

**INCREASING THE REPRESENTATION
OF MINORITIES IN
MEDICINE AND THE HEALTH PROFESSIONS:
POLICIES, PARTNERSHIPS AND OUTCOMES**

October 31, 2000
New York City

CONFERENCE PROCEEDINGS

Conference Sponsors:

**Arthur Ashe Institute for Urban Health
Associated Medical Schools of New York
Biomedical Sciences Career Program
New York State Council on Graduate Medical Education**

**Increasing the Representation of Minorities in Medicine and the
Health Professions: Policies, Partnerships and Outcomes**

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Event Coordination: Wanda Mann & Associates, Inc.

We are pleased to share with you the proceedings from our conference entitled, *“Increasing the Representation of Minorities in Medicine and the Health Professions: Policies, Partnerships and Outcomes”* which was held in New York City last October. With the Surgeon General’s *“Healthy People 2010”* initiative and the goal to eliminate health disparities coupled with the decrease in the number of minorities enrolling in medical and health professional schools we knew it was time to bring these issues to the forefront with academicians, politicians, practitioners, policy makers. This conference is the first in a series of meetings we plan to conduct to address these issue and potential solutions. Our ultimate goal is to assist in the development of a comprehensive plan to increase the representation of minorities in medicine and the health professions. It is critical for government, healthcare providers, educators and academic institutions to all play an active role in meeting this long term goal, therefore, our Planning Committee assembled a group of experts to share their experiences and recommendations. The goals of this first meeting were to:

- *Examine and propose short and long term policies to increase the representation of minorities in medicine and the health professions;*
- *Examine, propose and delineate solutions for tracking and identifying outcomes of minority high school pipeline programs, and*
- *Identify opportunities to replicate successful partnerships.*

The speaker’s presentations, insights and recommendations are highlighted in these proceedings. We hope their experiences will provide additional information to enhance progress in this area. It is clear that we need to work together to develop a cohesive, integrated, and comprehensive approach that will involve government, K-12 educators, colleges/universities, health professional schools, professional associations, foundations and academic medical centers to increase the number of minorities in medicine and the health professions. We are desirous of developing work groups to address some of the key issues raised during the conference. Some of these could include a work group to address pipeline issues, facilitating the replication of model programs, the development of a systematic approach for tracking and outcome measurements, educating individuals and organizations at the grass root level in order to better understand obstacles and opportunities to work together, and the development of a policy agenda.

The Association Of American Medical Colleges (AAMC) held a *“Symposium on Diversity in the Health Professions “* in March 2001 in honor of long time pioneer Herbert W. Nickens, M.D. This national conference addressed some of the same issues we articulated during our New York conference. This reinforced to us that there is a consensus on the issues we face in increasing the representation of minorities in the health professions, and we look forward to

working with them as we develop potential solutions. There are two documents from this conference which are attached to the end of these proceedings which could be helpful to those of you who are working to develop solutions to these issues, Annotated Bibliography and a Background Reading Bibliography".

We were able to provide this excellent conference because so many individuals and organizations were willing to share resources and expertise. Collaboration was critical to the success of this conference and it will be instrumental in our future work in this area. I want to thank the members of the Planning Committee for all their hard work and assistance in developing and implementing this conference and the Board of Directors of the Arthur Ashe Institute for their ongoing support.

The Associated Medical School of New York, the Arthur Ashe Institute for Urban Health, the Biomedical Science Careers Program and the New York State Council on Graduate Medical Education are committed to working together to improve minority representation in the health professional schools in New York State.

We also welcome the opportunity to work with other organizations to achieve educational equity in the health professions.

Ruth C. Browne, MPP, MPH, ScD.
Executive Director
Arthur Ashe Institute for Urban
Health (AAIUH)

HEALTH DISPARITIES AMONG MINORITIES

A Call to Action – A Mandate to Change The Way We Do Business

**David Satcher, M.D. Ph.D.
Assistant Secretary for Health and
United States Surgeon General**

David Satcher, M.D., Ph.D.
Assistant Secretary for Health and
United States Surgeon General
Washington, D.C.

Healthy People 2010

Dr. Satcher indicated that the twentieth century has witnessed unprecedented improvements in the health and longevity of people in the United States. Dramatic advances in medicine, public health, and the overall standard of living have led to many important health gains. Yet, despite decades of progress in these areas and significant achievements in civil rights protections, racial and ethnic minorities – many of whom are economically disadvantaged – have not shared fully in this progress. Statistics amply demonstrate the disproportionately greater burden of disease, disability, and death experienced by racial and ethnic minorities in this century. These disparities spark serious implications for our system of health care delivery and they require us to assess how minority populations access and receive quality care. The federal government has committed to eliminating racial and ethnic health disparities in the nation by 2010.

The following are just a few of the alarming statistics that amply demonstrate the disproportionately greater burden of disease, disability and death experienced by racial and ethnic minorities in this country:

- *African-American women are four times as likely to die in labor and delivery as their majority counterparts;*
- *Asian-Americans have a higher incidence of liver cancer;*
- *African-Americans males over 65 years are twice as likely to have prostate cancer;*
- *American Indians have the highest risk of Type 2 diabetes;*
- *Hispanics are twice as likely to suffer diabetes as the majority population.*

Even for non-chronic illness, there is a dramatic difference in the availability of service. There are dramatic disparities in adult immunizations. Forty-seven percent (47%) of whites received the pneumococcus vaccine compared to thirty-four percent (34%) of Hispanics and thirty percent (30%) of African-Americans over 65 years.

HIV in the African-American community is a serious health issue. Fifty percent (50%) of all new HIV infections and HIV cases are African-Americans. Twenty-five percent (25%) of all new AIDS cases are women.

The federal government have made the elimination of health disparities by 2010 a national priority –consequently, it is “a new day” for the federal government; a new way of doing business and allocating resources for funding initiatives that address health care disparity.

In order to achieve this goal, government agencies have made the following changes:

Health Research & Services Administration (HRSA)

- *Has committed to 100% access and zero disparities*
- *All funded projects must reach out and identify children within the communities they serve to inform and mentor youth about careers in the health professions.*
- *Funded projects are forming collaborative initiatives with community health centers.*
- *The agency is increasing its funding to community based outreach programs.*

National Institutes for Health (NIH)

- *A Center on Research In Health Disparities has been created.*

The agency is increasing its funding for research that addresses health disparity issues

Centers For Disease Control (CDC)

- *Funding communities to develop model programs and strategies for eliminating health disparities.*

The Agency for Health Care Research & Quality (AHRSQ)

- *Announced support for nine (9) centers of excellence for research in health disparities.*

Partnerships have also been developed with grant makers in health. There are over two hundred (200) foundations in this country that fund health care initiatives. These partnerships have enabled increased funding for research and care to improve health care disparities.

Dr. Satcher indicated that the health profession schools must play a critical role in achieving equity within our healthcare delivery system. He noted that they are poised to develop innovation partnerships with the communities, academic health centers, schools and government. He indicated it is time to change the way they do business.

The U.S. Surgeon General's Mandate to Health Professions School

THE HEALTH PROFESSION'S SCHOOLS MUST PLAY A SIGNIFICANT ROLE IN ELIMINATING HEALTH DISPARITIES BY:

- *Partnering with the communities they serve to encourage ethnic minority students to pursue careers within the health professions. To establish recruitment and retention programs to increase the number of ethnic minorities entering and graduating from health professional schools.*
- *Developing and implementing training and educational experiences for students that will provide them exposure to patients of various ethnic backgrounds in community based settings in order for them to obtain a certain level of cultural competency to serve in underserved and minority communities.*
- *Developing new models of care which will utilize a myriad of health professional (i.e., nurses, physicians, physician assistants, nurse practitioners) to address the health care needs of underserved and minority communities.*
- *Initiating relevant and innovative research that will provide solutions to eliminate health disparities. In order to be successful schools we will have to build the trust of the communities they serve in order to partner with them for clinical trials.*

Healthcare practitioners must also play a role in underserved communities. Dr. Satcher suggested that since the federal government subsidizes graduate medical education, providers should then be asked to serve in underserved communities as a way to “give back to their country for the training they received.” This would also enable young health care professionals to be exposed to patients of varying ethnic backgrounds and thereby enhance their sensitivity and competencies to serve people of color.

DR. SATCHER'S COMMENTS PROVIDED THE CONTEXT FOR THE PRESENTATIONS FOR THE REMAINDER OF THE CONFERENCE.

POLICY PANEL:
**Racial and Ethnic Disparities in Health -
Workforce Implications**

- **Delthia Ricks, New York Newsday**
- **Dr. Michael Diaz, Mt. Sinai College of Medicine**
- **Dr. Joseph Betancourt, New York Presbyterian Hospital – Weill Medical College of Cornell University**
- **Michael Carter, U.S. Department of Health and Human Services, Office of Civil Rights**
- **Tracey R. Beer, J.D., U.S. Department of Education, Office of Civil Rights**

Delthia Ricks
Reporter
New York Newsday
New York, New York

Racial and Ethnic Disparities in Health: Workforce Implications **Introduction – A Media Story**

The media can be an extremely effective tool in bringing issues of inequities to the forefront of the general public and to the effected industry. In 1988, New York Newsday reporter, Delthia Ricks and a team of reporters from the newspaper documented the unfair treatment residents of Queens and residents of Nassau and Suffolk counties had received by physicians and New York hospitals. The personal stories poignantly demonstrated how much stereotyping, lack of knowledge, racism and inappropriate assumptions by healthcare providers play a significant role in the treatment minorities receive, or do not receive, at New York hospitals. The New York Newsday series ignited the actions of other media outlets such as television and radio to also publicize the inequities occurring within New York hospitals.

Consequently, healthcare providers, including academic health centers, medical schools, and other health training programs have begun to implement programs within their hospitals to rectify the inequities in patient care. New training modules are being developed to equalize care and better prepare their students to treat and care for patients of various cultures, ethnicity's, and socio-economic backgrounds. The presenters on the panel entitled, "Racial and Ethnic Disparities in Health: Workforce Implications," shared some of the successful programs from their own institutions and policy recommendations for further consideration.

Dr. Michael Diaz
Assistant Clinical Professor of Medicine
Mount Sinai Medical Center
New York, New York

Governance Role

Healthcare providers, including academic health centers, and training programs (medicine and health-related professions) have begun to realize the instrumental role they must play in rectifying the inequities in patient care which exist within the institutions they serve and train. The programs developed by healthcare institutions must be multi-faceted, comprehensive, and institutionalized in order for there to be dramatic changes in the treatment of individuals from various cultures.

Dr. Diaz noted that the landmark article that appeared in the 1996 edition of the New England Journal of Medicine turned out to be one of the leading forces that brought this issue to the attention of healthcare facilities around the country. The article summarized the findings of a study which reviewed the patient records of 26 million individuals to determine the effects of race on the use of medical services such as ambulatory care visits, mammograms, lower extremity amputations, and angioplasties. The study clearly demonstrated a differential use of services by race. For example, African-Americans had fewer ambulatory care visits, yet higher hospitalization rates and high severity of illness. When studying the use of higher sophisticated treatments such as angioplasty, white patients received these therapeutic interventions at a higher rate than African-American patients with the same insurance coverage.

The New England Journal of Medicine concluded that

- Race was an overriding determinant for the disparities in healthcare services

Therefore, it was recommended that healthcare institutions:

- *“Examine the racial disparities in the use of healthcare services and in the choice of diagnosis and choice of therapeutic care recommended by physicians.”*
- *“There needs to be an understanding and awareness of the issues associated with treating patients of various ethnic and racial backgrounds in the training of physicians.”*

Mount Sinai Medical Center had already determined it needed to evaluate its practices and training modules in order to address the inequities within their institutions. The New England Journal of Medicine did help by keeping this issue at the forefront of the hospital leadership including the Board of Directors. The following initiatives were implemented at Mount Sinai:

- *The establishment of a committee named by the Board of Directors, whose members included community representatives, clinicians, management and*

governance. The committee's charge was to review the patient care, by floor, and by race, ethnicity, and insurance to determine if patients were treated equally and appropriately. The committee has the authority to make recommendations that will change the way care is given to minority patients. The committee has been instrumental in equalizing care given to all the patients who enter their facilities.

- *The establishment of a multi-cultural training program for medical students and house staff. The training provides students with lectures from practitioners from varying ethnic backgrounds (i.e., Asian, African-American, Hispanic) who share some of their culture's norms and beliefs. In addition, students spend time in practitioners private offices where they can observe the practitioner's care approaches to their patients, many of whom are from various cultures and countries.*

Physicians and healthcare professionals of color must continue to be role models for those in training so that individuals entering the field will realize they are not just treating disease but instead must realize they are treating people from various cultures. In this way, communities can receive appropriate care.

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Associate Director of Multicultural & Minority Health
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Delivering Quality to Diverse Populations: The Role of Cultural Competence

The increasing diversity of this nation poses a number of challenges to our health care system. Health care facilities ability to provide quality, cultural, appropriate care to Americans of various cultural and ethnic backgrounds has been compromised due to barriers (structural and organizational) within our health care organizations.

This has resulted in racial/ethnic disparities in the utilization of diagnostic and therapeutic procedures and health outcomes. How can healthcare organizations begin to address these inequities within their institutions? Organizations must develop and incorporate cultural competency initiatives at all levels of organization.

First of all the *leadership team*, both governance and management, must be diverse in order to be role models for other managers within the organization and to set appropriate policies.

The *workforce* must also be representative of the population it serves so that culturally appropriate services and programs are offered to patients. In addition to program implementation, a diverse workforce enables effective communication (including signage) between patients and staff.

Providers must also be diverse and trained to better understand and care for patients of varying backgrounds so they can become sensitive to various health beliefs, behaviors, and norms.

Ethnic minorities are often asked to play a leadership role in being “change agents” for their medical center. The limited number of faculty, house staff, and other trainees of color often serve on recruitment and admissions committees, curricular initiatives and other special task forces. Dr. Betancourt reflected on his own experiences and the experiences of his colleagues in articulating the problem this can cause for junior faculty members at academic medical centers as follows:

1. Faculty who are involved with recruitment and other efforts to improve training on issues of cultural competency often do so in addition to their other teaching and service responsibilities. This added responsibility often occurs without additional financial remuneration or even recognition by the

leadership team. In addition, the time providers spend on these committees make it harder for them to find time for their research and/or writing. Consequently, faculty promotions can be delayed.

2. Recruitment efforts can sometimes be scattered and disjointed. Information on programs to assist ethnic minorities to enter medicine and the health professions is not centrally located. These initiatives need to be in a special clearinghouse in order to assure those who need them are accessing them.
3. Additional membership opportunities need to be available for professionals of color. Medical and health professions' students need to have leadership and service opportunities available to them so when training is completed, they will have the skills needed to be effective faculty members.

To overcome some of these issues, the following recommendations were made to provide additional support to faculty, programs, and students who are committed to increasing minority representation in medical schools and in the health professions:

- *Future consideration should be given to linking medical school accreditation to effective minority recruitment efforts and multicultural training programs at schools.*
- *Develop an award with funding to schools that have documented improvements in the diversity of their student's body and training programs (i.e., residency programs).*
- *In the short-term, provide funding to schools for developing innovative community based recruitment efforts and compensate faculty for their involvement in these programs.*
- *In the long-term, develop partnerships with colleges and universities, government (i.e., Department of Education) and foundations to support and develop pipeline initiatives and to coordinate the initiatives that already exist. This would help to bring more support at the grass root level and would facilitate communications between programs so students would be better informed of the myriad of opportunities available to them.*
- *The Public Health Services Corps could be revised to include required experience at the leadership level in addition to the service level. This would enable more minorities and economically disadvantaged individuals to obtain the necessary experience and exposure that is needed to be in leadership positions in the future.*

Michael Carter
Regional Manager – Office of Civil Rights (OCR)
United States Department of Health & Human Services
New York, New York

The Need for a National Health Agenda

Since 1999, the New York Regional Office of the Office of Civil Rights has been a leading force in the elimination of racial and ethnic disparities in the healthcare delivery system. In fact, their efforts have spawned similar initiatives in other parts of the country. Historically, the Office of Civil Rights has played an investigative and punitive role. During the past two years, their enforcement strategy has changed to focus on three elements:

- *Dialogue,*
- *Education/outreach, and*
- *Technical assistance.*

Through outreach, education, investigation, and technical assistance this office is playing an active role in changing discrimination practices and empowering communities to challenge discrimination among hospital leadership. In this way he hopes communities will establish a “health agenda” so that long term discriminatory practices will end.

The Office of Civil Rights estimates that in the past two years it has reached over 5,000 individuals through its education and outreach strategy.

As a result of making presentations to healthcare executives and providers about the inequities in the delivery of healthcare services, they began to receive requests from hospitals about how to improve their operations. With the assistance of the Greater New York Hospital Association, the Academy of Medicine, the Associated Medical Colleges, the Medical Society, the Office of Civil Rights developed an instrument for health care organizations to implement their own internal assessment. The instrument was recommended to hospitals in a voluntary capacity in order for them to assess the following:

- *How they do business;*
- *Who they do business with;*
- *How diverse their workforce is;*
- *What their marketing approach is;*
- *Where they are marketing, and*
- *Policies on physician admitting privileges.*

The Office of Civil Rights has not systematically review or assessed the information from this process since the instrument was not mandated, but instead administered on a voluntary basis. Anecdotally, healthcare executives have indicated that they have better information on their internal operations, have

addressed access issues and cultural bias and barriers individuals from various cultures and ethnicity have within the organizations (i.e., language, signage). Consequently, the Greater New York Hospital Association has created several work groups to help hospitals resolve these issues. The Office has found that the strategy of communication and education has been more effective with healthcare institutions than its traditional enforcement strategy. Through its meetings with organizations and individuals, the Office has realized that on the whole, providers and consumers are unaware of the disparities that exist in the healthcare delivery system. Consequently, they are calling for the creation of a National Health Agenda. This health movement would be similar to previous national campaigns for fair housing, education reform, and economic development.

The Office of Civil Rights plans to be involved with educating groups at the grassroots level in churches, barber shops, and beauty shops. In addition, they are recommending that groups such as the Academy of Medicine, the Arthur Ashe Institute, the Associated Medical Schools of New York, the New York Council on Graduate Medical Education and the Greater New York Hospital Association continue their partnerships to eliminate health disparities within the healthcare delivery system.

**Tracey R. Beer, J.D.,
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Affirmative Action Programs

Government agencies also play a key role in promoting equity in healthcare services and within health professions training programs. The Office of the Civil Rights within the U.S. Department of Education and the U.S. Department of Health and Human Services has shifted its focus from enforcement to outreach and education.

Tracy Beers, from the U.S. Department of Education, Office of Civil Rights, noted that even though affirmative action programs are being challenged in the courts and in the legislature they still play an important role in expanding the representation of minorities at academic institutions and training programs throughout the country. In order to withstand legal scrutiny she offered the following advice to institutions as they develop affirmative action programs:

- *Develop a clear and concise school and/or program mission and goals;*
- *Develop a clear and compelling reason to use race and ethnicity to meet your school/program goals;*
- *Articulate the educational benefits for diversifying your school/program;*
- *Be sure your affirmative action program meets some specific objectives (it can not be used to remedy a plethora of societal problems);*
- *Maintain a competitive review process for the admittance of all students into your school/program. Race, ethnicity, national origin should be just one factor in the entire review process.*
- *Do not create separate review processes, lists, or committees. Your institutional review process should review all applicants.*
- *Periodically assess the impact your affirmative action program has had on its intended audience. Determine if your original goals have been met or do you need to continue the program.*
- *Be sure non-beneficiaries of your affirmative action program are not being discriminated against in the process.*

The Office of Civil Rights wants to provide technical assistance to colleges, universities, and training programs in order to strengthen affirmative action programs throughout the country.

**MODEL PROGRAMS:
Innovations in Tracking and Outcomes -
A Panel Discussion**

- **Rosalind Wilson, Arthur Ashe Institute for Urban Health, Health Science Academy**
- **Dr. Joan Y. Reede, Biomedical Science Careers Program**
- **Dr. Carolyn Hamilton, State University of New York @ Buffalo, School of Medicine and Biomedical Sciences & Associated Medical Schools of New York – Med STEP Program**
- **Maxine Bleich, Ventures Education Corporation**

The progress under represented minorities have achieved in the health professions is in large part due to the establishment of successful pipeline programs. A summary of these innovative programs is provided for use by other organizations considering embarking on such initiatives.

Rosalind V. Wilson, MSW
Program Director
Arthur Ashe Institute for Urban Health
Health Science Academy
Brooklyn, New York

Program Overview

In order to increase the number of minority students entering post-secondary programs in the sciences, medicine and the health related fields; the Arthur Ashe Institute for Urban Health developed the Health Science Academy. Since 1997, the Academy has work with high school minority students (African-American, Latino, Caribbean) after-school and on weekends. Similar to other pipeline initiatives, the program provides:

- *Academic support and enrichment*
- *Mentoring*
- *Psychological support*
- *Exposure to health care professionals (role models)*
- *Opportunities for critical thinking and problem-solving*
- *Professional opportunities.*

As a result of the course work and learning modules, students and teachers report that these sessions are highly effective in increasing student knowledge, critical thinking, and problem-solving.

The program has had some tremendous long-term success! Of the 117 graduates of the program, 90% of the graduates have matriculated into four-year colleges, 97% of the Academy graduates have remained in college. Ninety-six percent (96%) of the 1997 graduates are currently in their senior year. These seniors indicated that the Academy helped them adjust to the rigors of college. As the individuals graduate, the Academy will be able to report the number of its graduates who pursue graduate school in science, medicine or a health-related graduate program.

Long-Term Goal

The long-term goal of the Academy program is to continue to track its graduates in order to collect data that will provide insight into which program variables facilitate and/or hinder future student success. Once these variables are identified then model programs can be implemented throughout the nation that will facilitate larger numbers of minority students into post-secondary programs in the sciences, medicine, biomedical and health-related professions.

Assessments – Tracking – Data Collection

Assessment of program participants occurs prior to the students' entry into the program, while the student is taking classes with the Academy, and after the student has completed their formal program participation. Some of the critical assessments completed by the Academy are as follows:

- *Pre-test and post-test of science knowledge;*
- *Evaluation of students performance during the Academy's patient-oriented problem-solving sessions;*
- *Weekly quizzes and challenge questions;*
- *Review of student's written work;*
- *Evaluation of student's performance after each Academy module is completed;*
- *Evaluation of student's class participation;*
- *Focus group and individual student interviews.*

In addition, students also have an opportunity to provide feedback to the Academy on the lecture class sessions and other educational experiences.

In order to collect long-term data on the students, it is critical to develop relationships with the students and to continue to support and mentor them through their college years and beyond. The Academy maintains its relationship to its students through telephone calls, email, summer internships, annual reunions, and an academy newsletter. Program staff via mail and telephone calls, implement follow-up surveys after each semester of the student's tenure in undergraduate school.

Conclusion

It is critical that pipeline programs such as the Academy receive private and public financial support. It has been well documented that high school students need enrichment and mentorship programs in order to enter and compete in rigorous undergraduate programs. Students need to be successful in rigorous academic programs at the undergraduate level in order to gain access to medical school and health-related programs at higher percentages than have been traditionally the case. The Academy, as it identifies the "key" indicators for future student success, will share these results locally and nationally in order to generate additional pipeline programs for minority students.

Joan Y. Reede, M.D., M.P.H., M.S.
Associate Director for Faculty Development and Diversity
Director of the Minority Faculty Development Program &
Faculty Director of Community Outreach Program,
Assistant Professor of Medicine, Harvard Medical School,
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Biomedical Science Careers Program

The Biomedical Science Careers Program (BSCP) is a non-profit organization established in 1991 to increase minority representation in medicine and health careers. The program was developed on the premise that it takes the combined efforts of a cadre of individuals, institutions, and industry to help minority students reach their potential as professionals in the health care arena.

Therefore, BSCP has established unique partnerships with K-12 educators, colleges/universities, private industry, academic medical centers, and professional societies, and provide forums for linking programs, volunteers and students across academic and employment sectors.

The BSCP provides opportunities to individuals throughout their academic career (i.e., middle school, high school, college, graduate school and faculty). Specifically the program goals are:

- *To identify, inform, support and provide mentorship to minority students (African-American, Latino, and Native-American) who have performed well academically;*
- *To provide opportunities through seminars and forums for participants to exchange information and knowledge;*
- *To provide mentors and advisors to students. These mentors encourage and support their students to pursue their interest in the sciences.*

The program achieves these goals through a variety of program offerings. Middle school students are informed about the variety of health career options available to them. High school students are given skill enhancement courses. Special programs are also offered to guidance counselors, members of the business community and community leaders in order to explain to them how critical their role is in providing opportunities for minority students. A career development series is also available for post-doctoral students and junior faculty members. The Biomedical Science Careers Program has also created a resume directory for its program participants.

The BSCP student advisors are instrumental in providing career advice, information on schools and fellowship programs, exposure to health careers, job

shadowing experiences, and internships at their workplace. In addition, a communication network is developed among the BSCP students', which is supportive and also enables information sharing about colleges, graduate schools, fellowships, and internships. BSCP students in college and graduate school mentor the BSCP students at the high school level by enabling them to visit their schools and learn about the academic expectations of undergraduate programs. BSCP students are also able to make linkages with other sister programs for after-school activities, camps, and enrichment programs so they can continue to be supported academically.

Program Outcomes

The Biomedical Science Careers Program has documented successes. Since 1991, 2500 students and 250 post-doctoral fellows and junior faculty have participated in the program. As a result of their participation:

- *92% of BSCP participants felt they had acquired the information they needed to know in order to be successful in their field of choice;*
- *88.7% of BSCP participants indicated that their interests in biomedical and science careers had been strengthened;*
- *86% of BSCP students indicated that the mentors, advisors and other individuals they have met through the program will be helpful to them in meeting their career goals;*
- *85% of BSCP students felt they had been exposed to opportunities in the health field that they would not have otherwise had.*

In addition, many BSCP students have been placed in internships and jobs in the science arena. The program has also been helpful to students in identifying sources of educational funding so that BSCP students could attend post-secondary schools.

Conclusion

The Biomedical Science Careers Program is an excellent example of how to develop partnerships with key stakeholders in the health, business, and academic arena to expand the academic and career horizons of students of color. One of the mottos of the program is "*Connections Built on HOPE.*"

- H** - Expanding the **horizons** of students of color
- O** - Linking education, training and mentoring **opportunities** for students with employment opportunities
- P** - Supporting students academically so they can **persevere** and be successful.
- E** - Social and **economic** future of our country rests on our ability to engage all sectors of our society so that individual's have an opportunity to reach their full potential.

The opportunities to engage business, academia, individuals, professionals, policy-makers and foundations in sharing the responsibility and ownership of developing minority students for career in medicine, science and health care are numerous. The Biomedical Science Careers Program can be a model for engaging key stakeholders in communities throughout the country. Communities across the country can determine the resources they have to offer students, and then develop programs that will expose them to the opportunities available to them in health care. If these partnerships were realized throughout the United States, we could begin to see tremendous advancements for minorities in health care.

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Science and Technology Entry Program (MEDSTEP)
(University of Buffalo & Associated Medical Schools of New
York)

Background

The Science and Technology Entry Program (MEDSTEP) is a state funded program under the auspices of Associated Medical Schools in New York. The program is a part of the University of Buffalo School of Medicine and Biomedical Sciences and was developed to encourage youth to consider a career in medicine and health-related fields. Ninth through twelfth graders participate in the following activities:

- *Enrichment workshops in mathematics, computers, and the sciences;*
- *Clinical, hospital and research experiences within academic health centers during the summer;*
- *Tutorial support;*
- *Counseling/Advisement support and mentorship;*
- *Preparation of Scholastic Aptitude Tests (SAT).*

Tracking & Outcomes

The MEDSTEP initiative has developed an extensive tracking mechanism and a research design to determine how the students perform in comparison to their City of Buffalo peers. The program tracks educational attainment at the high school level (i.e., high school graduation rates), matriculation into post-secondary institutions, passage rate for math and science regent exams, matriculation as science and/or health majors at post-secondary institutions, and students' perspectives on the benefits of the program.

SAT results, academic performance in advance placements science courses, honors and/or college level courses are also collected and reviewed while the students are still in high school.

As of 2000, 1999/2000 academic year MEDSTEP participants have outperformed their peers in the state and those in the Buffalo area.

Conclusion

A number of key elements are critical to the success of this program. There has been a tremendous amount of support and commitment from the University of Buffalo Medical School and the Associated Medical Schools. The program also has an:

- Extremely committed staff that often goes above and beyond their responsibilities to assist the students;
- On-going data collection, and
- Continual programmatic evaluation and feedback to ensure the program is meeting its goals and objectives.

The MEDSTEP initiative is exactly the type of commitment David Satcher challenged medical schools to embark upon.

Health Policy and Opportunities for Minorities in Medicine and Health: A Policy Agenda

- **Dr. Vann Dunn, New York City Health and Hospitals Corporation**
- **Assemblyman, Richard N. Gottfried, New York State Assembly,
Chairman, Assembly Health Committee**
- **Dr. Vincent C. Rogers, Health Resources and Services Administration**

Dr. Vann Dunn
Health and Hospitals Corporation
New York, New York

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It is clear from the presentations that a multifaceted approach is required in order to see dramatic increases in the number of minorities pursuing careers in medicine and the health professions. There has been ample documentation of the impact racism has on the delivery of healthcare services, admissions and student success in professional school and even in our K-12 educational system. The Office of Civil Rights can be a resource to faculty and students, schools who observe blatant and even subtle racism. It is time to bring national attention (instead of fighting individual battles) through a national media campaign that promotes the need for quality math and science education throughout the country beginning at the elementary school level. We know if we do not increase the number of students who are well prepared in reading, math and the sciences even in elementary school it will be almost impossible for them to catch up in junior and high school. If we really value science and math education in this country, we will identify education standards and provide resources to assist communities to meet these standards. National attention would also encourage innovation and partnerships at all levels of the education process.

It has also been suggested that we move away from our traditional pipeline approach and think more globally about a national training model. A national training agenda will cause program planners to think more creatively by developing a more dynamic and inter-related training process. This will enable local, state, and federal agencies to all play a role in meeting our supply of minority health professionals (and could also lead to progress in other areas). The following is an example of the goals and activities organizations can implement at the local/community, state and federal levels:

| Local Level | |
|-------------------------------|---|
| Goal | To develop model initiatives to share with other communities and local legislators. |
| Organizations | Community Based Organizations (churches, YMCA, YWCA, community centers) |
| Role & Activities | After School Science and Enrichment Programs, Tutorial & Mentoring Programs, Parenting programs, and student study skills and test preparation courses. |
| Organizations | Medical Schools and Health Professional Schools |
| Role & Activities: | To provide expertise to school systems and communities by conducting summer programs, assisting schools with science curriculum development, teacher training and exposure. |
| Organizations: | School districts and individual K-12 schools |
| Role & Activities: | To reach out to local community organizations and schools and ask them to develop collaborative ventures to enhance student performance within the school, supplement teachers' educational opportunities. Team teaching in order to enhance teachers' knowledge of science and math. Provide more release time for teachers for additional training (utilize faculty from other schools to teach during teacher development periods). |
| State Level | |
| Goal: | To develop relationships and partnerships with community based organizations and health professional training programs to assist them in crafting programs that can be integrated into new and existing funding streams. |
| Organization: | State agencies, elected officials, staff members or elected officials, Lobbyists. Academic health centers, health professions training programs. |
| Role & Activities: | Develop a clear understanding of what state funded programs are paying for (currently and historically). Learn about initiatives within the state and elsewhere in order to support funding of these programs. Develop and promote coalition building and collaboration among constituencies and |

| | |
|-------------------------------|--|
| | <p>programs so new initiatives can be grouped together for funding purposes (also promotes collaboration among programs). Develop relationships between organizations and elected officials in order to build strong and trusting alliances.</p> |
| Federal Level | |
| Goal: | <p>To develop policies that would provide incentives to healthcare institutions to work with local agencies to develop recruitment and training initiatives for underrepresented minorities and cultural diversity training.</p> |
| Organizations: | <p>Federal agencies, federal funding sources</p> |
| Role & Activities: | <p>Conduct forums to learn about successful programs for future funding opportunities. Provide federal support for innovative teacher training initiatives. Mandate service and leadership commitments to individuals receiving federal tuition support.</p> <p>Increase federal support for graduate medical education, but stipulate community based training and courses in cross-cultural awareness.</p> |

Conclusion

The presentations at this conference demonstrated the need for hospitals, academic medical centers, medical schools, health profession programs, politicians, government officials, providers and educators to work collectively to develop new strategies and approaches to increase the number of minorities in medicine and the health professions. Individuals who operate successful initiatives with documented results can lobby for local and national funding and therefore acquire the necessary long term funding that is needed to sustain these critical initiatives.

We challenge you to continue to develop innovative programs to address these issues and to engage non-traditional organizations that have resources to develop and maintain these programs. The Arthur Ashe Institute for Urban Health and the other sponsors of the conference will be reaching out to individuals and organizations as we continue the work started at this conference. As we develop new programs we must always remember to engage students who are in high school, undergraduate school and professional schools in order to hear first hand the obstacles they face in meeting their goals. In addition to gaining valuable insight into their issues and concerns we are also able to develop their leadership skills so they can be our future pioneers in this area.

The program planning committee and participants are committed to developing additional strategies at subsequent meetings that will create a national agenda for minority representation in the health professions and thereby meet the Surgeon General's goal of eliminating health disparities by 2010.