

**STRATEGIC PLANNING COMMITTEE MEETING
OF THE BOARD OF DIRECTORS**

**MARCH 13, 2012
10:00 A.M.
HHC BOARD ROOM
125 WORTH STREET**

AGENDA

- I. CALL TO ORDER** **JOSEPHINE BOLUS, RN**
- II. ADOPTION OF FEBRUARY 7, 2012
STRATEGIC PLANNING COMMITTEE MEETING MINUTES** **JOSEPHINE BOLUS, RN**
- III. SENIOR VICE PRESIDENT'S REPORT** **LARAY BROWN**
- IV. INFORMATION ITEM:**
- i. WORLD TRADE CENTER HEALTH PROGRAM - SURVIVOR PROGRAM UPDATE**
- JOAN REIBMAN, M.D., MEDICAL DIRECTOR
WORLD TRADE CENTER ENVIRONMENTAL HEALTH CENTER
- TERRY MILES, EXECUTIVE DIRECTOR
WORLD TRADE CENTER ENVIRONMENTAL HEALTH CENTER
- V. OLD BUSINESS**
- VI. NEW BUSINESS**
- VII. ADJOURNMENT** **JOSEPHINE BOLUS, RN**

MINUTES

STRATEGIC PLANNING COMMITTEE MEETING OF THE BOARD OF DIRECTORS

FEBRUARY 7, 2012

The meeting of the Strategic Planning Committee of the Board of Directors was held on February 7, 2012, in the Board Room located at 125 Worth Street with Josephine Bolus, RN presiding as Chairperson.

ATTENDEES

COMMITTEE MEMBERS

Josephine Bolus, RN, Chairperson of the Committee
Alan Aviles
Anna Kril
Robert F. Nolan
Bernard Rosen
Andrea Cohen, representing Deputy Mayor Linda Gibbs in a voting capacity

OTHER ATTENDEES

J. DeGeorge, Analyst, Office of the State Comptroller
M. Dolan, Senior Assistant Director, DC 37
M. Dubowski, Analyst, Office of Management and Budget
C. Fiorentini, Analyst, New York City Independent Budget Office
M. Meagher, Budget Analyst, Office of Management and Budget
E. Mendez-Santiago, Commission on the Public's Health System

HHC STAFF

M. Belizaire, Assistant Director of Community Affairs, Intergovernmental Relations
D. Benjamin, Restructuring Officer, Central Office
L. Brown, Senior Vice President, Corporate Planning, Community Health
and Intergovernmental Relations
E. Casey, Assistant Director, Corporate Planning and HIV Services
D. Cates, Chief of Staff, Office of the Chairman
C. Dunn, Senior Director, Communications and Marketing
L. Guttman, Assistant Vice President, Intergovernmental Relations
V. Henry, Senior Associate Director, Queens Health Network

- E. Hughes, Director, Media Relations, Communications and Marketing
- C. Jacobs, Senior Vice President, Patient Safety, Accreditation and Regulatory Services
- J. Jurenko, Senior Assistant Vice President, Intergovernmental Relations
- Z. Liu, Senior Management Consultant, Corporate Planning Services
- P. Lockhart, Secretary to the Corporation, Office of the Chairman
- T. Mammo, Deputy Chief of Staff, President's Office
- N. Mar, Director, Corporate Reimbursement
- A. Martin, Executive Vice President and Chief Operating Officer, President's Office
- K. McGrath, Senior Director, Communications and Marketing
- J. Omi, Senior Vice President, Organizational Innovation and Effectiveness
- S. Russo, Senior Vice President and General Counsel, Legal Affairs
- W. Saunders, Assistant Vice President, Intergovernmental Relations
- J. Schick, Chief of Staff, President's Office
- J. Streeter, Assistant Director, Communications and Marketing
- K. Whyte, Senior Director, Corporate Planning, Community Health and Intergovernmental Relations
- R. Wilson, M.D., Senior Vice President, Corporate Chief Medical Officer, Medical and Professional Affairs

CALL TO ORDER:

The meeting of the Strategic Planning Committee was called to order at 10:00 A.M. by the Strategic Planning Committee Chairperson, Josephine Bolus, RN. The minutes of the January 10, 2012, meeting of the Strategic Planning Committee were adopted.

SENIOR VICE PRESIDENT REMARKS:**LARAY BROWN**

Ms. Brown greeted and informed the Committee that her remarks would include brief updates on federal and city issues and the Corporation's Breakthrough work. Ms. Brown noted that components of the State Fiscal Year 2012 - 2013 Executive Budget proposal, that are important to HHC, would be delineated by Ms. Wendy Saunders during the information item presentation.

FEDERAL UPDATE

Ms. Brown reminded the Committee that, on December 23, 2012, both Houses of Congress had passed by unanimous consent, a compromise bill that had extended for two months the Social Security payroll tax holiday, emergency unemployment insurance benefits, and another temporary Medicare physician payment rates fix. She noted that without an extension, there would have been a 27.4% cut to Medicare payments to physicians. Ms. Brown informed the Committee that Congress has re-convened from its holiday break with only three weeks to agree upon legislation to deal with the payroll tax reduction and the Medicare rate fix for the remainder of the year. She explained that there was a House-Senate Conference Committee working on such legislation. The hospital advocacy community's main focus is to ensure that the means by which Congress pays for the payroll tax reduction and the physicians' Medicare rates do not include significant cuts to hospitals. Ms. Brown noted that two New York State representatives, Congress members Nan Hayworth and Tom Reed, were on the Conference Committee. Ms. Brown emphasized that the "pay-for" provisions that had been included in the House's original bill (H.R. 3630) were again being seriously considered by the Conference Committee. These provisions include onerous hospital provider payment reductions which would greatly impact HHC. Specifically, these reductions would:

- Significantly reduce payments for certain hospital outpatient services. This could reduce HHC's Medicare revenues by \$187 million over 10 years;
- Extend the Medicaid Disproportionate Share Hospital (DSH) reductions already mandated by the Accountable Care Act (ACA) by one year, to federal fiscal year 2021. This extension could cost HHC \$421.8 million in lost revenue for that year alone; and
- Reduce the allowable reimbursement for Medicare bad debt payments from 70 percent to 55 percent, costing HHC an estimated \$5 million over 10 years.

Ms. Brown informed the Committee that the hospital cuts that had been included in H.R.3630 totaled more than \$17 billion nation-wide. The hospital advocacy community, spearheaded by the American Hospital Association, is pushing to have the "pay-for's" for the physician Medicare payment fix come from unspent funds that had been originally set aside to pay for the winding down of the Iraq and Afghanistan wars. New York Congressman Joseph Crowley has spearheaded a bipartisan letter emphasizing the need to use the unspent war funds, in order to negate the need for further hospital cuts.

Ms. Brown reported that, on January 13, 2012, the Center for Medicare and Medicaid Services (CMS) had issued a proposed rule that expanded the definition of "uninsured" in the Medicaid Disproportionate Share Hospital (DSH) program. Accordingly, DSH allocations can now include provider costs for serving patients whose health insurance does not cover a particular procedure or service for which there is no liable third party or for whom an annual lifetime cap would apply. Ms. Brown explained that, in 2008, CMS had excluded the cost of all services provided to a patient with any form of "creditable coverage" when CMS implemented the DSH audit requirements of the Medicare Modernization Act of 2003. This new rule would reverse the CMS rule that was implemented in 2008.

Ms. Brown further noted that the proposed rule would allow hospitals to increase their hospital specific DSH cap. While HHC supports this policy change, its implementation would not likely translate into additional revenue for HHC because New York State's current DSH allocations are not expected to increase.

CITY UPDATE

Mayor Releases Fiscal Year (FY) 2013 Preliminary Budget

Ms. Brown reported that, on February 2, 2012, Mayor Bloomberg had released the City's FY 2013 Preliminary Budget. While the \$68.7 billion Financial Plan closes the budget gap for FY 2013, a \$3 billion gap exists for FY 2014 and in the out-years. Because of these forecasted gaps, the Financial Plan includes agency spending reduction plans (known as PEGs for Program to Eliminate the Gap) that will save \$470 million this current fiscal year (FY 2012) and \$1.02 billion in FY 2013. Ms. Brown informed the Committee that HHC had received a 6% PEG to the City Tax Levy portion of its budget, which equates to a \$4.2 million reduction. This PEG will be achieved through a reduction in the subsidy that the City provides HHC.

Ms. Brown informed the Committee that the City Council would begin to hold hearings on the Preliminary Budget beginning in March. A second round of budget hearings on the Mayor's Executive Budget will occur in late May or early June.

BREAKTHROUGH UPDATE

Ms. Brown provided the Committee with an update on the Breakthrough work on behalf of her colleague Joanna Omi, Senior Vice President for Organizational Innovation and Effectiveness. She reported that, as of December 31, 2011, more than 840 Rapid Improvement Events (RIEs) in more than 80 value streams (52 of which are currently active) had been conducted throughout the Corporation. More than 11,000 employees have participated in Breakthrough activities. Ms. Brown noted that these figures were cumulative since the start of Breakthrough activity in November 2007; and that the participant count included duplicates.

Ms. Brown reported that the Breakthrough training team had continued to conduct Lean certification and other types of training. As of January 6, 2012, a total of 534 HHC employees were certified at the Green level, 154 at the Bronze level, and 24 at the Silver level. Two HHC staff have achieved Gold level certification. Twelve additional staff members are working on the experience requirements for Gold level certification. Ms. Brown added that a total of 378 employees had taken the Process Owner course. She announced that the Breakthrough Office was planning to launch the first Platinum class in February. A Blue class for managers and leadership training would be launched later in 2012.

INFORMATION ITEM**2012-2013 State Fiscal Year Executive Budget Overview**

Wendy Saunders, Assistant Vice President, Office of Intergovernmental Relations

Ms. Brown introduced Wendy Saunders, Assistant Vice President and John Jurenko, Senior Assistant Vice President for the Office of Intergovernmental Relations. She informed the Committee that Ms. Saunders would be presenting an overview of key components of the State Fiscal Year (SFY) 2012-2013 Executive Budget.

Ms. Saunders reported that Governor Cuomo had released his 2012-13 Executive Budget proposal on January 17, 2012. The proposed budget closed a \$2 billion budget deficit. She noted that the deficit had originally been projected to be \$3.5 billion, but was later reduced to \$2 billion as a result of actions taken by the Administration in December 2011, relating to the millionaires' tax. Ms. Saunders described components of the Governor's Executive Budget proposal that were important to HHC. These components include:

- A second year of a two-year agreement on Medicaid.
- An increase in overall spending in Medicaid by 4% (as per last year's agreement).
- No new significant Medicaid cuts. Ms. Saunders reminded the Committee that there would still be an impact on HHC from the actions that had been taken last year. These actions included a no inflation factor for providers and a 2% across the board rate cut. The total impact of these actions on HHC is \$174.5 million less Medicaid revenues. Ms. Saunders noted that there would be additional reductions due to the implementation of a new nursing home reimbursement methodology, the impact of which is not reflected in the \$174.5 million reduction.
- Creation of a New York State specific Health Benefits Exchange to implement the federal Affordable Care Act (ACA). This Legislation was passed by the Assembly but not the Senate last year.
- New authority for the State Department of Health (SDOH) to close health care facilities, replace operators or board members in circumstances where there are repeat violations, significant mismanagement or criminal activity. This recommendation came out of the recommendations of the Medicaid Redesign Team (MRT) Health Systems Redesign Brooklyn Work Group led by Stephen Berger.
- A cap on executive compensation of \$199,000. Ms. Saunders highlighted that, two days after the Executive Budget proposal was released, Governor Cuomo instituted this rule via Executive Order. This rule is now law in New York State.
- The phase-in of State takeover of the growth in the local share of Medicaid spending. Ms. Saunders explained that the increases in Medicaid spending that localities would have to pay had been capped at 3%. Going forward, this cap will be reduced to 2% in calendar year 2013 and to 1% in 2014. In 2015, localities would not be responsible for any additional growth in Medicaid spending. This action is expected to save localities approximately \$1 billion over a five year period.

- Replacement of the 2012 nursing home bed-hold provision with new rules for adult residents to be issued by SDOH. Ms. Saunders explained that a new rule would be promulgated by the State Commissioner of Health that would reduce funding for bed-hold reimbursements to nursing homes by \$40 million. Ms. Saunders explained that there had been a similar provision enacted as part of last year's budget, however it had not been approved by the Centers for Medicare and Medicaid Services (CMS). Ms. Saunders added that, after the new rule is promulgated, the impact on HHC would be determined.

Andrea Cohen, representing Deputy Mayor Linda Gibbs in a voting capacity, asked for further clarification on what is meant by bed-hold. Ms. Saunders responded that when a nursing home resident has to go to a hospital, the nursing home receives payment to keep the bed open to allow that patient to return to that nursing facility. She added that there will be a funding cut of \$40 million for adult patients. While nursing homes will still receive bed hold reimbursement, this reimbursement will be reduced, given the proposed \$40 million cut in funding. Ms. Brown explained that SDOH wants to encourage nursing homes to provide much more assertive health care services in the nursing home setting. The hypothesis being that doing so would lessen the need for patients to be hospitalized in an acute care setting for conditions that could have been better monitored and managed. The challenge will be to ensure that the many vulnerable and frail nursing home patients who become in need of greater levels of medical care can get care as soon as it is needed.

- A requirement that managed long term care plans must offer consumer directed personal care as an option for their members.
- New electronic reporting of Health Care Reform Act (HCRA) cash receipts assessment. Ms. Saunders explained that facilities will now have to report that information electronically.
- An extension of the potentially preventable readmissions cut until 2013. It also allows SDOH to implement an adverse events policy in outpatient settings. Ms. Saunders reminded the Committee that this cut does not include behavioral health services.
- An extension of the global cap on Medicaid spending for one additional year (three years total)
- A 4.2% increase in Medicaid spending for SFY 2013-14, which is consistent with the ten year rolling average of the Consumer Price Index (CPI).
- Continuation of SDOH's "superpowers" if spending exceeds projections. Ms. Saunders reminded the Committee that this provision would allow the Commissioner to reduce payment rates or eliminate benefits to keep spending under the cap. Ms. Saunders reported that through November 2011, spending had remained on target and was \$4.4 million below projection. Additionally, enrollment increases must be covered under the global cap. For the current fiscal year, Medicaid enrollment has grown by nearly 2% or by 94,000 individuals.

Ms. Saunders reported that the Executive Budget proposal also included many of the recommendations that were made by the Medicaid Redesign Team (MRT). She commented that, on February 3, 2012, Jason Helgeson, the State's Medicaid Director had announced during a twitter session that the final MRT report was not due until the end of the fiscal year or March 31, 2012. Additionally, all of the recommendations made by the MRT would be included in the MRT report. Ms. Saunders informed the Committee that the MRT recommendations that were included in the Governor's Executive Budget

proposal were cost neutral from the perspective of the new benefits that were added and those that had been eliminated.

Ms. Saunders highlighted the MRT recommendations that had been included in the Executive Budget proposal. These recommendations include:

- New benefits for Medicaid patients:
 - ❖ Harm reduction activities
 - ❖ Coordinated Hepatitis C care
 - ❖ Expanded maternal and child health services
 - ❖ Lactation consultants
 - ❖ Tobacco cessation counseling by dentists
 - ❖ Podiatry care for diabetes in private offices
 - ❖ Enteral formula for HIV patients (this was eliminated in 2012)
- Elimination of Medicaid benefits that were found to have no positive outcomes for patients (as recommended by the MRT Benefits Review Committee). They are:
 - ❖ Arthroscopy of the knee for osteoarthritis;
 - ❖ Treatments for lower back pain where there is no evidence for benefit;
 - ❖ Percutaneous Coronary Intervention (PCI) or angioplasty in circumstance of no clear benefit;
 - ❖ Treatment of Idiopathic Short Stature (ISS) with growth hormone; and
 - ❖ Reduced payments for elective C-sections and inductions < 39 weeks without medical indication.
- Creation of a new supportive housing reinvestment program to help increase the availability of supportive housing. Ms. Saunders noted that the continuation of a \$75 million investment that the State made last year for affordable housing was also included in the Budget proposal.
- New requirement for language accessible prescriptions for individuals who are limited English proficient or hearing impaired
- Expansion of data collection for disparities
- Targeted increase in funding to make fair hearings more accessible to support the move to mandatory enrollment in managed long term care
- A new Primary Care Service Corps to provide loan repayment for non physician primary care practitioners
- Enrollment assistance for Medicaid long term care patients through facilitated enrollers. This model has been used successfully in non long term care settings
- Electronic asset verification for certain Medicaid patients
- Phase-in of State takeover of Medicaid administration. Ms. Saunders explained that SDOH is proposing to conduct a gradual takeover that would be phased in over several years (the number of years not specified). Activities that would be assumed by SDOH include the processing of applications, eligibility determinations and the authorization of benefits. It was discussed that SDOH may contract with localities. This provision also includes the absorption of some local staff that may be displaced by the shifting of these functions to the state.

- Support for Medicaid rate enhancements for Essential Community Providers/Vital Access Providers under HEAL NY 21 by eliminating Inpatient Reform Transition II funding. Ms. Saunders informed the Committee that this recommendation originated from the Payment Reform MRT Subcommittee. She announced that a new HEAL NY 21 Request for Applications (RFA) had been promulgated that would provide \$450 million for capital improvements and rate enhancements.
- Closure of the Kingsboro Psychiatric facility. Ms. Bolus inquired if the entire facility would be closed completely. Ms. Brown clarified that the State Office of Mental Health (SOMH) had stated that the current crisis residence programs would remain open but the inpatient facility along with the state operated facilities would close. Additionally, post acute psychiatric care would be directed to South Beach or Rockland. Ms. Saunders added that the State anticipates receiving HEAL NY 21 funding requests from providers within the vicinity of Kingsboro to increase their capacity. Ms. Brown informed the Committee that HHC's Coney Island Hospital was preparing a proposal to obtain CPEP funding. Additionally, Coney Island Hospital is also seeking funding to renovate its psychiatric emergency room. This would help to offset the potential impact of the closure of Kingsboro.
- Consolidation of Children's Psychiatric Centers in New York City. Mr. Nolan, Committee Member, asked if more specific information about the consolidation of the New York City centers was available. Ms. Saunders responded that the information provided included a list of all centers with general language regarding consolidation. Ms. Saunders added that that she expected to learn more about the consolidation following the Legislature's budget hearings on health and behavioral health care.
- Extension of the Comprehensive Psychiatric Emergency Program (CPEP) for four years until 2016
- A new framework for SDOH and SOMH to jointly operate behavioral health agencies with broad authority that would allow these agencies to waive requirements and deem compliance. Ms. Cohen asked for further clarification regarding this provision. Ms. Brown explained that the aim of this provision was not only to facilitate the integration of physical and behavioral health services in one setting but also to reduce the bureaucratic processes in dealing with the varied regulatory standards and licensing requirements of these agencies.

Ms. Saunders discussed other policy items that were of importance to HHC but were not included in the Governor's Executive Budget proposal. She informed the Committee that changes regarding the State's methodology for allocating Charity Care reimbursement/Disproportionate Share Hospital (DSH) funding had not been included in the proposed budget. However, the MRT recommended that a new group should be convened to make specific recommendations related to this funding. Additionally, Ms. Saunders reported that the Governor had indicated in the supporting documents of his Executive Budget proposal that he planned to pursue a five-year Medicaid 1115 Waiver to provide support for the State's health care restructuring efforts. Ms. Saunders noted that HHC staff is working closely with the State in the preparation of this Waiver.

Ms. Bolus asked for further clarification regarding mandatory enrollment in long term care. Ms. Saunders responded that this provision was part of last year's enacted State budget, which required that all Medicaid recipients receiving more than 120 days of community-based long term care services enroll into a managed long term care program or other care coordination model (CCM). Mandatory enrollment of this population will be rolled out over a period of time beginning in April. There is an expectation that because of this rule, there will be a significant increase in fair hearing requests. Ms. Brown re-emphasized that this is specifically for community-based long term care and does not include

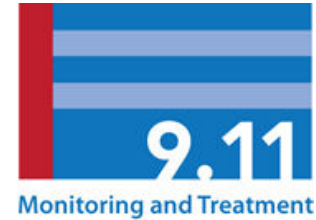
institutionally-based long term care facilities (i.e., HHC's LTC facilities). She reminded the Committee that HHC's MetroPlus Health Plan had submitted an application to be approved as a managed long term care plan in preparation for this transition. Mr. Rosen asked if an indirect benefit would be the reduction in the cost of personal care. Ms. Brown responded that this effort is directed towards the utilization and the perceived overutilization of personal care. There is also recognition that people transitioning from personal care or who will experience changes in their current community-based long term care will have a lot of questions. It will be important for managed care plans or CCMs to acknowledge this and to put into place processes that will ensure that people have access to fair hearings.

Mr. Aviles asked if the requirement for language accessible prescriptions was directed to retail pharmacies. Ms. Brown responded affirmatively. Mr. Aviles further asked if the recommendation indicated the number of languages or the specific languages. Ms. Brown responded that the recommendation did not indicate the specific languages but focused on the languages that are predominant within a geographical area. Ms. Brown added that this had been a longstanding effort on the part of the New York Immigrant Coalition, HHC and others. The inclusion of this provision in the Executive Budget is a major success.

Ms. Brown shared with the Committee that she had received many inquiries from Community Advisory Board (CABs) members and advocacy organizations regarding HHC's advocacy strategy for the upcoming State budget negotiation cycle. She stated that HHC would be changing its advocacy strategy for this budget cycle because the opportunity to effect changes in the Governor's Executive Budget proposal were not significant. Ms. Brown stated that the legislative events are being hosted by the CABs at their respective facilities. However, the grassroots advocacy trip to Albany that would usually include the participation of 200 - 400 participants would not be conducted this year.

ADJOURNMENT

There being no further business, the meeting was adjourned at 10:45 a.m.



World Trade Center Health Program *Survivor Program Update*

Joan Reibman, M.D., Medical Director
HHC WTC Environmental Health Center

Presentation to the Strategic Planning Committee
March 13, 2012

WTC destruction as an environmental disaster



WTC exposure risk

Heroic rescue workers and recovery workers had exposure to dust fumes and gasses from WTC destruction.

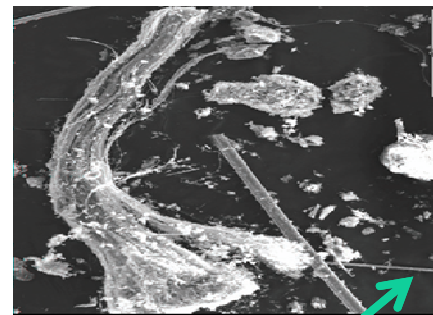


Characteristics of particles/fumes released from WTC destruction

- Alkaline dust (pH 9-11)
- Construction materials (cement, concrete, wallboard)
- Particulate matter (calcium sulfate, calcium carbonate, crystalline silica)
- Fibers
- Combustion products (polycyclic aromatic hydrocarbons, hydrocarbons)



asbestos

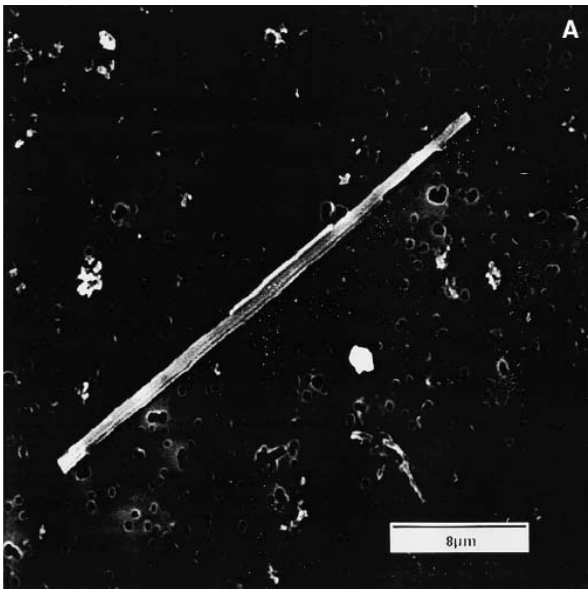


concrete

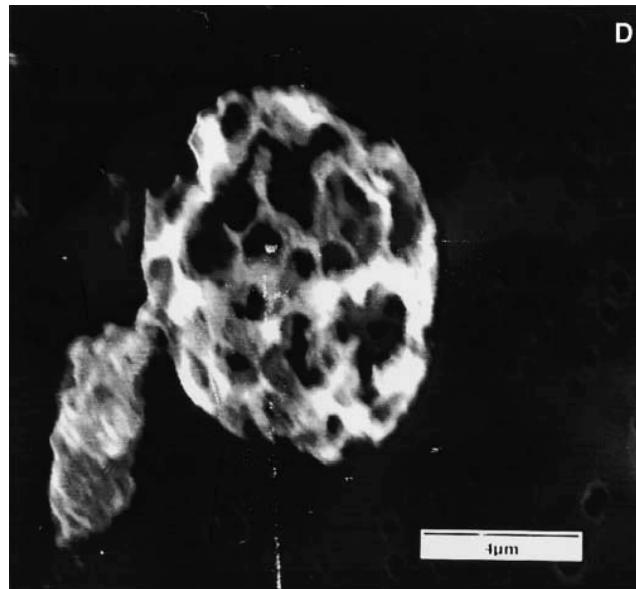
glass fiber

Banauch et al. Current Opinion Pulmonary Med 2005, 11:160-168
USGS Environmental Studies of WTC

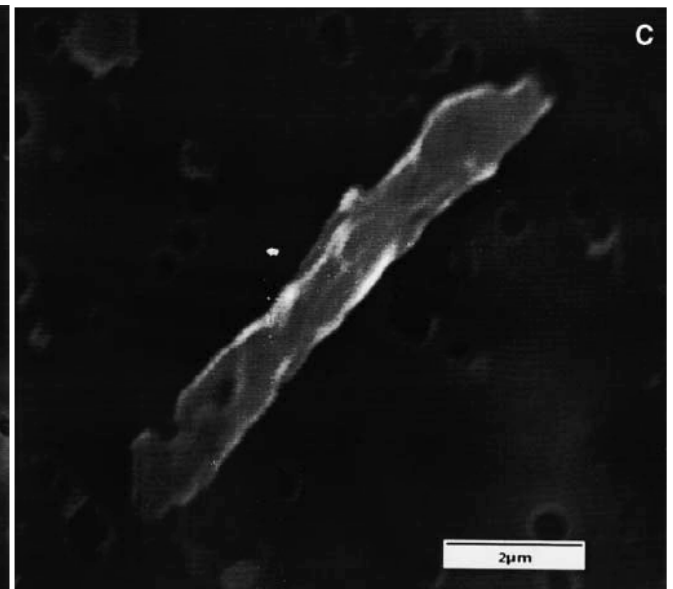
Mineralogic analysis of bronchoalveolar lavage from firefighter



(A) Amosite asbestos fiber (uncoated)



(B) Fly ash particle



(C) Degraded fibrous glass.

What we now know

Efforts from Fire Department (FDNY) and multi hospital consortium (including site at Bellevue) documented ongoing medical and mental health illness in this responder population



Community/survivor populations at risk

- Local residents (60,000)
- Building evacuees/local workers (300,000)
- Children (15-25,000)

Brackbill et al. MMWR 55:No. SS-2; 2006



Potential types of exposures to WTC dust/fumes

- Acute exposures
 - Dust Cloud
- Chronic exposures
 - Settled dust inside buildings/ventilation systems
 - Resuspended dust from incompletely cleaned ventilation systems
 - Fumes from fires that burned through December 2001



WTC Environmental Health Center Funding

2005	Private philanthropy American Red Cross New York Times Neediest
2006	New York City Mayor's Office
2008	Federal Government Centers for Disease Control , National Institute of Occupational Safety and Health
2011	Federal Government World Trade Center Healthcare Program (WTCHP) as a result of the Zadroga Act

WTC Environmental Health Center

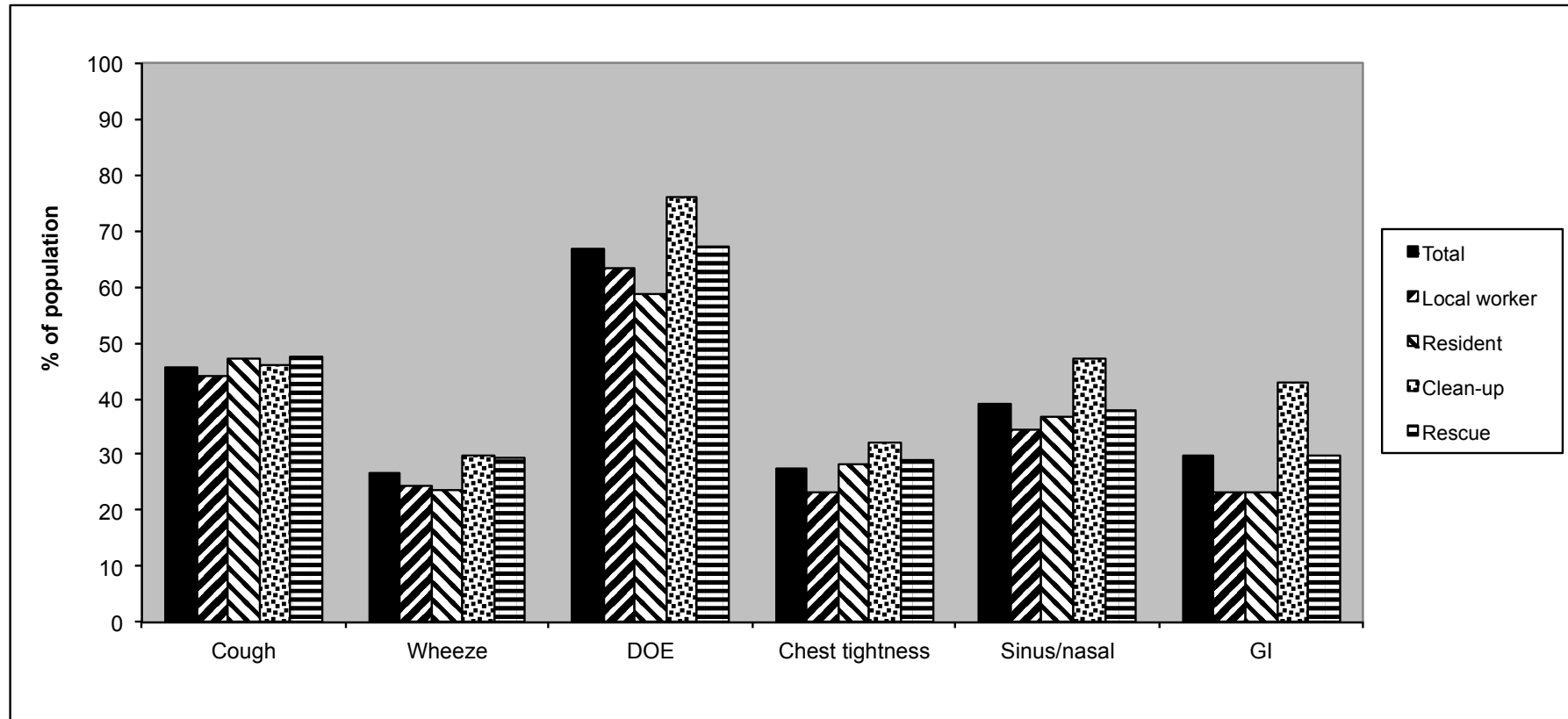
- Treatment program for individuals with presumed WTC-related illness
 - Had to have potential exposure (geographic boundaries)
 - Had to have symptom (initially physical, subsequently mental health or physical)
- Target populations: Community members
 - residents
 - local workers
 - students
 - clean-up workers
- Multidisciplinary treatment program (medical, mental health, social services)
- 5,600 individuals enrolled between September 2005 to September 2011 for treatment

Characteristics of first 1,898 WTC EHC members, 9/2005 – 5/2008

Characteristic	Total
Gender, %	
Male	53
Female	47
Age, mean±SD	48 ± 12
Race, %	
White	46
Black	17
Asian	11
Ethnicity, %	
Hispanic	42
Dust cloud, %	40

Reibman *et al.* Characteristics of a residential and working community with diverse exposure to WTC dust, gas and fumes J Occup Env Med 2009

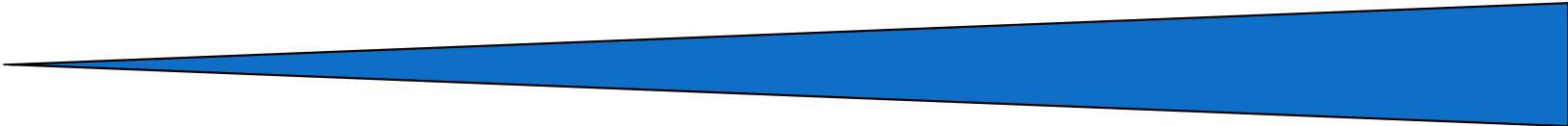
Symptoms similar among all potential exposure groups in the WTC EHC (n = 1898)



Reibman *et al.* Characteristics of a residential and working community with diverse exposure to WTC dust, gas and fumes J Occup Env Med 2009

Physical disease heterogeneity in response to environmental exposure

Nasal/sinus Cough Asthma Airway damage (bronchiectasis) Sarcoidosis_? Interstitial lung disease (NSIP, UIP, HP, ?)



Dose

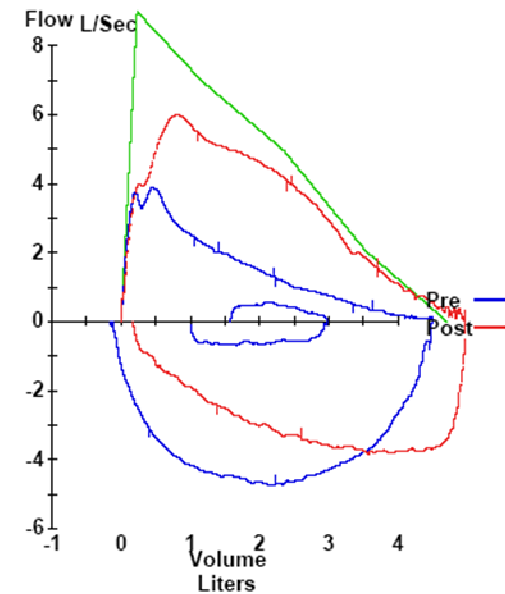


Individual susceptibility

- Allergy
- Tobacco
- Immune

CASE MR

- 37 year old resident of Lower Manhattan (Beekman Street)
- Previously healthy (training for marathon), no history of childhood asthma/lifelong nonsmoker
- Not in dust cloud
- Stayed in apartment and cleaned dust-covered apartment
- Onset of shortness of breath and wheezing 6 months later
- Presented to WTC EHC in 2006 with persistent upper airway symptoms (nasal congestion, post nasal drip) and daily lower airway symptoms (shortness of breath, wheezing)
- Treated aggressively for asthma
- Continues to need therapy to control symptoms



Preliminary data on children ≤ 18 on 9/11

Demographic characteristics (n = 148)

Characteristic	Prevalence or mean
<i>Demographics</i>	
Female sex	55.4
Age on 9/11/01, years	11.5 (Range: 0-18)
Years to first visit from 9/11/01	7.83 (Range: 4.83-10.19)
Race , %	
White	61.4
Asian	24.2
African American	12.9
No answer	10.2
Ethnicity	
Hispanic	24.6

Exposure and clinical characteristics of children in the WTC EHC

Characteristic	Prevalence or mean
<i>Exposure characteristics, %</i>	
Caught in dust cloud	38.5
Heavy dust in home (n=140)	21.4
Residence in home at least 1 day in the period September 11-18, 2001 (n=145)	80.0
School <1 mi to WTC site (n=64)	78.1
<i>Clinical conditions</i>	
Provider-diagnosed asthma	21.4

- Younger age on 9/11 associated with provider diagnosed asthma
- Presence in dust cloud associated with lower lung function

Mental health issues in WTC EHC

- ~ 40% score positive for PTSD symptoms, depression or anxiety
 - Risk factors
 - sex (female),
 - low income,
 - exposure (dust cloud),
 - physical symptoms (upper and lower respiratory symptoms, and severity of shortness of breath)

How effective have we been?

- Monitored lung function over time in community members enrolled in WTC EHC
- Improvement in lung function in group as a whole
- Improvement not complete in those with abnormal lung function
- Local workers had least improvement compared to residents, clean-up workers

Linear mixed effects model adjusted for age, BMI, gender, race/ethnicity, dust-cloud exposure, smoking status, and WTC exposure category

Liu et al. manuscript submitted

Unanswered questions in the “survivor” population

- Medical questions
 - Cancer risk
 - Lung disease – long term progression, types, how to treat
 - Connective tissue disorders
 - Neurologic sequela – headaches, neuropathy
 - Vulnerable populations - children
- Mental health
 - who is at risk for persistent PTSD
 - long term outcomes
 - treatment of PTSD in civilian populations and associated with complex mental health and physical co-morbid conditions and socioeconomic issues
 - risk for cognitive defects with intractable PTSD