result: Status: Episode: Onset: Duration: Value: Unit:



EMR-SBC

OmniDoc Forms Input - HCIDS VISIT SCREENING NOTE Health Aid

Student Info | Screenings | Medications | Visit Information | Visit Problem | Intervention | Education | Outcome

COUNSELING AND EDUCATION

Asthma Y N Use Of Helmets Y N
 HIV Y N Dental Hygiene Y N
 Nutrition Y N Personal Hygiene Y N
 Exercise Y N Wash Hands Regularly Y N
 Smoking cessation Y N Bullying Y N
 Abstinence Y N
 Vaccines Y N Other Communicable diseases Y N
 Medication Compliance Y N Behavioral Counseling Y N
 Safety Guidelines Y N Prenatal Education Y N
 Illicit Drug Use Y N Chronic Disease Management Y N
 Alcohol Use Y N Coordination student with disability Y N
 Seat Belts Y N Other Y N

HCN FORM DIRECTORY
HCIDS STUDENT FOLLOW UP

Patient education about asthma

Prefix: Modifier: Result: Status: Episode: Onset: Duration: Value: Unit:



EMR-SBC

Omnidoc Forms Input - HCIDS VISIT SCREENING NOTE Health Aid

Student Info | Screenings | Medications | Visit Information | Visit Problem | Intervention | Education | Outcome

VISIT OUTCOMES

REFERRED TO		OUTCOME DISPOSITION	
New CHC Medical home	<input type="checkbox"/> Y <input type="checkbox"/> N	Return To Class	<input type="checkbox"/> Y <input type="checkbox"/> N
Regular PCP	<input type="checkbox"/> Y <input type="checkbox"/> N	Sent home	<input type="checkbox"/> Y <input type="checkbox"/> N
HCIDC Navigator	<input type="checkbox"/> Y <input type="checkbox"/> N	Emergency Care: ER	<input type="checkbox"/> Y <input type="checkbox"/> N
Kidcare	<input type="checkbox"/> Y <input type="checkbox"/> N	Emergency Care: 911	<input type="checkbox"/> Y <input type="checkbox"/> N
mental health counseling	<input type="checkbox"/> Y <input type="checkbox"/> N	Other	<input type="checkbox"/> Y <input type="checkbox"/> N
school speech pathologist	<input type="checkbox"/> Y <input type="checkbox"/> N		
domestic violence	<input type="checkbox"/> Y <input type="checkbox"/> N		
Abuse Registry	<input type="checkbox"/> Y <input type="checkbox"/> N		
M/D/PS	<input type="checkbox"/> Y <input type="checkbox"/> N		
TRUST specialist	<input type="checkbox"/> Y <input type="checkbox"/> N		
Social Services	<input type="checkbox"/> Y <input type="checkbox"/> N		
Healthy Start	<input type="checkbox"/> Y <input type="checkbox"/> N		
Consultation With Dentist	<input type="checkbox"/> Y <input type="checkbox"/> N		
Homelessness	<input type="checkbox"/> Y <input type="checkbox"/> N		
Substance Abuse Counseling - Alcohol	<input type="checkbox"/> Y <input type="checkbox"/> N		
Substance Abuse Counseling - Tobacco	<input type="checkbox"/> Y <input type="checkbox"/> N		
Substance Abuse Counseling - Drugs	<input type="checkbox"/> Y <input type="checkbox"/> N		
Medical/Nurse care	<input type="checkbox"/> Y <input type="checkbox"/> N		
Guidance Counselor	<input type="checkbox"/> Y <input type="checkbox"/> N		
HCIEY	<input type="checkbox"/> Y <input type="checkbox"/> N		
Nursing Assessment	<input type="checkbox"/> Y <input type="checkbox"/> N		
School Psychologist	<input type="checkbox"/> Y <input type="checkbox"/> N		
Other	<input type="checkbox"/> Y <input type="checkbox"/> N		
None/not applicable	<input type="checkbox"/> Y <input type="checkbox"/> N		

RE-ASSESSMENT OF PAIN
0-10

HCN FORM DIRECTORY
HCIDS STUDENT FOLLOW UP

Referred elsewhere for Referred to new CHC Medical Home

Prefix Modifier Result Status Episode Onset Duration Value Unit
referred elsew

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EMR-SBC

CHIEF COMPLAINT

The Chief Complaint is: BMI SCREENING

REASON FOR VISIT

Referred here by school health staff and referred here for health.

HISTORY OF PRESENT ILLNESS

is a 14 year old female.
* Student ID# was 6937207.

PERSONAL HISTORY

Education: In 9th grade.

PHYSICAL FINDINGS

Vital signs:

Vital Signs/Measurements	Value	Normal Range
Pain level (0-10)	0	
Weight	229 lbs	83 - 173
Body mass index	31.1	18 - 25
Height	72 in	59.055 - 68.11

ASSESSMENT

Obesity screening
Obese V85.54.

THERAPY

* Fit to return to school.

PLAN

* Follow-up visit 6 weeks
Results sent home to parents.



EMR-SBC

CHIEF COMPLAINT

The Chief Complaint is: Vision follow up.

PERSONAL HISTORY

Education: In 10th grade.

PHYSICAL FINDINGS

Vital signs:

Vital Signs/Measurements

Pain level (0-10) (re-assessment)

Value

Normal Range

0

THERAPY

* Post consultation with an optometrist: Returned signed by Optometrist - documentation in chart and post an optometrist: Student received glasses.

ADMA WILSON ARNP

Entered data sealed by: WILSON, ADMA ARNP Date: 06/03/2009 15:22



EMR- Clinic Team

- Complaints
- Visit history
- Socio-demographic information
- Review of systems
- Physical exam
- Diagnosis
- Lab results
- Medications
- Counseling and education

Electronic Medical Record
created either
in SBHC or CHC



EMR-Clinic Team

OmniDoc Forms Input - ADULT GENERIC MALE VISIT FP

HPI | PMH1 | FMH2 | SH | FH | SurgHx | RDS1 | RDS2 | PE1 | PE2 | PE3 | PE4 | PE5 | Dx1 | Dx2 | Dx3 | LABS | EDU | CONS |

Family History

- family history reviewed
- Y N family history unchanged
- Y N family health status
- Y N family history of Cancer
- Y N family history of DIABETES
- Y N family history of heart disease
- Y N family history of HTN
- Y N family history of early deaths
- Y N family history of DEPRESSION
- Y N family history of abuse / neglect
- Y N family history of violent behavior

Free Text

Y Family History

HCM FORM DIRECTORY
ADULT MEDICINE MENU
LABS AND IMAGING
IMMUN & INJECTIONS
PATIENT CARE PLAN
PATIENT HX FORM
METABOLIC DISEASES
CLINIC TEAM

Family history reviewed

Prefix	Modifier	Result	Status	Episode	Onset	Duration	Value	Unit
history of				...				



EMR-Clinic Team

OmniDoc Forms Input - ADULT GENERIC MALE VISIT FP

HPI | FMH1 | FMH2 | SH | FH | SurgHx | RDS1 | RDS2 | PE1 | PE2 | PE3 | PE4 | PE5 | Dx1 | Dx2 | Dx3 | LABS | EDU | CONS |

Past Surgical History

- history of Tonsillectomy
- Y N history of Tonsillectomy With Adenoidectomy
- Y N history of Coronary Artery Bypass Graft (CABG)
- Y N history of Appendectomy
- Y N history of Cholecystectomy
- Y N history of Transurethral Resection Of Prostate
- Y N history of Genito-Urinary Tract Surgery Prostatectomy (TURP)
- Y N history of Splenectomy
- Y N history of Lung Surgery Pneumonectomy
- Y N history of Cystoscopy (For Therapy)
- Y N reported Hx of surgery for diverticula
- Y N history of Pyloromyotomy
- Y N history of Craniotomy (therapeutic)
- Y N history of Surgery Of Male Genitalia Orchiectomy

Free Text/Surgery other

Y Past Medical/Surgical History

Y N a history of prior surgeries (other)

HCM FORM DIRECTORY
ADULT MEDICINE MENU
LABS AND IMAGING
IMMUN & INJECTIONS
PATIENT CARE PLAN
PATIENT HX FORM
METABOLIC DISEASES
CLINIC TEAM

History of tonsillectomy

Prefix	Modifier	Result	Status	Episode	Onset	Duration	Value	Unit
history of				...				



EMR-Clinic Team

OmniDoc Forms Input - ADULT GENERIC MALE VISIT FP

HPI | PMH1 | PMH2 | SH | FH | SurgHx | ROS1 | ROS2 | PE1 | PE2 | PE3 | PE4 | PE5 | Dx1 | Dx2 | Dx3 | LABS | EDU | CONS |

Diagnoses

<input type="checkbox"/> Y <input type="checkbox"/> N ABDOMINAL PAIN	<input type="checkbox"/> Y <input type="checkbox"/> N CARDIOVASCULAR DISORDERS
<input type="checkbox"/> Y <input type="checkbox"/> N ACUTE ABDOMEN	<input type="checkbox"/> Y <input type="checkbox"/> N CARPAL TUNNEL SYNDROME
<input type="checkbox"/> Y <input type="checkbox"/> N ACUTE BRONCHITIS	<input type="checkbox"/> Y <input type="checkbox"/> N DERMATITIS
<input type="checkbox"/> Y <input type="checkbox"/> N AIDS	<input type="checkbox"/> Y <input type="checkbox"/> N DERMATOPHYTOSIS
<input type="checkbox"/> Y <input type="checkbox"/> N ALCOHOL DISORDERS	<input type="checkbox"/> Y <input type="checkbox"/> N CHF
<input type="checkbox"/> Y <input type="checkbox"/> N ALLERGIC RHINITIS	<input type="checkbox"/> Y <input type="checkbox"/> N CHOLELITHIASIS
<input type="checkbox"/> Y <input type="checkbox"/> N ANEMIA	<input type="checkbox"/> Y <input type="checkbox"/> N CONDYLOMA ACUMINATUM
<input type="checkbox"/> Y <input type="checkbox"/> N ANXIETY AND DEPRESSION	<input type="checkbox"/> Y <input type="checkbox"/> N CONSTIPATION
<input type="checkbox"/> Y <input type="checkbox"/> N ANXIETY DISORDER NOS	<input type="checkbox"/> Y <input type="checkbox"/> N CONJUNCTIVITIS
<input type="checkbox"/> Y <input type="checkbox"/> N ARTHROPATHY	<input type="checkbox"/> Y <input type="checkbox"/> N COPD
<input type="checkbox"/> Y <input type="checkbox"/> N ASTHMA	<input type="checkbox"/> Y <input type="checkbox"/> N CVA
<input type="checkbox"/> Y <input type="checkbox"/> N BACKACHE	<input type="checkbox"/> Y <input type="checkbox"/> N DEMENTIA
<input type="checkbox"/> Y <input type="checkbox"/> N BPH	<input type="checkbox"/> Y <input type="checkbox"/> N DEPRESSION
<input type="checkbox"/> Y <input type="checkbox"/> N BREAST LUMP OR MASS	<input type="checkbox"/> Y <input type="checkbox"/> N DERMATITIS
<input type="checkbox"/> Y <input type="checkbox"/> N CAD	<input type="checkbox"/> Y <input type="checkbox"/> N DERMATOPHYTOSIS
<input type="checkbox"/> Y <input type="checkbox"/> N CANCER	<input type="checkbox"/> Y <input type="checkbox"/> N DIABETES MELLITUS
<input type="checkbox"/> Y <input type="checkbox"/> N CANDIDIASIS	

Free Text

Y Assessment

HCN FORM DIRECTORY

- ADULT MEDICINE MENU
- LABS AND IMAGING
- IMMUN & INJECTIONS
- PATIENT CARE PLAN
- PATIENT HX FORM
- METABOLIC DISEASES
- CLINIC TEAM
- DIAGNOSES

Assessment of abdominal pain

Prefix	Modifier	Result	Status	Episode	Onset	Duration	Value	Unit
assessment of				...				



EMR-Clinic Team

OmniDoc Forms Input - ADULT GENERIC MALE VISIT FP

HPI | PMH1 | PMH2 | SH | FH | SurgHx | ROS1 | ROS2 | PE1 | PE2 | PE3 | PE4 | PE5 | Dx1 | Dx2 | Dx3 | LABS | EDU | CONS |

Labs

<input type="checkbox"/> Y <input type="checkbox"/> N ordered Blood Counts - CBC	<input type="checkbox"/> Y <input type="checkbox"/> N ordered BMP
<input type="checkbox"/> Y <input type="checkbox"/> N ordered Lipids Test Panel	<input type="checkbox"/> Y <input type="checkbox"/> N ordered Fasting Blood Sugar (FBS)
<input type="checkbox"/> Y <input type="checkbox"/> N ordered TSH	<input type="checkbox"/> Y <input type="checkbox"/> N ordered Glycosylated Hemoglobin
<input type="checkbox"/> Y <input type="checkbox"/> N ordered Serum RPR	<input type="checkbox"/> Y <input type="checkbox"/> N ordered HbA1c
<input type="checkbox"/> Y <input type="checkbox"/> N ordered Urinalysis	<input type="checkbox"/> Y <input type="checkbox"/> N ordered GC/chlamydia DNA
<input type="checkbox"/> Y <input type="checkbox"/> N ordered Urine Culture	<input type="checkbox"/> Y <input type="checkbox"/> N ordered (PSA)
<input type="checkbox"/> Y <input type="checkbox"/> N ordered Viral Antibody ELISA HIV-1	<input type="checkbox"/> Y <input type="checkbox"/> N ordered Fecal Analysis- Occult Blood
<input type="checkbox"/> Y <input type="checkbox"/> N ordered Absolute CD4 Count	<input type="checkbox"/> Y <input type="checkbox"/> N ordered Hepatic Function Panel
<input type="checkbox"/> Y <input type="checkbox"/> N ordered Viral Load (HIV)	<input type="checkbox"/> Y <input type="checkbox"/> N ordered Prothrombin Time (PT)
<input type="checkbox"/> Y <input type="checkbox"/> N ordered Urine Microalbumin	<input type="checkbox"/> Y <input type="checkbox"/> N ordered (PTT)
<input type="checkbox"/> Y <input type="checkbox"/> N ordered CMP	<input type="checkbox"/> Y <input type="checkbox"/> N ordered Coagulation Studies: INR
<input type="checkbox"/> Y <input type="checkbox"/> N ordered Drug Screen	

Free Text

Y N Discussion

Y N Disposition

Y N PLAN

Y N NOTES

HCN FORM DIRECTORY

- ADULT MEDICINE MENU
- LABS AND IMAGING
- IMMUN & INJECTIONS
- PATIENT CARE PLAN
- PATIENT HX FORM
- METABOLIC DISEASES
- CLINIC TEAM

Studies/Tests

<input type="checkbox"/> Y <input type="checkbox"/> N ordered X-Ray	<input type="checkbox"/> Y <input type="checkbox"/> N Patient refused diagnostic tests at this time
<input type="checkbox"/> Y <input type="checkbox"/> N ordered Chest X-Ray	
<input type="checkbox"/> Y <input type="checkbox"/> N ordered Imaging Studies	
<input type="checkbox"/> Y <input type="checkbox"/> N ordered Bone Density Studies	
<input type="checkbox"/> Y <input type="checkbox"/> N ordered Electrocardiogram	
<input type="checkbox"/> Y <input type="checkbox"/> N ordered Colonoscopy	
<input type="checkbox"/> Y <input type="checkbox"/> N ordered Sigmoidoscopy	

HIV Screening

Y N

Ordered a basic metabolic panel

Prefix	Modifier	Result	Status	Episode	Onset	Duration	Value	Unit
ordered				...				



EMR-Clinic Team

OmniDoc Forms Input - ADULT GENERIC MALE VISIT FP

HP1 | PMH1 | PMH2 | SH | FH | SugHx | ROS1 | ROS2 | PE1 | PE2 | PE3 | PE4 | PE5 | Dx1 | Dx2 | Dx3 | LABS | EDU | CONS

<input type="checkbox"/> <input type="checkbox"/> N Consultation With Allergist <input type="checkbox"/> <input type="checkbox"/> N Consultation With Cardiologist <input type="checkbox"/> <input type="checkbox"/> N Consultation With Dermatologist <input type="checkbox"/> <input type="checkbox"/> N Consultation With Endocrinologist <input type="checkbox"/> <input type="checkbox"/> N ENT Services <input type="checkbox"/> <input type="checkbox"/> N Consultation With Gastroenterologist <input type="checkbox"/> <input type="checkbox"/> N Consultation With A General Surgeon <input type="checkbox"/> <input type="checkbox"/> N Consultation With Infectious Disease <input type="checkbox"/> <input type="checkbox"/> N Consultation With Internist <input type="checkbox"/> <input type="checkbox"/> N Consultation With Nephrologist <input type="checkbox"/> <input type="checkbox"/> N Consultation With Neurologist <input type="checkbox"/> <input type="checkbox"/> N Consultation With A Nutritionist	<input type="checkbox"/> <input type="checkbox"/> N Consultation With Ophthalmologist <input type="checkbox"/> <input type="checkbox"/> N Consultation With An Otolaryngologist <input type="checkbox"/> <input type="checkbox"/> N Consultation With An Orthopedic Surgeon <input type="checkbox"/> <input type="checkbox"/> N Consultation With Pain Clinic <input type="checkbox"/> <input type="checkbox"/> N Consultation With Plastic Surgeon <input type="checkbox"/> <input type="checkbox"/> N Consultation With A Psychiatrist <input type="checkbox"/> <input type="checkbox"/> N Consultation With A Physical Therapist <input type="checkbox"/> <input type="checkbox"/> N Consultation With A Pulmonologist <input type="checkbox"/> <input type="checkbox"/> N Consultation With Rheumatologist <input type="checkbox"/> <input type="checkbox"/> N Consultation With Urologist <input type="checkbox"/> <input type="checkbox"/> N Consultation With A Specialist	<input type="checkbox"/> Pre Op Evaluation <input type="checkbox"/> Request for clearance <input type="checkbox"/> Informed Consent Obtained
<input type="checkbox"/> Follow-up <input type="checkbox"/> <input type="checkbox"/> N RTC II Worse/New Symptoms <input type="checkbox"/> <input type="checkbox"/> N Go To ER II Worse <input type="checkbox"/> <input type="checkbox"/> This record was created by <input type="checkbox"/> <input type="checkbox"/> Under supervision of	<input type="checkbox"/> Free Text <input type="checkbox"/> <input type="checkbox"/> N DISCUSSION <input type="checkbox"/> <input type="checkbox"/> N DISPOSITION <input type="checkbox"/> <input type="checkbox"/> N PLAN <input type="checkbox"/> <input type="checkbox"/> N NOTES <input type="checkbox"/> <input type="checkbox"/> N THERAPY	<input type="checkbox"/> Risk and Benefits <input type="checkbox"/> <input type="checkbox"/> N Risk Factor Counseling <input type="checkbox"/> <input type="checkbox"/> Prosthetic/Screening Risk/Benefits <input type="checkbox"/> Prostate Screening <input type="checkbox"/> <input type="checkbox"/> N Patient refusal <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> N Diagnostic tests

Requested consultation with an allergist

Prefix	Modifier	Result	Status	Episode	Onset	Duration	Value	Unit
ordered				...				



EMR-Clinic Team

OmniDoc Forms Input - PEDIATRIC PRACTICE MENU

<p>WELL VISIT FORMS</p> <table border="1"> <tr> <td>WELL BABY BIRTH-4 WK</td> <td>WELL BABY 15 MONTH</td> <td>WELL CHILD 6 YEAR</td> </tr> <tr> <td>WELL BABY 2 MONTH</td> <td>WELL BABY 18 MONTH</td> <td>WELL CHILD 7-12 YEAR</td> </tr> <tr> <td>WELL BABY 4 MONTH</td> <td>WELL BABY 2 YEAR</td> <td>ADOLESCENT FEMALE</td> </tr> <tr> <td>WELL BABY 6 MONTH</td> <td>WELL CHILD 3 YEAR</td> <td>ADOLESCENT MALE</td> </tr> <tr> <td>WELL BABY 9 MONTH</td> <td>WELL CHILD 4 YEAR</td> <td>GENERIC VISIT</td> </tr> <tr> <td>WELL BABY 12 MONTH</td> <td>WELL CHILD 5 YEAR</td> <td></td> </tr> </table>	WELL BABY BIRTH-4 WK	WELL BABY 15 MONTH	WELL CHILD 6 YEAR	WELL BABY 2 MONTH	WELL BABY 18 MONTH	WELL CHILD 7-12 YEAR	WELL BABY 4 MONTH	WELL BABY 2 YEAR	ADOLESCENT FEMALE	WELL BABY 6 MONTH	WELL CHILD 3 YEAR	ADOLESCENT MALE	WELL BABY 9 MONTH	WELL CHILD 4 YEAR	GENERIC VISIT	WELL BABY 12 MONTH	WELL CHILD 5 YEAR		<p>SECTION FORMS</p> <table border="1"> <tr><td>DIAGNOSES PEDS</td></tr> <tr><td>PRENATAL & BIRTH HX</td></tr> <tr><td>FMH</td></tr> <tr><td>IMMUNIZATIONS PEDS</td></tr> <tr><td>TB SCREENING</td></tr> <tr><td>LEAD RISK</td></tr> <tr><td>LABS AND IMAGING</td></tr> <tr><td>CLINIC TEAM</td></tr> <tr><td>HCOS MENU</td></tr> <tr><td>PEDIATRIC PATIENT HISTORY</td></tr> <tr><td>HCN FORM DIRECTORY</td></tr> </table>	DIAGNOSES PEDS	PRENATAL & BIRTH HX	FMH	IMMUNIZATIONS PEDS	TB SCREENING	LEAD RISK	LABS AND IMAGING	CLINIC TEAM	HCOS MENU	PEDIATRIC PATIENT HISTORY	HCN FORM DIRECTORY
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EMR-Clinic Team

The screenshot shows the 'OmniDoc Forms Input - CLINIC TEAM' interface. The top navigation bar includes 'Chief Complaint/Vital Signs', 'Guidelines1', 'Guidelines2', 'Guidelines 3', 'Pulse ox/PFT', 'In-House Labs', 'Women's Health', 'Vision/Hearing', 'Self Mgt Goals', and 'PHQ-9'. The main content area is titled 'VISUAL FUNCTION SCREENING' and contains three columns of questions for the Right and Left eyes, including 'Near vision', 'Distance visual acuity', and 'Color' tests. Below this is the 'AUDIOGRAM SCREENING' section with a grid for recording decibel (db) values at frequencies of 500, 1000, 2000, 4000, and 6000 Hz for both ears. A sidebar on the right contains buttons for 'HCN FORM DIRECTORY', 'LABS AND IMAGING', 'ADULT MEDICINE MENU', 'PATIENT HISTORY FORM', 'ADULT FEMALE VISIT', 'MEDICAL NOTES', 'ADULT MALE VISIT', 'DIAGNOSES', 'PED PRACTICE MENU', 'HRSA KEY INDICATORS', and 'METABOLIC DISEASES'. At the bottom, there is a table for recording screening results with columns for Prefix, Modifier, Result, Status, Episode, Onset, Duration, Value, and Unit.



Case Study

- Anna is a 12 year old female with a history of eczema. She presented to the school based clinic because of exacerbations of her symptoms. She was evaluated by the ARNP. Her parent was contacted and consent for treatment was obtained from the father over the phone.
- With the EMR system all the different steps pertaining to the treatment and care of Anna was captured in the system, from the assessment of the patient to the prescription of medication.



Case Study (con't)

- Ana was later referred to her PCP in the established CHI clinic. At the follow up visit with the pediatrician, it was easier to complete the follow up and add on to the care the child needed.



EMR -Advantages

- Share patient information everywhere assessment, diagnosis and treatment decisions occur
- Reduce costs by shortening billing cycles and other core administrative and clinical operations, including storage and copying costs of medical records
- Direct data entry by clinicians and staff greatly reduces transcription costs



EMR -Advantages

- Higher quality documentation
- Document visits to a consistent level of quality/service
- Improve the accuracy of coding at the appropriate level
- Minimize the issues of incorrect or conflicting drug prescriptions
- HIPPA requires better, more complete, secure and audible medical records

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EMR -Advantages

- Each item clicked on is coded in the medicin data base codes.
- Laboratory interface allows accurate and timely test results electronically.

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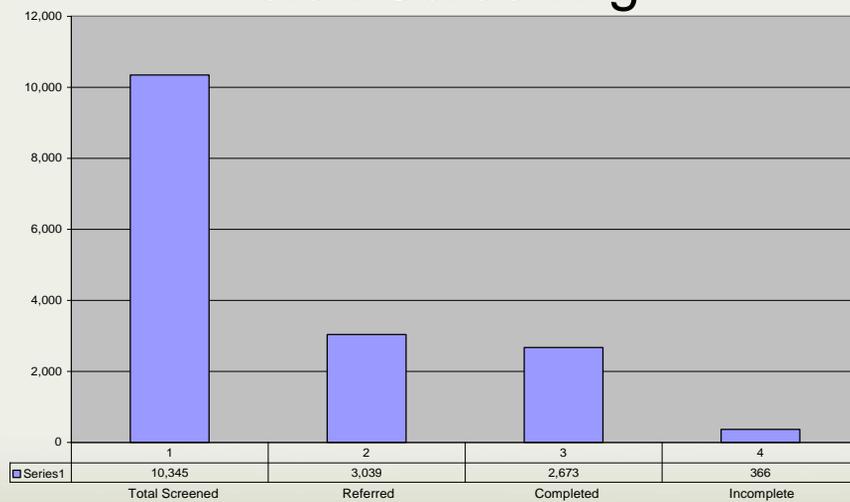


EMR-Disadvantages

- Downtime
- Multiple Record Locks
- System Slowness



Vision Screening



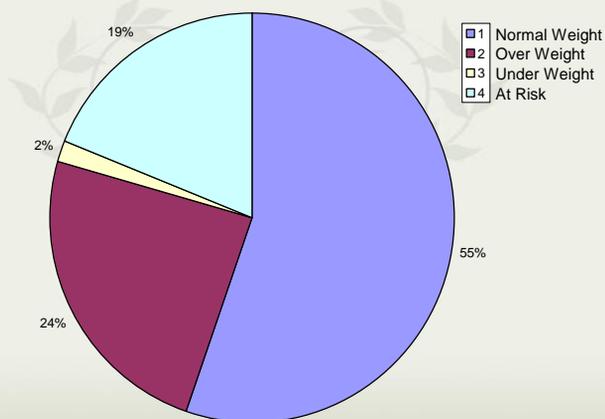


BMI Screening 2008-2009

# Children	# Normal Weight	# Over Weight	# Under Weight	# At Risk
8,788	4,850	2,137	147	1,654



BMI Screening 2008-2009





Visits by Health Problem

Complaint	# Visits
Neurological	12,911
Gastrointestinal	10,569
Other / Miscellaneous	21,229
Eye/Ears/Nose/Throat	6,279
Dermatological	2,668
Musculo/Skeletal	2,326
Endocrine	1,740
Dental	936
Immune System (allergies)	807
Respiratory	859
Cardiovascular	788
Gynecological/Obstetrical	1,201
Genitourinary	199
Communicable Diseases	729
Psychosocial	40
TOTAL	63,281

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Conclusion

- The value of EMR in the SBC
- Next steps



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EMR-SBC

Questions ?

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www.ephilippe@hcnetwork.org