

Tri-Community Assessment and Intervention Final Report December 20, 2006

Dedication
Mr. O. V. B. Jr.

This report is dedicated to Mr. O. V. B. Jr., a seventy-two year old African-American male who in many ways epitomizes the purpose of the community Assessment and Intervention project, and who for HDHHS, illustrates the urgency of health disparities in some of Houston's most vulnerable communities. Mr. B. died on October 4, 2006; his health was significantly impacted by housing conditions and respiratory illness.

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who helped make this event a success!

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- and -
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they provided us throughout this entire process.

Plus, the fried fish lunch they prepared for all of us on Friday made the work that much easier!

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INTRODUCTION

The Houston Department of Health and Human Services (HDHHS) spearheaded and conducted, along with community-based organizations (CBOs) and volunteers, its first community Assessment and Intervention project (A&I) on September 8th and 9th, 2006 within the Tri-Community neighborhood.

Tri-Community is a residential neighborhood located on the far eastern ridge of the Houston city limits and is comprised of Clinton Park, Fidelity, and Clinton view. The Tri-Community A&I project was initiated when members of the Tri-Community Super Neighborhood Association approached the department for help identifying solutions to accessing health care within their community.

The project involved an assessment survey and intervention in response to the request for HDHHS's assistance in finding solutions for the community's number one priority issue, a perceived lack of access to health care. An intervention component was incorporated into the assessment, demonstrating the department's commitment to doing more than exploring the problems. An assessment of the community's environmental concerns was then added due to their proximity to the ship channel.

The primary purpose of A & I was three-fold: 1) to investigate access to health care; 2) to explore environmental concerns affecting the community; and 3) to serve as a safety net by linking residents to the health and human services they identified during the assessment. Secondary purposes of A&I included mobilizing HDHHS to participate in a large-scale assessment and response effort, as well as mobilizing community partnerships and resources to broaden the department's service reach.

A COLLABORATIVE EFFORT

The A&I project was conducted through both internal and external collaboration. HDHHS staff from different divisions with diverse skill sets worked closely with one another in a large scale, grass roots effort to fulfill its mission; "to work in partnership with the community to promote and protect the health and social well being of Houstonians". The A&I was both a visionary vehicle and a highly complex venture that addressed each of the three core functions of public health: 1) assessment (by monitoring health, diagnosing and investigating), 2) policy development (by informing, educating, empowering and mobilizing community partnerships), and 3) assurance (by evaluating, assuring a competent workforce, linking the community to and/or providing care and enforcing laws). The following figure, from the CDC website (www.health.gov/phfunctions/public.htm), details these core functions and their relationship to one another.

Figure 1: The Core Functions of Public Health

A broad spectrum of HDHHS programs participated in the A&I planning and execution contributing all necessary resources (human, material, funding, and intelligence) to make this event a success. In addition to intra-department collaboration amongst all divisions, HDHHS sought and gained partnership from additional city departments including HPD's Neighborhood Protection Division and Parks and Recreation.

Community Involvement

Creating a partnership with the community was a core feature of the A&I, which was deemed essential in strengthening the community's capacity to address changing neighborhood needs. Community partners were engaged, beginning with the Tri-Community Super Neighborhood organization, area Civic Clubs, Houston Hope and a multi-agency team of partners who are developing expanded services for the HDHHS Tri-Community Center on Clinton Drive. Additional collaborative partners include; Houston Hope, Job Corps, Neighborhood Centers, Inc., SNAP, Houston Library Department, Sheltering Arms, Youth Advocates, Inc. and City of Houston Building Services Department.

Community partners assisted in distributing flyers to introduce A&I to the community, mobilizing volunteers and hosting a ministers' breakfast with the A&I volunteer recruitment team. In addition to partners that are working on the Tri-Community project, several community agencies volunteered staff to help respond to immediate needs during the A&I. These partners included: Department of Aged and Disabled, Community Health Choice and Houston Association of Black Psychologists. A total of 53 volunteers participated during both days of the assessment; 47 volunteers on Friday and 17 volunteers on Saturday. The 53 volunteers worked a total of 283 hours on Friday and 71 hours on Saturday; for a total of 354 volunteer hours for the event. Appendix A details community and agency partners and their level of engagement.

DEPARTMENT MOBILIZATION

Approximately 220 people (inclusive of HDHHS staff, community agency volunteers and other volunteers) took part in the two-day event. Staff from the planning team represented the following divisions and bureaus: Neighborhood Services (Human Services), Environmental Health (Air Quality Control), Surveillance and Public Health Preparedness (Community Health Statistics), Communicable Disease (Administration, Health Education) and Administrative Services (Information Systems). Additional support for the project was provided by Case Management, Nursing Services, Compliance and Multi-Service Center Administrators. The mobilization effort took approximately three months to develop and implement pre-event and approximately two months data processing and referral follow-up post-event.

While many issues were identified and addressed immediately during the A&I, it was realized that there are complex issues in the community that will take time to address and improve. Tri-Community has initiated community mobilization efforts to increase services at the Tri-Community Center and address identified systemic problems in the community over a sustained period of time. The expanded effort is designed to engage community members, HDHHS and other organizations to: 1) identify community assets and 2) organize available resources to address problems. A Community Planning Team has been formed at the Tri-Community Center to assist with ongoing mobilization efforts and to coordinate expansion of services at City of Houston facilities in the area.

Community mobilization is a cornerstone in HDHHS' efforts to strengthen the health and well-being of vulnerable communities. The goal of a community mobilization initiative is to develop a plan to improve the quality of life in targeted communities. These initiatives have proven to be successful when there is community readiness, or 'buy-in', to sustain them. The A&I has helped HDHHS to identify organizational and community support to lead to this next step (detailed below).

Mobilizing for Community Change

- I. Define the Target Community - Identify geographic boundaries
- II. Develop a Community Profile - Get a picture of what the community looks like
- III. Identify Community Landmarks
- IV. Identify Key Community Leaders
- V. Convene Discovery Meeting - Assess interest in developing and implementing a healthier community plan
- VI. Form Steering Committee - Provide structure for the initiative
- VII. Host First Community Forum - Solicit input from the entire community
- VIII. Develop Community Vision from Community Forum Visioning Exercise
- IX. Host Second Community Forum - Solicit additional input, people and resources for the initiative
- X. Host Third Community Forum - Begin looking at and agree on action items and areas
- XI. Host Fourth Community Forum - Form teams and begin developing Action Plans
- XII. Implement Defined Actions - Evaluate progress and report back to the community at specified intervals

Figure 2. The Steps of Mobilization

A&I Staff Organization

A&I staff consisted of HDHHS staff and community volunteers who were divided into four large groups, called "pods". Each pod had 3 teams (A, B and C) and each team had 3 tiers (1, 2 and 3) to

increase the scope and nature of work. Tier one conducted the assessment tool in every home in the community. Tier two conducted the intervention by providing direct assistance and education to the homes that indicated need -based upon their answers to questions on the assessment tool. Tier three also conducted the 5
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intervention by providing emergent care to the homes that indicated need. An example of A&I staffing organization follows:

POD 1 POD 2 POD 3

Each Pod Contained:

Site Coordinators (2) Data
 Entry Oper. (3) 3 Teams

POD 4

TEAM A Team Lead Case Liaison	TEAM B Team Lead Case Liaison	TEAM C Team Lead Case Liaison
Assessment & Education 4+ pairs of HDHHS staff and community members	Assessment & Education 4+ pairs of HDHHS staff and community members	Assessment & Education 4+ pairs of HDHHS staff and community members

Direct Assistance & Education 2 pairs of HDHHS staff and community agencies	Direct Assistance & Education 2 pairs of HDHHS staff and community agencies	Direct Assistance & Education 2 pairs of HDHHS staff and community agencies
Emergent Care 1 pair of HDHHS nursing staff	Emergent Care 1 pair of HDHHS nursing staff	Emergent Care 1 pair of HDHHS nursing staff

Figure 3: Pod Staffing Division

BUDGET

The following A&I project budget (table 1) was created to include staffing and supply costs for September 8 and 9, 2006. This budget does not reflect planning, transportation, intervention costs, or lost opportunity costs.

Salary and Overtime	
Salary Allocation	\$41,800.00
Overtime (Saturday)	\$38,625.00
*Subtotal	\$80,425.00
Promotional Items	
T-shirts	\$688.50
Caps	\$80.00
Back Packs	\$278.60
Subtotal	\$1,047.10
Logistical Items	
Megaphones	\$70.85
Batteries	\$31.31
Padlocks and caps	\$56.52
Portable Toilets	\$400.00
Subtotal	\$558.68
Food	
Water	\$343.14
Snacks	\$63.00
Breakfast	\$1,764.12
Subtotal	\$2,170.26
Supplies	
Gum, pops, mints, pens	\$150.00
First Aid kits	\$170.79
Sanitizer spray	\$75.00
Stethoscopes and gloves	\$118.00
Assessment & tier supplies	\$2,647.76
Copies	\$2,000.00

Subtotal	\$5,161.55
Salary	\$41,800.00
Overtime	\$38,625.00
Supplies	\$8,937.59
TOTAL	\$89,362.59

Table 1: Budget Breakdown

**Salary Allocation and Overtime rates for this general budget were based on an average hourly rate of \$25.00/hr. This figure includes salaries, pension, FICA, Health Insurance and Workers Compensation.*

METHODS

The survey tool and study design used for this assessment were descriptive and exploratory, intending to assess the prevalence of access-to-care indicators among households in the community, and to identify the household characteristics that might be associated with lack of access to care. The survey collected data on 28 questions focusing on access to care and basic environmental concerns.

The survey asked questions about basic household demographics, such as the number of members of vulnerable groups (elderly, children and disabled) living in the household. The access to health care questions related to issues such as, specific barriers to obtaining health care, whether households needed help finding a doctor, and whether they had problems obtaining medical supplies and services. The survey asked the variety of ways in which members of households paid for health care. Household members who responded that they pay with Medicare, Medicaid, Gold Card, or other types of insurance, were considered "insured," while all other responses from household members, including those who paid by cash or credit card, with no mention of insurance, were considered "uninsured." The survey also collected information on emergency room usage and the frequency of emergency room visits, as possible indicators of lack of access to health care.

The survey attempted to obtain a 100% response rate from the total target population (100% of households were visited and targeted for interview by survey teams on the ground). However, only a total of 417 (69%) households were reached for interview during the two-day event, and only 322 (53%) households consented to participate. Having fallen short of the 100% goal, the degree to which adequate representation of the community was achieved could not be determined because those persons who "happened" to be available on at least one of the days on which the survey was conducted may have had distinctly different characteristics and concerns compared to the remaining 47% who refused or were unable to participate (selection bias). Because of these concerns, the survey results can not be used for epidemiologic or statistic analysis but for descriptive use only. It must be noted that generalization from these results to the Tri-Community Neighborhood at large may not be valid given the potential bias in the response.

Community Mapping

To facilitate survey distribution among staff and volunteers, the Tri-Community Neighborhood was divided into four sections. One pod was assigned to complete the surveys for one section; such as pod one for section one. Each section was further divided into blocks. As pods were assigned to sections, teams within pods were assigned to streets within each section. Team members were grouped into pairs from their respective tiers. Each pair was assigned to a block in their section where they conducted surveys on only one side of the block. Another pair conducted surveys on the opposite side of the same block. Since some sections were more densely populated than other sections, some pods finished their surveying more quickly than other pods. As this happened, teams were randomly reassigned to assist the completion of surveys for incomplete sections.

Maps of the Tri-Community were created by the Geographic Information Systems (GIS) Unit, Office of Surveillance and Public Health Preparedness. Maps were created using GIS data from the Planning Department in combination with the Appraisal Districts' (HCAD) parcel data. Parcel data shows the classification of parcels (buildings, offices, churches and homes) on maps. This information allowed A&I planning team members to deduce the approximate number of homes and vacant lots in the community. The software used to produce the maps was ArcView 9.1. Maps of the Tri-Community are detailed in Appendix C.

GIS created a total of 38 maps of the Tri-Community for the project. Site coordinators and the planning team used large maps to track pod completion at "Command Central," located at Clinton Park, by placing color-coded push pins on streets that were completed or needed to be revisited. Smaller maps were used in the field by team leaders and team members to facilitate movement of teams. Short-wave radios and cell phones were used to maintain communication between command and the field.

Assessment Tool Development

The survey tool (also commonly referred to as, 'assessment tool' and 'questionnaire') was adapted from a tool used by the San Antonio Metropolitan Health District in 1994. The "Southwest San Antonio Primary Healthcare Review Community Survey" was tested and adapted for English and Spanish speaking communities.

Questions from the San Antonio survey that utilize the Healthy People 2010 (<http://www.healthypeople.gov/LHI/lhiwhat.htm>) 'access to care' indicator were adapted for the Tri-Community tool. The Tri-Community Super Neighborhood leadership also assisted in the creation of the questionnaire by making language and question suggestions that were specific to the needs of their community's residents. The environmental questions used in the Tri-Community tool were adapted from a mobilization process initiated in another Houston community and conducted by HDHHS Environmental Health staff.

Significant input from various HDHHS divisions contributed to development of the questionnaire. Particularly notable is use of the "answer option cards" that were used to maximize participant engagement in responding to lists of questions related to health care access, utilization and payment of health care services and prevalence of chronic health conditions.

This survey was conducted with the goal to assess and provide intervention, where needed, to every member of the community through face-to-face interviews. Each person living in the home who was 18 years and older was eligible to participate, on behalf of the household. The survey was conducted by visiting, door-to-door, every home in the Tri-Community, instead of visiting a random sample of homes in the community. Since sampling of the population was not conducted using traditional epidemiologic methods, results from this survey can only refer to the group who participated in the survey and not to the community as a whole. For analysis purposes, the participants who completed the survey were treated as a whole population, in and of themselves, without reference to the larger community.

ASSESSMENT RESULTS

Tier one staffing was charged with conducting the survey in every home in the community. Although anecdotal evidence suggested that this community had approximately 900 homes, far fewer homes actually exist. Attempts were made to survey a total of 605 homes in the community. Of these 605 homes, 322 homes actually completed the survey, while 186 homes were unable to be interviewed and 95 homes refused to be interviewed.

Figure 4: Survey Response Rate (N=605)

The survey response rate for a community of 605 homes was 53%, while the unable to interview rate was 31% and the refusal rate was 16%. It is important to note that the households that could not be interviewed were visited twice -once on Friday, September 8th and once on Saturday, September 9th. The "unable to interview" group also included homes with "no trespassing" signs posted in their yards or large dogs, which prevented HDHHS staff from entering the yard and conducting the survey. Excluded from the survey were 58 addresses that were empty lots, abandoned or demolished homes or homes for sale. The large number of homes that were unable to be interviewed, as well as the numerous abandoned and vacant homes observed during A&I illustrate the complex nature of conducting community-based survey research.

HDHHS Director, Stephen L Williams, speaks with a community member about an abandoned home.

The Data

As questionnaires were completed, runners carried them from the community back to command central throughout both days of the event. Thirteen trained data entry operators were onsite at command central simultaneously entering data in a database (Microsoft Access 2003) using 13 laptops furnished from various HDHHS divisions. Several days after the event, the databases on all 13 laptops were merged into one file for analysis. Descriptive analysis of the survey was then conducted using the statistical software package SPSS version 10.0.

Deidra Thompson and other Data Entry Operators enter questionnaires into the database.

DEMOGRAPHICS

The figures on the following pages (figures 5-9) represent the demographic information for the households who responded to the survey. This demographic information is compared to Census 2000 data for the Tri-Community. While the lack of sampling strategies used prevents generalizations from being made about the community as a whole, the correlation between data from households surveyed by HDHHS and Census data gives HDHHS confidence to utilize results for service planning. For example, figures 5 and 6 show a similarity for the total number of people living in households between HDHHS and Census data.

Figure 5: Total Number of People Living in Households, HDHHS (2006) Figure 6: Total Number of People Living in Households, Census (2000)

Homeless, <1% (1)	
1 person households 44% (133)	1 person 25% (77)
	3 or more households 31% (261)
	2 person households 41% (346)

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Figures 7 and 8 (below) do not show similarities between HDHHS and Census data for households with at least one child.

Figure 7: Households with at least One Child, **Figure 8: Households with at least One Child,**
HDHHS (2006) **Census (2000)**

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30% (90)

< 18 year old children 64% (542)
No Children 36% (299) No children 49% (159)

Figures 9 and 10 (below) show similarities between HDHHS and Census data for households with elderly who live alone or live with others.

Figures 9 and 10: Households with Elderly who live alone and with others from Census (2000) and for the households surveyed by HDHHS (2006) in Tri-Community

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Figures 10 (below) depict the similarity of the age distributions of households surveyed by HDHHS and by the Census 2000. These figures show that the ages of individuals surveyed in the Tri-Community by HDHHS considerably mirrors the 2000 Census data for the Tri-Community.

Frequencies of responses to survey questions are provided in the following three tables: 1) Access to Health Care, 2) Environmental Health and 3) Final Follow-up Question. The "Access to Health Care" table is divided into six sections: 1) Medical Home and Supplies, 2) Difficulty Obtaining Medical Services, 3) Emergency Room Usage, 4) Care of the Elderly, 5) Household Health Care Financing, and 6) Household Health Problems. The "Environmental Health" table has one section: Air, Water and Land Concerns. The "Final Follow-up Question" table also has one section: Further Information and/or Assistance Needed.

ACCESS TO HEALTH CARE

Medical Home and Supplies	Percent (N)		
	Yes	No	No Response, Don't Know
<i>Does your household have a regular family doctor or clinic to go to when someone in the home is sick or needs a check-up? (N=322)</i>	77.6(250)	18.9(61)	3.5(11)
<i>Does your household need help finding a regular family doctor or clinic? (N=322)</i>	15.8(51)	79.8(257)	4.4(14)
<i>Has your household had problems getting medication or medical supplies in the past year (ie: getting medicine the doctor said you needed, getting bandages, or diabetic monitor strips)? (N=322)</i>	14.3(46)	82.3(265)	3.4(11)

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<i>If your household has had problems getting medication or medical supplies in the past year, would you like help getting them? (N=46)</i>	84.8(39)	10.9(5)	4.3(2)
Difficulty Obtaining Medical Services			
<i>In the past year, has your household had problems getting medical services that were needed (ie: problems seeing a doctor, or getting to a clinic)? (N=322)</i>	18.3(59)	77.9(251)	3.8(12)
<i>If your household has had difficulty getting needed medical services in the past year, what are the reasons for this? (N=59) *Responses to this question should be treated separately because the option was given to 'circle all that apply'. _</i>			Percent (N)
I do not have a car or transportation to go to the doctor.			39.0(23)
I do not have insurance.			35.6(21)
I do not have enough money to pay for health care.			35.6(21)
I do not have a doctor/clinic to go to.			20.3(12)
Doctor's office/Clinics could not give me/us an appt when needed health care.			11.9(7)
Other			11.8(7)
I do not know where to go for health care.			10.2(6)

I do not like to go to the doctor.					10.2(6)				
I do not like to leave home.					6.8(4)				
I do not like to go to the doctor alone.					6.8(4)				
Doctor's office/Clinic is too far from my home.					6.8(4)				
Doctor's office/Clinics were not opened when I/we needed health care.					5.1(3)				
Doctor's office/Clinic waiting time is too long.					5.1(3)				
Doctor/staff does not treat me/us with respect.					3.4(2)				
Doctor/staff does not listen to me or understand me.					3.4(2)				
I do not have childcare.					3.4(2)				
Doctor is different each time I/we go for health care.					3.4(2)				
Doctor/staff does not speak our language / look like me/us.					1.7(1)				
Emergency Room Usage									
		Percent (N)							
<i>Has your household used a hospital emergency room for any reason in the past year? (N=322) _</i>		Yes		No		No Response, Don't Know			
		36.0(116)		56.8(183)		7.2(23)			
<i>If yes, how many times has your household used the emergency room in past year? (N=116)</i>		1 time		2 times		3 times		3+ times	
		44.0(51)		31.9(37)		9.5(11)		14.6(17)	
<i>Please list the top 3 health problems for which your household went to the emergency room in</i>									

<i>the past year. (N=116)</i>					Percent (N)	
1. Cardiovascular Disease / High Blood Pressure / Chest Pain / Stroke					28.5(33)	
2. Respiratory Disease					10.5(12)	
3. Accidents					9.9(11)	
Care of the Elderly						
		Percent (N)				
<i>Does the elderly in your household have a caregiver or someone to help take care of them? (N=89)</i>		Yes		No		No Response, Don't Know
		37.1(33)		56.2(50)		50.6(6)
<i>If yes, does the caregiver need assistance taking care of the elderly? (N=33)</i>		15.2(5)		81.8(27)		3.0(1)
<i>Does the elderly in your household need help with any of the following? (N=89)</i>		Yes		No		No Response, Don't Know
		10.1(9)		88.7(79)		1.1(1)
		5.6 (5)		93.2(83)		1.2(1)
Bathing						
Toileting						

Eating	2.2(2)	96.6(86)	1.2(1)
Feeding	2.2(2)	96.6(86)	1.2(1)
Dressing	6.7(6)	92.1(82)	1.2(1)
Walking	9.0(8)	89.8(80)	1.2(1)
Housework	13.5(12)	85.3(76)	1.2(1)
Other	5.6(5)	5.6(5)	88.7(79)
No help needed	47.2(42)	51.6(46)	1.2(1)
Household Health Care Financing			
	Percent (N)		
<i>Please circle all the ways your household has paid for health care in the past year. (N=322) _</i>	Yes	No	No Response, Don't Know
Cash/Credit Card	35.1(113)	63.4(204)	1.5(5)
Medicare	35.1(113)	62.7(202)	2.2(7)
Insurance (Traditional insurance)	23.6(76)	74.5(240)	1.9(6)
Medicaid	24.5(79)	73.0(235)	2.5(8)
HCHD Financial Assistance (ie: "Gold Card")	19.3(62)	78.9(254)	1.8(6)
Managed Care Plan (ie: "Blue Cross Blue Shield)	8.7(7)	89.1(287)	2.2(28)
Disability	8.1(6)	90.1(290)	1.8(26)
Military Benefits	5.6(18)	92.5(298)	1.9(6)
Payment Plan (With Insurance/MCO)	3.4(11)	94.7(305)	1.9(6)
Payment Plan (Self-pay)	3.8(11)	94.9(305)	1.3(6)
I/We do not pay for health care.	0.9(3)	96.9(312)	2.2(7)
I/We have not paid for health care in the past year.	1.2(4)	96.6(311)	2.2(7)
Worker's Compensation	0.9(3)	96.9(312)	2.2(7)
Other	9.0(29)	8.7(28)	82.3(265)

Don't Know	0.3(1)	97.5(314)	2.2(7)
Refused to Answer	0	93.8(302)	6.2(20)

Household Health Problems

	Percent (N)		
	Yes	No	No Response, Don't Know
Pressures (Low / High Blood Pressure)	47.2(152)	50.9(164)	1.9(6)
Arthritis	41.3(133)	57.1(184)	1.6(5)
Cholesterol Problems	25.2(81)	73.3(236)	1.5(5)
Dental Care Problems	24.8(80)	73.6(237)	1.6(5)
Sugars in the blood (Diabetes)	23.0(74)	75.5(243)	1.5(5)
Breathing Problems (Asthma)	21.7(70)	76.4(246)	1.9(6)
Swelling / Inflammation of Joints (Gout)	21.7(70)	76.4(246)	1.9(6)
Foot Care Problems	17.7(57)	80.7(260)	1.6(5)

Heart Disease	17.7(57)	80.7(260)	1.6(5)
Memory Loss / Forgetfulness (Alzheimer's)	12.4(40)	85.4(275)	2.2(7)
Depression / Bipolar / Mental Health Issues	14.6(47)	83.9(270)	1.5(5)
Mobility / Falling / Dizzy / Disoriented	10.2(33)	87.6(282)	2.2(7)
Cancer	7.1(23)	91.3(294)	1.6(5)
Shakes (Uncontrollable Shaking / Parkinson's Disease)	2.8(9)	94.4(304)	2.8(9)
Chemical Dependency	1.2(4)	97.2(313)	1.6(5)
HIV/AIDS / STDs	1.2(4)	97.2(313)	1.6(5)
No Health Problems	9.6(31)	87.6(282)	2.8(9)
Other	16.1(52)	3.1(10)	80.8(260)
Don't Know	0.6(2)	96.6(311)	2.8(9)
Refused to Answer	0	96.6(311)	3.4(11)

Table 2: Access to Health Care Questions

Lessons Learned about Access to Health Care

Lack of access to health care was not a concern for a majority of the households that were surveyed:

- 78% reported that their household already had a regular doctor or clinic;
- 78% reported no problems obtaining medical services;
- 82% reported no problems obtaining medications or supplies within the past year; and
- 82% reported having at least one form of health insurance or health care coverage.

Fewer than one of every five households surveyed had problems with access to health care: 59 households (18%) had difficulty obtaining medical services and 51 households 17 TRI-COMMUNITY ASSESSMENT AND INTERVENTION FINAL REPORT

(16%) needed help finding a regular family doctor. Table 3 (below) represents the barriers to health care indicated by surveyed households.

Barriers to Health Care (N=59) *Responses should be treated separately because the option was given to 'circle all that apply'.	Percent (N)
Do not have car or transportation to go to doctor.	39.0(23)
Do not have insurance	35.6(21)
Do not have enough money to pay for health care	35.6(21)
Do not have a doctor/clinic to go to	20.3(12)
Doctor's office/clinics could not give me/us appt when needed	11.9(7)
Other	11.9(7)
Do not know where to go for health care	10.2(6)
Do not like to go to the doctor	10.2(6)
Do not like to leave home	6.8(4)
Do not like to go to the doctor alone	6.8(4)
Doctor's office/clinic is too far from home	6.8(4)
Doctor's office/clinics were not opened when I/we needed health care	5.1(3)
Doctor's office/clinic waiting time is too long	5.1(3)

Doctor/staff does not treat me/us with respect	3.4(2)
Doctor/staff does not listen to me or understand me	3.4(2)
Do not have childcare	3.4(2)
Doctor is different each time I/we go for health care	3.4(2)
Doctor/staff does not speak our language/look like me/us	1.7(1)
Refused to answer / Don't Know	0

Table 3. Barriers to getting needed medical services

Among the households that reported experiencing a barrier to health care (n=59), lack of transportation, lack of insurance, lack of money to pay for health care and not having a doctor/clinic to go to were the top four impediments households experienced in obtaining health care. Arthritis, blood pressure, cholesterol, respiratory diseases and mental health are the top five health concerns for the households that experienced barriers to obtaining health care. HIV/AIDS was the least reported health care concern for households that experience barriers to obtaining health care. Cardiovascular disease (28%), respiratory diseases (10%), and accidents (10%) were the top three health problems for which all surveyed households used emergency services in the past year.

Even though the A&I was created with perceived lack of access to health care, the information for the persons who responded to the survey shows that lack of access to health care is not a primary concern. This could exist for several reasons. Perceptions that the community lacked access to health care might have been incorrect. Another reason that lack of access to health care may not be well represented by this data is that since this survey attempted, but failed to achieve a 100% response rate, it is impossible to say if access to health care is truly a problem for the community - until everyone in the community is able to participate.

ENVIRONMENTAL HEALTH

AIR, WATER, AND LAND CONCERNS	Percent (N)		
	Yes	No	No Response, Don't Know
<i>Are you concerned about the air you breathe? (N=322)</i>	67.4(216)	26.1(85)	6.5(21)
<i>Are you concerned about your tap water? (N=322)</i>	56.5(182)	37.3(120)	6.2(20)
<i>Are you concerned about the land in your community? (N=322)</i>	54.3(175)	35.1(113)	10.6(34)

Table 4: Environmental Health Questions

Lessons Learned about Environmental Health

In contrast to access to health care survey results, over half of the residents surveyed expressed concern about the environment: 67% of the households (n=216) were concerned about the air they breathe; 56.5% of the households (n=182) were concerned about their tap water; and 54.3% of the households (n=175) were concerned about the land in their community.

Reasons why Tri-Community participants expressed such high concern about their air quality might

include the fact that it is bordered by several pollution emitting sources. Clinton Drive has dense and steady truck traffic - as a major thoroughfare for a mixture of industrial and shipping activities in the area. Dense clouds of dust and dust plumes are frequently emitted by nearby business operations and tracked by trucks driving on Clinton Road. This is exacerbated by the many unpaved surfaces that are prevalent throughout the area. Tri-Community is also bordered by an active railroad track, the Houston Port of Authority and ship channel (South), IH-610 freeway (West), and a dredge spoils deposit facility (Northeast).

In order to address air quality concerns, the City of Houston and the Texas Commission on Environmental Quality operate fixed base ambient air quality monitors at the intersection of Clinton Park Road and Clinton Road, including ozone and PM_{2.5} (fine particulate) monitors. The Environmental Protection Agency (EPA) has set national standards for six pollutants considered harmful to public health and the environment. Ozone and PM_{2.5} are two of the six pollutants required to meet EPA's National Ambient Air Quality Standards (NAAQS). The eight hour ground level ozone standard was exceeded three times in 2005 and one time in 2006 at the Clinton Park Road site. Ground level ozone is monitored throughout the Houston/Galveston/Brazoria (HGB) area. The HGB area (Harris County and its seven immediately surrounding counties) is classified as non-attainment for ozone by the EPA and has until 2010 to meet the required standard. Houston currently meets the EPA NAAQS for fine particulate, but is at risk of surpassing the standard. The Clinton monitoring site levels for fine particulate have been higher for the last several years than levels at other monitored sites in Houston.

Exposure to harmful pollutants can have significant ramifications to the health of a community. Ozone exposures can impair lung function, exacerbate asthma and allergies and can also impair the immune system so that people are more susceptible to respiratory infections. Exposures to elevated levels of PM_{2.5} can cause shortness of breath and coughing, especially in children, the elderly and pregnant women. In addition, PM_{2.5} can aggravate the conditions of individuals with lung cancer, respiratory disease, or cardiovascular disease. PM_{2.5} also soils and damages buildings and property and can impair visibility.

HDHHS is working with area business stakeholders, including the Houston Port of Authority, City of Houston Public Works and Engineering, and other agencies to develop a plan to curb particulate matter emissions such as road dust. The Mayor's Office is currently coordinating this project.

HDHHS is also working to engage stakeholders in Tri-Community to better understand pollutant exposure issues such as sources of particulates and possible courses of abatement action. An environmental education component, to help residents take protective measures from pollutants, should be part of future community mobilization initiatives. Further investigations should be conducted to better understand the public health implications of Tri-Community's close proximity to the ship channel and dredge spoils deposit facility.

Final Follow-up Question

FURTHER INFORMATION AND/OR ASSISTANCE NEEDED	
<i>Please circle all of the issues about which your household needs further information and/or assistance: (N=322) *Responses to this question should be treated separately because the option was given to 'circle all that apply'.</i>	Percent (N)
Air, Water, Land, and Community Concerns	35.7(115)
Homebuyer's, Utility, Rental Assistance	21.4(69)

Medical Care	19.9(64)
Senior Assistance	18(58)
Food/Basic Needs	16.5(53)
No Assistance/Info Needed	15.8(51)
Education/Job Training	14(45)
Legal Services	11.5(37)
Child Care/After School Program	10.2(33)
Nutrition Information	9.9(32)
Lead in the Household Information	9.6(31)
Financial Education	9.3(30)
Disability Support	9.1(29)

Family Recreation	8.7(28)
Other	8.5(27)
Counseling/Mental Health Care	6.2(20)
Don't Know	0.3(1)
Refused to Answer	0

Table 5: Final Intervention Question

INTERVENTION RESULTS

Based upon answers to survey questions, 183 referrals were received (177 Tier two referrals and 6 Tier three referrals). Among those referrals:

- 85 (48%) households had 1 - 2 needs
- 64 (36%) households 3 -5 needs
- 16 (9%) households had 6 -9 needs
- 7 (3%) households had 10 or more needs

Lessons Learned about Direct Assistance and Education

Tier two provided direct assistance and education and was triggered by any of the following survey questions:

Does your household need help finding a regular family doctor or clinic?

If your household has had problems getting medication or medical supplies in the past year, would you like help getting them?

Does the elderly in your household need help with any of the following?

Does the elderly in your household have a caregiver or someone to help take care of them?

If yes, does the caregiver need assistance taking care of the elderly?

Please circle all of the issues about which your household needs further information and/or assistance.

Based upon the questions you answered today, you have requested further information and/or assistance. Would you like us to visit your home again to provide you with this information or assistance

If a resident had an affirmative response to any of these Tier two activation questions, s/he was asked to complete a "referral form". The referral form indicated specific requests for assistance and required consent of the resident indicating need. The form was in triplicate; one copy was given to the resident, one to the interviewer, and one to the volunteer agency for follow-up, if necessary. Based upon answers to the survey questions, there were a total of 177 Tier two activations.

Two months post event, staff from the HDHHS Human Services Bureau were still involved in actively following-up with Tier two referrals. During the first week post event, all 177 referrals were contacted

by phone and/or home visit. For households who desired continued support, regular home visits and phone calls were made by HDHHS and partnering agencies to resolve each household's needs. Forty-five days post-event the majority (n=96, 54%) of Tier two referrals are complete, while 42 (24%) referrals were still in progress. The remaining 39 (22%) referrals were closed forty-five days post-event due to unavailability for follow-up or assistance no longer needed at follow-up. Figure 11 (below) depicts this referral status breakdown for forty-five days post-event.

Intervention in Progress

Intervention Complete

No Assistance Needed at Follow-up

No Contact (wrong #, no answer)

The following figure (figure 12) illustrates a significant change between the needs identified by households at the time of conducting the survey and the needs identified by these same households when Tier two staff returned for follow-up during the event.

Change in household needs might be attributed to several factors. When discussed by the Tri-Community Planning Team (comprised of residents and providers mobilized for service improvement) several possibilities were identified. In particular, household needs may often have been addressed by resource information (handouts, pamphlets, enrollment in senior meals program) given when the survey was conducted. People may have already utilized the resources presented in handouts and pamphlets and felt that little more could be offered. The initial respondent may have been a different household member from the resident responding to the follow-up contact. Additionally, people may have expressed a concern for which they were embarrassed to seek assistance. Also, people may have experienced a concern without actually needing support to address the issue. Another reason for change in household needs might include the increased enrollment for senior activities held at the Tri-Community Center during the event.

At 60 days post event, intervention was completed with households requesting assistance through connection to available services and resources. On average, five contacts (via telephone or home visit) were required to resolve and close referrals. This was accomplished through eligibility pre-screening; application assistance; support coordination planning with family members; referrals to both internal and external services; and listening.

Listening, above all, was reflected in case notes as a common element in assisting individuals in assessing family and service resources and developing a plan for better accessing supports. The Human Services team consisted of 8 service managers whose standard assignments include ongoing operation of multi-service center programming, and 2 specialty case managers.

At 70 days post event, letters were sent to the 47 households where intervention consisted of referrals that had not been confirmed by the agency receiving the referral. The letter inquired if referring issues were addressed adequately and provided a HDHHS contact number. One call was received to ask for further assistance in resolving a 311 report of a weeded lot. An additional 52 letters were sent to households where contact was initially unsuccessful or where follow-up on referrals made were not successful.

Case files were reviewed based on support provided through 70 days post event. Nine households will be offered continued monitoring and support through individualized case management services and/or senior congregate meals provided at Tri-Community Center.

Lessons Learned about Emergent Care

Tier three responded to emergent care concerns and was triggered by one survey question: "Do you or any members of your household need emergency medical services for any health problems?" If a resident had an affirmative response to the above survey question and consented for medical assistance, a pair of nurses visited the household to conduct a brief history and physical assessment. Tier three was activated for a total of six homes during the two-day assessment.

The medical history and assessment were diagnostic techniques based on the SOAP (Subjective, Objective, Analysis and Plan) method. Tier three response materials were developed with assistance from Nursing Services and Case Management and were based on materials used from the rapid response involvement with Hurricanes Katrina and Rita.

COMMUNITY IMPACT

Quantifying the impact of this project has been challenging. Photos, figures, tables, budgets and data illustrate the complex nature of the project, but characterizing the community impact is not so simple. As a result of the community mobilization launched by the A&I, several improvements in the Tri-Community have taken place.

Neighborhood Protection officers have been actively involved in Tri-Community both before and after the A&I event. Thus far, they have:

- cut and cleared 40 vacant lots,
- followed-up on the status of 50 previously reported property inspections,
- initiated 24 new property inspections,
- followed-up on 44 new homes and/or lots that were reported vacant and/or abandoned by HDHHS staff during the Tri-Community event,
- investigated two graffiti complaints, and
- investigated one narcotic complaint.

Officers from the Bureau of Animal Regulation and Control (BARC) conducted a three-day sweep just before the A&I event. This sweep resulted in 80 impounded dogs and two municipal citations.

HDHHS staff noticed that one of the homes surveyed in Tri-Community was found to have a natural gas leak near the gas meter. The leak was immediately reported by HDHHS staff. The area near the leak was excavated and the damaged line and equipment was replaced shortly after the report was made.

The mobilization work that will continue through the Tri-Community Planning Team was greatly motivated through the A&I. Residents expressed an elevated sense of community evidenced by:

- Super Neighborhood event with new neighbors volunteering
- Greater attendance at funerals
- Increased resident participation in the Tri-Community Planning Team
- Resident participation in planning meetings
- Interest in Time-Banking project coordinated through Houston Hope

The Tri-Community Planning Team has commitments from several agencies to expand and coordinate rotating services in the Tri-Community Center. Neighborhood Centers, Inc will continue senior congregate meal and support services and expand to offer exercise programs and activities for younger seniors. NCI will also assist with the colocation of additional agencies. The Houston Public Library is working with the team to develop an e-library at the site. Houston Hope is guiding the development of a Time-Banking program, where member to member exchanges provide both group and individual support and tracks growing volunteerism in the community. The Tri-Community Planning Team is also in discussion with agencies to provide youth activities at the Center. The team meets twice monthly and will begin offering expanded hours in January.

Case Study

Mr. O.V. B. Jr. was a 72 year old African-American widower who suffered from respiratory conditions, gout, and arthritis. He had been hospitalized four times between September 6 and September 21, 2006. His source of income was Veterans Administration (VA) and Social Security (SSI) benefits. His income was insufficient for his basic needs especially dental, nutritional and home repair costs.

During the A&I event, on September 8th, an assessment team surveyed Mr. B.'s home and made a referral for food, dental and environmental support. A Tier two team provided follow-up contact on September 9, 2006. Another home visit was made on September 12, 2006, and by September 13, 2006, an intervention plan was established with Mr. B. The plan involved, but was not limited to, application for food stamps, verification of VA and SSI benefits, nutrition education and reporting of environmental concerns. A total of nine visits and telephone calls from September 9-30, 2006, were made by HDHHS staff to follow-up with Mr. B.'s progress.

Mr. B.'s home had a roof leak, but it was never repaired. The home appeared to have extensive mold and water damage. It also appeared to have extensive dust, which he attributed to the traffic on Clinton Park Road. None of these home conditions had been repaired. Mr. B. was encouraged to move in with his daughter until home repairs could be made, but he preferred to stay in his home. Unfortunately, Mr. B. passed away on October 4, 2006.

The health and living conditions experienced daily by Mr. B. and many others in Houston illustrates why a superior level of collaboration among public and private agencies is vital. Data must be made personal; it must elicit action that improves the quality of life for individuals and for the community as a whole. Increased effectiveness in future assessment and intervention projects will build upon lessons learned.

RECOMMENDATIONS FOR FUTURE A&I ACTIVITIES

A series of after-action meetings involving the planning team, site coordinators, team leaders, and team members took place within two weeks following the A & I event. After-action meeting notes are detailed in the Appendix D. The following themes or recommendations for future events emerged as a result of the evaluation activity:

- Appropriate A&I roles should be clearly defined: staff should be assessed for individual strengths and weaknesses in regards to A&I roles. A strength-based approach in identifying the best role for each individual should be used.

- Examine efficiency of each person's role and assure an equal distribution of workload.

- Knowledge and understanding of essential public health functions throughout the department is needed.

- Team building exercises are needed prior to the event: teams need time to bond and interact prior to event and should remain consistent throughout department activities.

- More practice of tier activation procedures and details is also needed.