

Davies Community Health Organization Committee
Recommendations for a Supplemental Q&A Document to
Accompany the Heart of Texas Application

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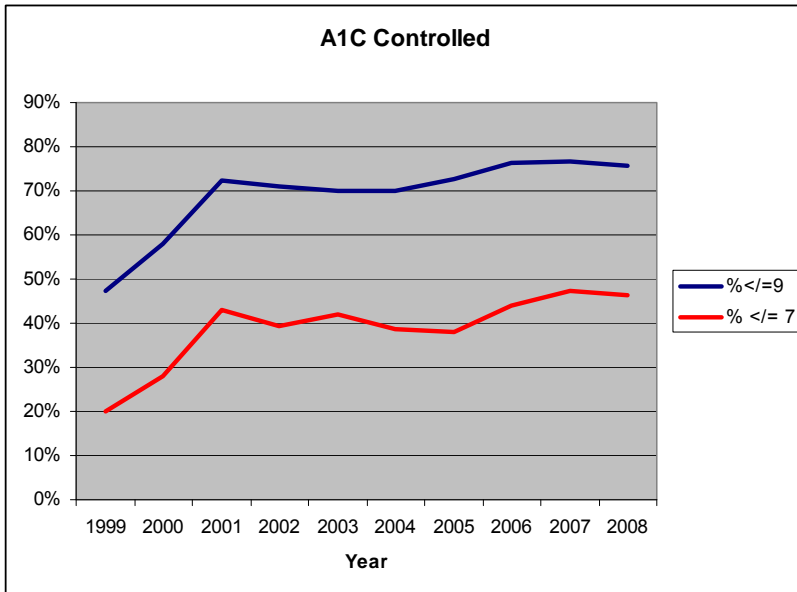
EVIDENCE OF IMPROVEMENT OVER TIME - LONGITUDINAL DATA

HRSA/BPHC Quality Measure: Diabetes

Health Plan and Grant Data - DIABETES				Internal Performance Improvement Data	
Year	Denominator	Numerator	%<=9	<= 7	% <= 7
1999	678	320	47%	135	20%
2000	888	516	58%	248	28%
2001	1133	818	72%	487	43%
2002	1399	991	71%	550	39%
2003	1614	1131	70%	678	42%
2004	1783	1246	70%	689	39%
2005	1975	1433	73%	750	38%
2006	2295	1750	76%	1012	44%
2007	2567	1964	77%	1211	47%
2008	2857	2164	76%	1327	46%

Numerator: Number of adult patients age 18 and older with a diagnosis of Type 1 or Type 2 diabetes whose most recent hemoglobin A1c level during the measurement year is ≤ 9%, among those patients included in the denominator.

Denominator (Universe): Number of adult patients age 18 years and older as of December 31 of the measurement year (for measurement year 2008, date of birth on or before December 31, 1990) with a diagnosis of Type 1 or Type 2 diabetes, who have been seen in the clinic at least twice during the reporting year and do not meet any of the exclusion criteria. (This report uses Problem List Diagnosis as the diagnosis selection criteria)



HOTCHC joined the Diabetes Health Disparities Collaborative in 2001.

Interventions included:

- BestPractice Alerts
- Health Maintenance Alerts
- Diabetes Registry sorted by provider

In November 2007 we began to engage Community HealthCorps (AmeriCorps) members in chronic disease management through:

- Self-management goal counseling
- Diabetic patient recall

This measure is developmental and future

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progress will be monitored and reported annually by all grantees via the Uniform Data System (UDS) beginning in 2009. The FY 09 target will be established after the collection of baseline data.¹

¹ Fiscal Year 2009 Performance Appendix - Primary Health Care.
<http://www.hrsa.gov/about/budgetjustification09/performance/PrimaryCare.htm>

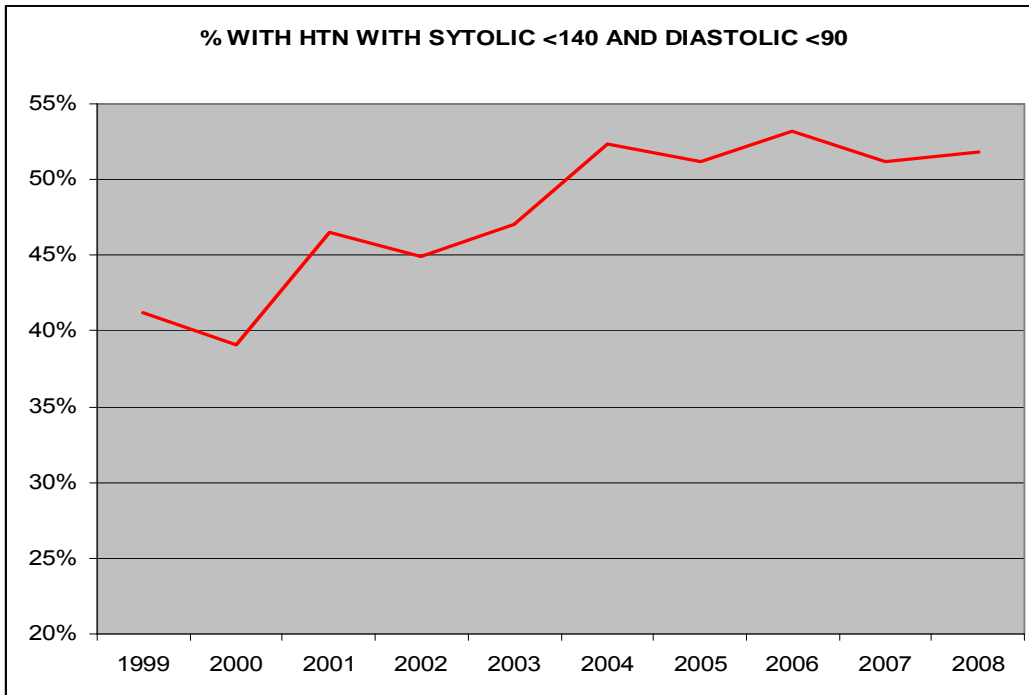
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HRSA/BPHC Quality Measure: Hypertension

Health Plan and Grant Data - HTN

Year	Denominator	Numerator	Percent
1999	964	397	41%
2000	1037	405	39%
2001	1098	511	47%
2002	1346	604	45%
2003	1776	836	47%
2004	2279	1194	52%
2005	3622	1852	51%
2006	4443	2362	53%
2007	5263	2691	51%
2008	6421	3324	52%

Denominator (Universe): All patients ≥ 18 years of age as of December 31 of the measurement year (for measurement year 2008, date of birth on or before December 31,1990) with diagnosis of hypertension and have been seen at least twice during the reporting year, and have a diagnosis of hypertension. *(This report uses Problem List Diagnosis as the diagnosis selection criteria)*
 Numerator: Patients 18 years and older (for measurement year 2008, date of birth on or before December 31,1990) with a diagnosis of hypertension with most recent systolic blood pressure measurement < 140 mm Hg and diastolic blood pressure < 90 mm Hg



In 2004 and 2005, 42.7% of hypertensive Health Center patients had their blood pressure under control. In 2006, the figure was 44.4%, exceeding the target. The FY 08 and FY 09 targets are 42.0% and 43%, respectively.²

² Fiscal Year 2009 Performance Appendix - Primary Health Care.
<http://www.hrsa.gov/about/budgetjustification09/performance/PrimaryCare.htm>

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HRSA/BPHC Quality Measure: Pap Smears

Health Plan and Grant Data - PAP SMEAR

Year	Denominator	Numerator	Percent
1999	5884	2306	39%
2000	5926	2776	47%
2001	6164	3190	52%
2002	6801	3482	51%
2003	7498	3549	47%
2004	7894	4146	53%
2005	9189	4608	50%
2006	10038	5003	50%
2007	10900	5506	51%
2008	11580	5980	52%

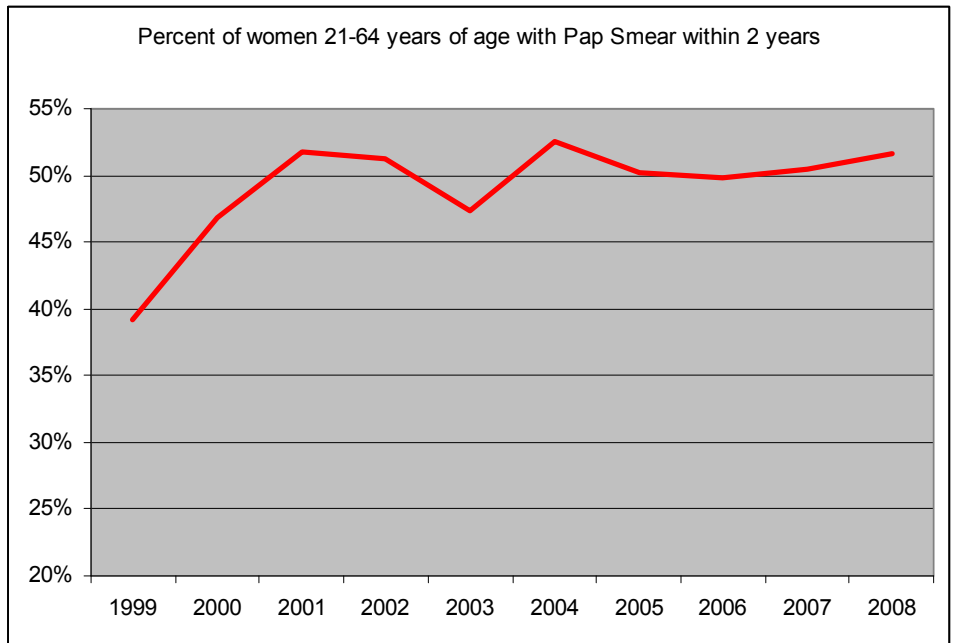
Numerator: Number of female patients 21 – 64 years of age receiving one or more Pap tests during the measurement year or during the two years prior to the measurement year (for measurement year 2008, patients born on or after January 1, 1944 and on or before December 31, 1987), among those women included in the denominator.

Denominator (Universe): Number of female patients age 21-64 years of age during the measurement year (for measurement year 2008, patients born on or after January 1, 1944 and on or before December 31, 1987) who were seen for a medical encounter at least once during 2008 and were first seen by the grantee before their 65th birthday.

Interventions to increase Pap smear rates:

- Health maintenance reminder 1999.
- September 2003 - grant funding for pap smears for non-Medicaid patients. Patient recall system

Nationally, among women aged 21 years and older in 2005, 51.8 percent received a Pap smear in the past 3 years.³



³ HRSA Women’s Health USA 2008 - Preventive Care. <http://mchb.hrsa.gov/whusa08/hsu/pages/304pc.html#fn1>

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HRSA/BPHC Quality Measure: Childhood Immunizations

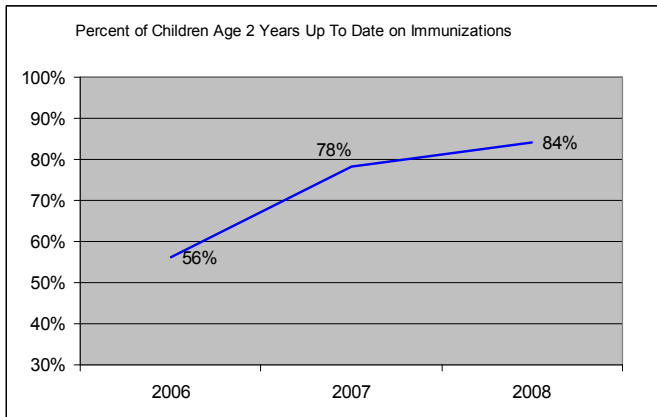
Health Plan and Grant Data - IMMUNIZATIONS

Year	Denominator	Numerator	Percent
2006	971	545	56%
2007	1250	978	78%
2008	1272	1070	84%

Denominator (Universe): Number of children with at least one medical encounter during the reporting period, who had their second birthday during the reporting period, who did not have a contraindication for a specific vaccine. For measurement year 2008, this includes children with a date of birth on or after January 1, 2006 and on or before December 31, 2006, who were seen for the first time in the clinic prior to their second birthday, regardless of whether or not they came to the clinic for vaccinations or well child care.

Numerator: Number of children in the "universe" who received all of the following: 4 DTP/DTaP, 3 IPV, 1 MMR, 3 Hib, 3 HepB, 1VZV (Varicella) and 4 Pneumococcal conjugate, prior to or on their 2nd birthday whose second birthday occurred during the measurement year (prior to 31 December), among those children included in the denominator.

The national rate for this measure in 2007 was 68.1%.⁴

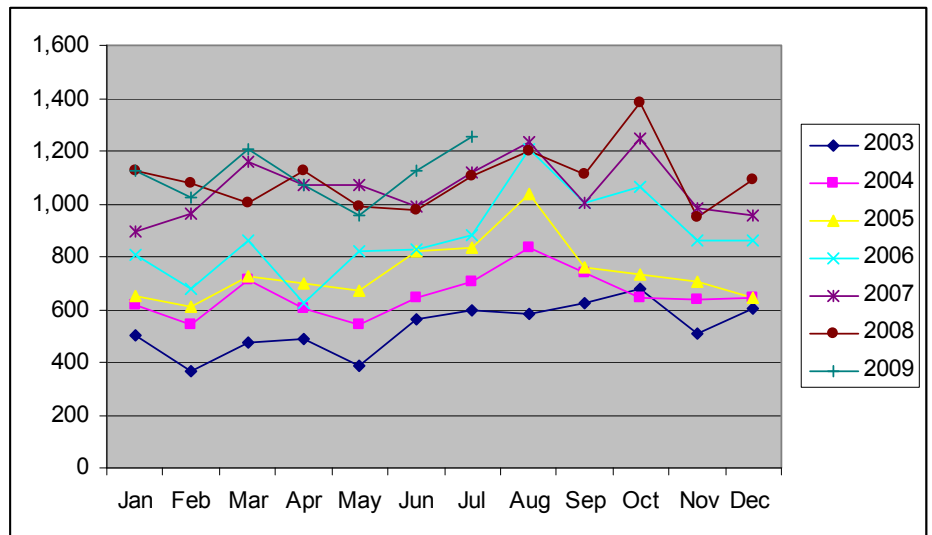


Interventions to improve childhood immunization rates:

- August 2006 - Well child recall telephone calls
- January 2007 - Standing and delegation orders for nurses
- January 2007 - Well child recall letters
- January 2007 - Health Maintenance Configuration
- February 2007 - QI reports (physicians, nurses)

This chart shows monthly THSteps (Medicaid Well-Child) visits.

- August 2006 - telephone recall system THSteps visits
- January 2007 - added recall letters in addition to the telephone recall system.



⁴ US, National Immunization Survey, 2007.

http://www2a.cdc.gov/nip/coverage/nis/nis_iap.asp?fmt=r&rpt=tab27_4313314_race_iap&qtr=Q3/2007-Q2/2008

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Access Measure: Provider Panel Optimization

Provider	Location	Schedule Template	Visits Per Pt Per Year	Visits Per Provider Per Year		Panel Size		Over/Under
				Actual	Target	Current	Ideal	
HUGHES, AIMEE	Bellmead		3.1	841	3,800	125	1,234	-1,109
RAIMONDO, JEFF T	Bellmead	Level 2	3.5	3,509	4,500	1,203	1,285	-82
STEELE, KEVIN C	Bellmead	Level 4	4.4	4,824	4,500	1,404	1,032	372
MORROW, AARON S	Elm Avenue	Level 2	3.4	3,758	4,500	1,236	1,316	-80
VO, THU P	Elm Avenue	Level 4	3.3	4,130	4,500	1,369	1,371	-2
BOLES, KEITH A.	McGregor	Level 1-2	2.3	3,965	4,500	1,375	1,974	-599
COOK, JESSICA K	McGregor	Level 4	3.3	2,505	3,000	1,076	912	164
REYNOLDS, KELLEY M	McGregor	Level 3	3.5	4,042	4,500	1,542	1,271	271
CESSNUN, COLBY W	MEYER	Level 1	3.3	3,359	4,500	1,095	1,365	-270
RAINEY, CRAIG	MEYER	Level 1	4.0	3,615	4,500	957	1,113	-156
HESS, BURRITT W	Oliver S18th	Level 4	4.1	4,792	4,500	1,156	1,106	50
SMITH, LESLIE	Oliver S18th	Level 4	3.7	4,009	3,465	1,107	926	181
SPAIN, LA TRISHA F	Oliver S18th	Level 3	3.9	4,161	4,500	1,162	1,152	10
WATSON, CLINT	Oliver S18th	Level 4	3.6	4,776	4,500	1,331	1,250	81
PORTER, MATTHEW R.	Waco Lung	Level 3	3.3	3,913	4,500	1,464	1,356	108

September 2007: began to manage the patient panels of each provider in order to:

1. Optimize continuity of patients with their assigned provider leading to improved efficiency, patient satisfaction and provider satisfaction.
2. Shift new patient volume to providers with capacity for those new patients, thus making them more productive.

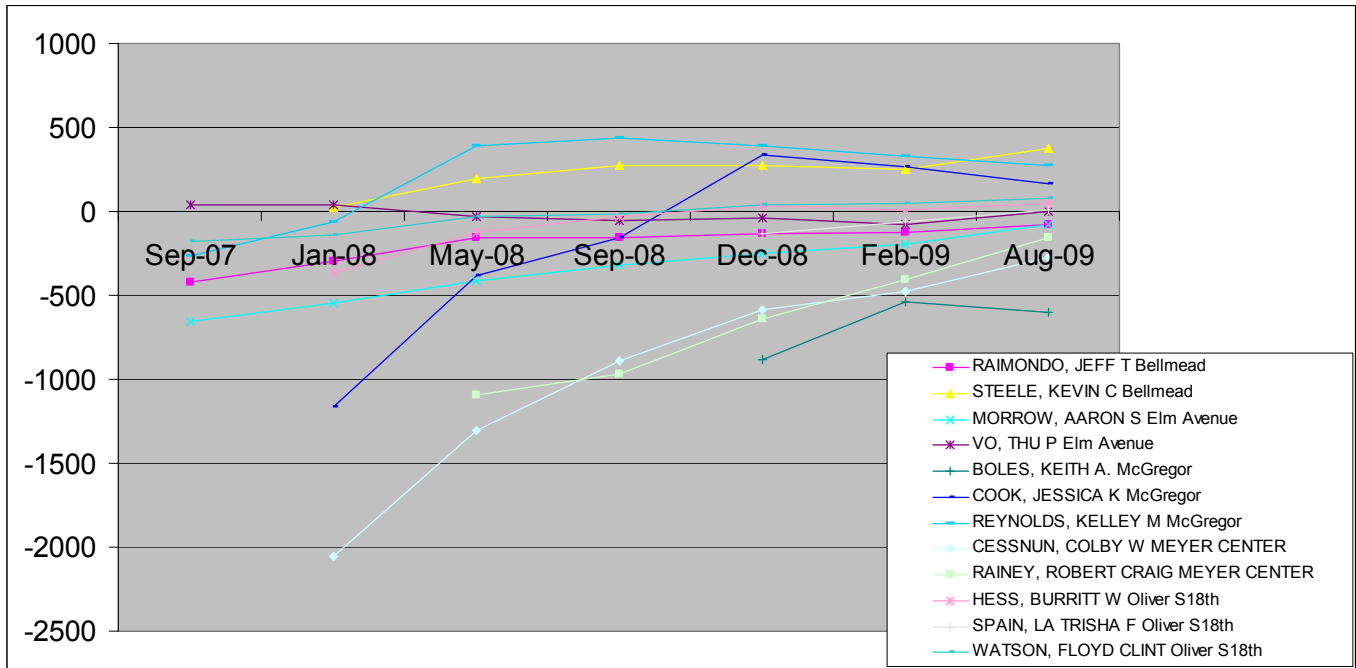
Optimal panel size is based on:

- a. Target number of encounters a provider (based on provider type, FTE) is able to generate in a 12 month period
- b. Number of visits per year per patient generated by the provider's patient panel

Optimal patient panel size = a/b

The relative number of new patient appointments (the primary variable controlling panel size) is adjusted on a regular basis according to the optimal panel size estimate for each physician. New patients are routed to sites where providers have the capacity for new patients.

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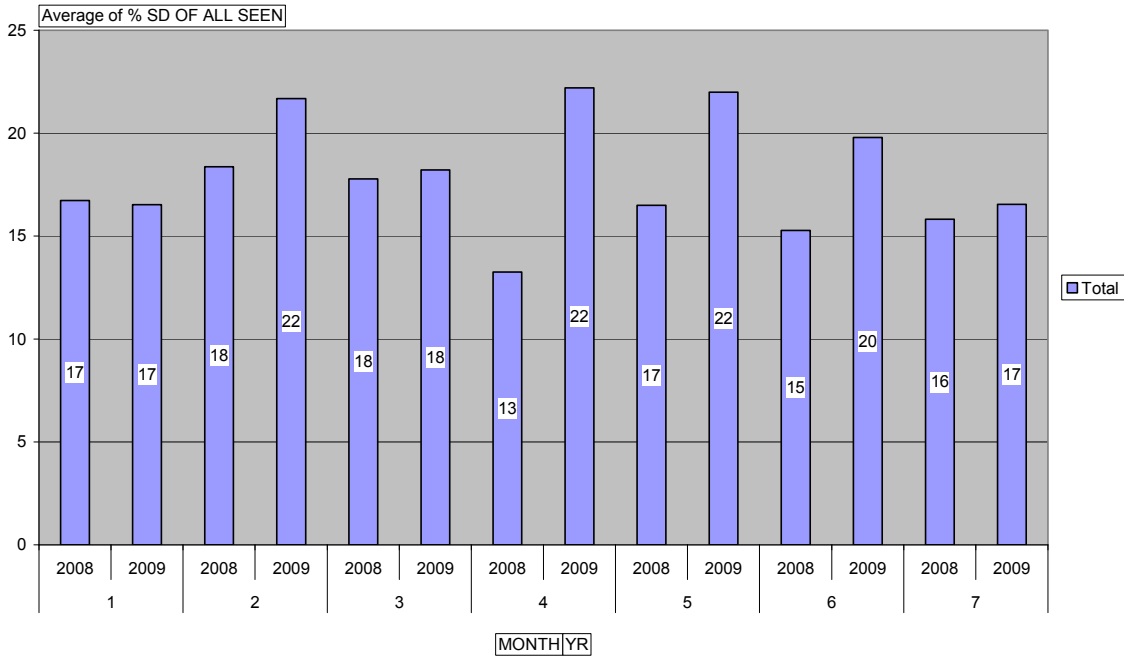
This chart demonstrates the effects of patient panel management. Most providers are trending toward optimal patient panel size.

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Access Measure: Availability for Acute Visits

DEPARTMENT (All)

Resident Team Areas



Issue: patients assigned to resident physicians could not easily obtain a same day appointment for an acute illness.

This chart is a same month comparison for the first seven months of 2008 to 2009 which shows the effects of the following interventions to improve availability of urgent appointments for patients assigned to a resident physician. For example, in February 2008 18% of patients were seen the same day they made their appointment. This measure increased to 22% in February 2009. These interventions began in January of 2009.

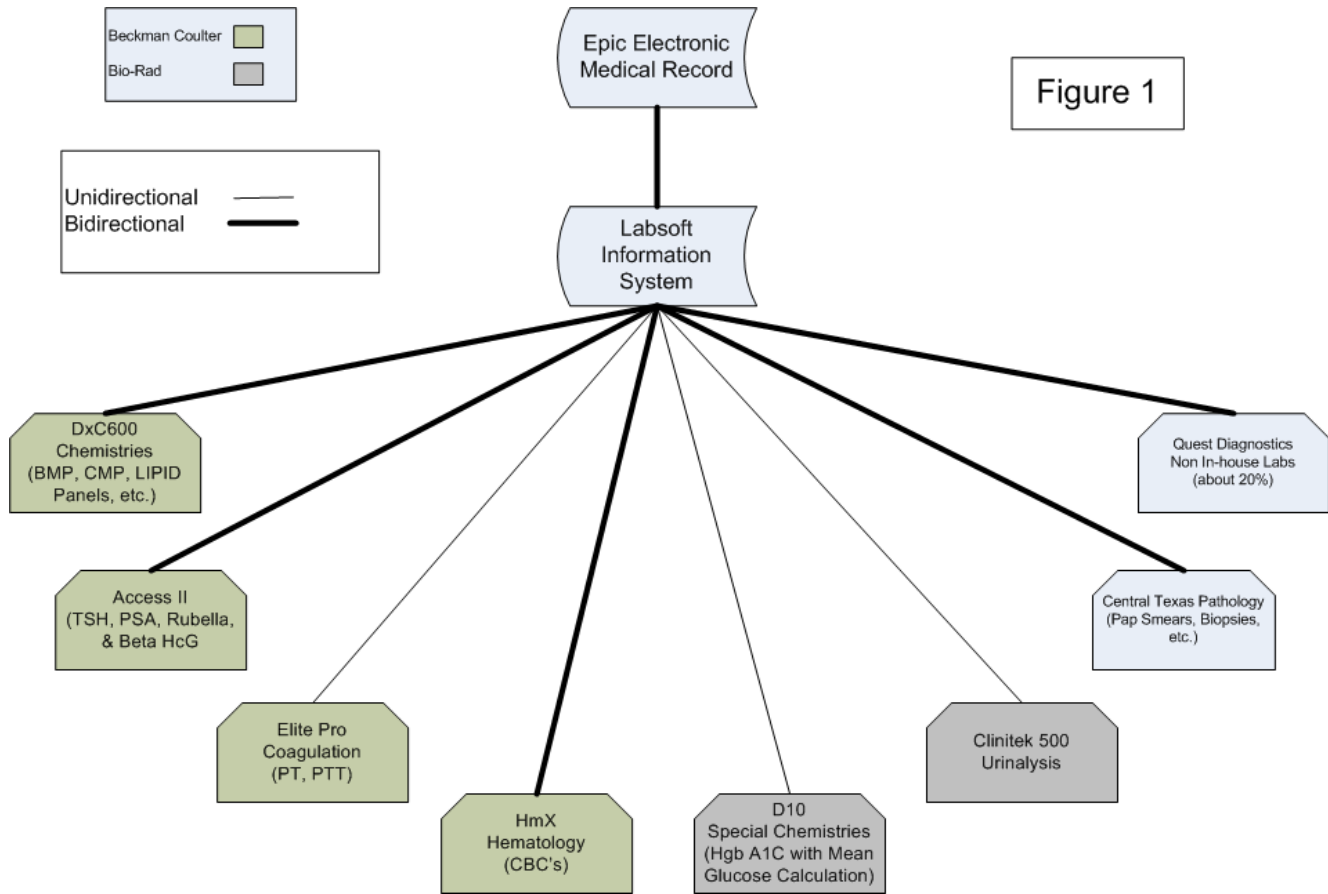
- New patients routed to other sites and providers with capacity (to move resident patient panels, which were larger than optimal size, to a more appropriate level)
- At least 25% of appointments blocked for urgent/acute visits so that they only become available 1 business day prior to the appointment. These blocked visits can also be used for same day appointments

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INTERFACES, NETWORK, OTHER INFRASTRUCTURE

Our main interface is a bidirectional HL7 interface between Epic’s electronic health record and Labsoft’s electronic lab system. Epic’s bidirectional interfaces begin at

\$30,000 each and Labsoft’s interfaces cost \$5,000 each. We knew if we could funnel all possible interfaces through Labsoft into the Epic interface, we could save quite bit of money. Since Epic’s HL7 interface contains a powerful set of data items, we were able to work with Labsoft to configure the interfaces fairly easily. (See Figure 1)



We are interfaced with several Beckman Coulter instruments:

- DxC600---Chemistries (Examples: BMP, CMP, Lipid Panels, Hepatic Function Panels)
- Access II---TSH, PSA, Rubella, & Beta HcG
- Elite Pro---Coagulation (PT, PTT)
- HmX---Hematology (CBC's)

We also use an interfaces with Bio-Rad instruments:

- D10---Special Chemistries (Hgb A1C with Mean Glucose Calculation)

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- Clinitek 500---Urinalysis

Our largest interface attached to Labsoft is with Quest Diagnostics. The vast majority of lab tests we do not do in-house are sent to Quest. Orders are transmitted via the interface to Quest which creates an order number for each patient. When labs are completed, the results are sent back to Labsoft to be processed and relayed to Epic. The Quest interface is handled by a VPN connection over the internet.

Another bidirectional interface is with Center Texas Pathology. They process our pap smears and biopsies. This interface is through a high speed wireless link.

All of our sites, except McGregor Community Clinic, are connected to our main site with a Alvarion BreezeAccess VL high speed wireless network. (See Figure 2 - next page) The distances range from across the street to 15 miles. The cost of the wireless link per site, when compared to monthly T1 charges, will pay for its self within the first year. The network is robust enough to handle image scans, radiology images (PACS), and normal network traffic. We use it to send our digital x-rays to Waco Radiology and digital ultrasounds to Hillcrest Radiology for reading. All our providers have notebooks with wireless access at all our sites. If they have access to the internet outside the clinics, they can access the EHR through a VPN connection. We also have a geriatric nurse practitioner who uses a cellular wireless connection to access the system at four different nursing homes.

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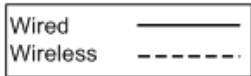
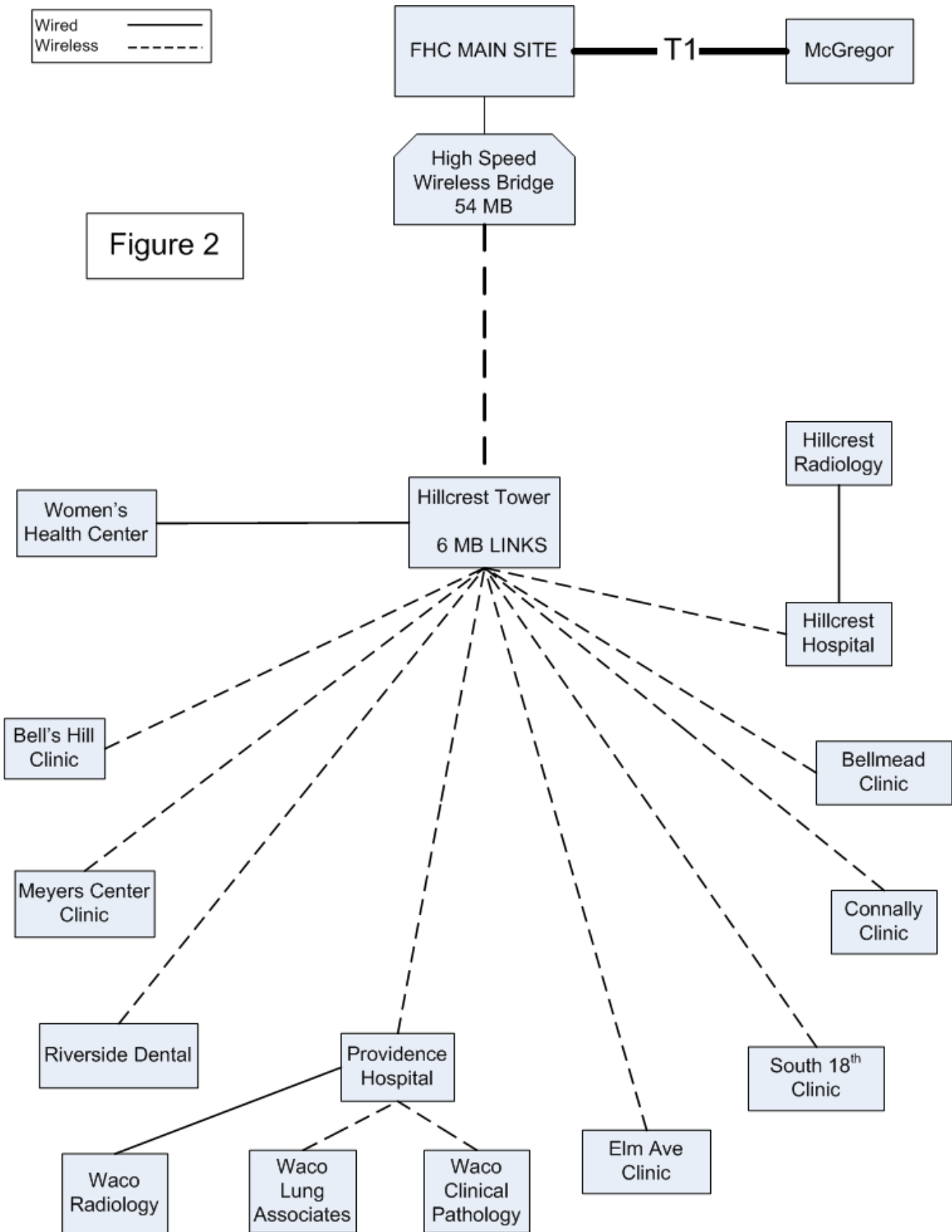


Figure 2



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INTEGRATION OF TEACHING AND SERVICE

Academic culture facilitates EHR implementation and development

Change is readily accepted due to the desire for a leading edge academic program

Technology is generally embraced

Dedicated faculty time to engage in creative projects (contrast to fulltime clinical practice)

- Faculty physicians available to be intimately involved in implementation and system optimization

Academic funding opportunities (e.g. Title VII graduate training in family medicine)

Trainees with a high level of expertise in the use of technology

New Resident Training Strategy

E-learning Modules

Training Scenarios (Theme this year: "The Office". See Appendix A)

EpicCare Competencies List (example attached)

Follow-up Training (e.g. In-Basket)

Benefits to Resident Education

Residency recruiting

Rapid communication cycle for chart review/feedback

Teaching patient care standards (e.g. pain management, warfarin therapy SmartSets)

Targeted peer review (e.g. drug usage reviews)

Reporting to ACGME (annual program information regarding resident experience)

Remote access is important for patient continuity for residents

Recruiting of residents to clinical (14) and faculty (8) positions post training

Support of research - data gathering and reporting

Community HealthCorps Training

Attached document developed by HealthCorps member CraShanta Evans to train future members***

ARRA PROJECTS

HOTCHC's Use of American Recovery and Reinvestment Act (ARRA (Stimulus)) Funding Toward Health IT

Summarily, HOTCHC is planning to use a sizable portion of all three ARRA opportunities (Increased Demand for Services (IDS), Capital Improvement Program (CIP), and Facility Investment Program (FIP)) for Health IT purposes. Indeed, it could easily be said that HOTCHC's leading-edge position with Health IT is one of the primary reasons HOTCHC has been able to respond so successfully to the goals of ARRA, the Bureau of Primary Health Care, and HRSA.

Increased Demand for Services (IDS):

HOTCHC submitted one of the first successful IDS applications in the country. It was awarded \$668,000 of IDS funding, to be used in operational support of its expanded South 18th Street Community Clinic. The capital portion (bricks and mortar and equipment) of that project was officially completed this week (Monday, August 10, 2009) with the receipt of the Certificate of Occupancy from the City of Waco. The Chamber of Commerce ribbon-cutting and open house for said expansion is slated for next Monday, August 17 at 3 PM. Given that the building has been equipped, and the requisite incremental staff has been hired, the expanded facility will be operationalized the next day.

From a Health IT perspective, ARRA IDS funding will be used, beginning next Tuesday, August 18, 2009, to pay for the incremental monthly maintenance and support costs associated with the expanded operations of the South 18th Street Community Clinic. It should be noted that none of the IDS funding was used for the capital costs of this expansion. Instead HOTCHC used private funding for the capital aspects, including but not limited to well over \$100,000 for incremental Health IT equipment and licenses.

Capital Improvement Program (CIP):

HOTCHC submitted a successful CIP application in May, and on June 25th was awarded \$1.9 million to assist with two capital projects totaling \$2.7 million. One project will add approximately 7,800 square feet of dental and medical clinic space to HOTCHC's existing Elm Avenue Community Clinic. The other project will build a brand new 7,800 square foot medical clinic, to be called the Martin Luther King Community Clinic, at the intersection of Martin Luther King Boulevard and East Herring Avenue in deep east Waco. Construction on both projects should begin next month (September 2009), and be finished within one year.

From a Health IT perspective, ARRA CIP funding will be used to pay for almost \$200,000 of Health IT equipment and licensures, including but not limited to incremental license fees for EpicCare (our electronic health record) and Dentrix (our electronic dental record).

Facility Investment Program (FIP)

HOTCHC submitted an application for FIP funding last week, on August 4, 2009. Our FIP application is to build and equip a 3-story 24,000 square foot health care facility immediately adjacent to our main site (Family Health Center) at 1600 Providence Drive, Waco, TX 76707. The first floor would be health-related retail space, most likely for a fitness center and a healthy foods grocery store for low-income residents of our community. The second floor would be a 15-exam room medical clinic. The third floor would be a 10-chair dental clinic. The total cost of the project is estimated to be \$5.63 million, of which we requested \$5.30 million in Federal funding. Awards are to be announced in October or November of this year. If approved, we would start construction on our project within two months, and be finished within a year after that.

It should be noted that this 3-story health care facility is expected to be the spark that ignites another \$15 million investment in the area, including two 4-story buildings on the same block. The first floor of each of the 4-story buildings is expected to be retail, including restaurants, hair salons, etc. The top three floors are expected to be apartments and condominiums. Community support, indeed community excitement about the overall project (Master Plan attached - Appendix B) is incredible.

From a Health IT perspective, HOTCHC's ARRA FIP application includes over \$600,000 of Health IT equipment, including but not limited to a main server and disk array upgrade, incremental electronic health record licenses, desktop and notebook computers, automated resulting and reminder systems, and networking equipment.