

Proceedings of the National Summit On Defining a Strategy for Behavioral Health Information Management and Its Role in the Nationwide Health Information Infrastructure

**co-sponsored by the
Substance Abuse and Mental Health Services Administration
and the
Software and Technology Vendors' Association**

Other Contributing Organizations:

**Anasazi Software
Askesis Development Group
Austin Travis County Mental Health Mental Retardation Center
ClaimTrak Systems
CMHC Systems
Comprehensive Behavioral Care
Esteam
Family Services of Western Pennsylvania
Mental Health Corporations of America
North Central Behavioral Health Systems
Qualifacts
Sequest Technologies
Western Psychiatric Institute and Clinic**

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Summit Proceedings

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**Audio recordings of the Summit presentations, synchronized with slides
if the presenter used them, can be accessed at:**

<http://www.mhsip.org/itsummit>

Summit Planning Group

Many people contributed to the planning of the Summit. The primary planners, who comprised the Summit Planning Group, are listed below. Listed on the next four pages are the members of the Summit Planning Advisory Group and the Behavioral Health Data Standards Workgroup, each of whom also contributed of their time and recommendations to planning the Summit.

Tom Trabin, Ph.D., M.S.M.
Summit Organizer and
Executive Director, SATVA

Ronald Manderscheid, Ph.D.
Chief, Survey and Analysis Branch
Center for Mental Health Services, SAMHSA

John Paton
Past Chair, SATVA and
Chair, CMHC Systems

Sarah Wattenberg, LCSW-C
Public Health Advisor, Organization and Financing Branch
Center for Substance Abuse Treatment, SAMHSA

John Carnevale, Ph.D.
Chair, Behavioral Health Data Standards Workgroup
and President, Carnevale Associates, LLC

Kevin Mulvey, Ph.D.
Chief, Practice Assessment and Applications Branch
Center for Substance Abuse Prevention, SAMHSA

Pamela Roddy, Ph.D.
Senior Public Health Analyst
Center for Substance Abuse Prevention, SAMHSA

Kevin Hennessy, Ph.D.
Science to Service Coordinator
Office of Program, Policy and Budget, SAMHSA

Summit Planning Advisory Group

The Summit Planning Advisory Group met in Washington, D.C. in April 2005 to identify the key topic areas that should be covered in the Summit Program presentations and workgroups, the basic Summit Program Agenda, and most of the presenters. They also provided suggestions then and subsequently on who to include on the invitation list.

Sylvia Caras

Mental Health Consumer Advocate

John Carnevale, Ph.D.

Chair, Behavioral Health Data Standards Workgroup and President, Carnevale Associates, LLC

Simon Cohn, M.D.

Associate Executive Director Permanent Federation, Kaiser Permanente and Chair, National Committee on Vital & Health Statistics

Allen Daniels, Ed.D.

CEO, Alliance Behavioral Care

Steven Davis, Ph.D.

Member, Mental Health Statistics Program Policy Group and Director, Decision Support Services
Oklahoma Department of Mental Health and Substance Abuse Services

Dick Dillon

Vice President Preferred Family Healthcare, Inc. and Member, State Associations of Addiction Services

Kathleen Fyffe

Senior Advisor Office of the National Coordinator of Health Information Technology

Frank Ghinassi, Ph.D.

Chief, Adult Services and Director, Performance Measurement and Clinical Outcomes Division
Western Psychiatric Institute

Kevin D. Hennessey, Ph.D.

Science to Service Coordinator Office of Policy, Program and Budget (SAMHSA)

Sharon Hicks

CEO, Askesis Development Group and Chair-Elect, SATVA

Jim Kretz

Senior Survey Statistician/Project Officer, Surveys and Analysis Branch
Center for Mental Health Services, SAMHSA

Ted Lutterman, Ph.D.

Director of Research Analysis
NASMHPD Research Institute, Inc.

Ronald Manderscheid, Ph.D.

Chief, Survey and Analysis Branch
Center for Mental Health Services/ SAMHSA

A. Thomas McLellan, Ph.D.

Director Treatment Research Institute

George Morris

Vice President for Information Technology, JCAHO

David Nickelson, PsyD., J.D.

Assistant Executive Director Technology Policy and Projects
American Psychological Association

George Pashel

President, Esteam and Chief Operating Officer, Pressley Ridge Schools

John Paton

Past Chair, SATVA and Chair, CMHC Systems

Eric Smith, Ph.D.

VP of Development
IMPEL Strategic Solutions

Tom Trabin, Ph.D., M.S.M.

Executive Director
SATVA

Sarah A. Wattenberg, LCSW-C

Public Health Advisor/SAMHSA
HIPAA Coordinator
Organization and Financing Branch, Center for Substance Abuse Treatment, SAMHSA

Grady Wilkinson, ACSW

President and CEO
Sacred Heart Rehabilitation Center

Pat Wise

Director of EHR Initiatives
Health Information Management Systems Society

Behavioral Health Data Standards Workgroup

The Behavioral Health Data Standards Workgroup met in Washington, D.C. and by conference call to review and refine the work of the Advisory Group, with particular attention to developing the workgroup definitions and tasks that are at the heart of the Summit.

CHAIRPERSON

John Carnevale, Ph.D.
President
Carnevale Associates, LLC

MEMBERS

John Bartlett, M.D., M.P.H.
Executive Director
The Avisa Group

Jeannie Campbell
National Council for Community
Behavioral Healthcare

Henry Chao
Technical Advisor, CIO
Enterprise Architecture and
Planning Staff, Office of
Information Services
Centers for Medicare & Medicaid
Services

Mark Covall
Executive Director
National Association of
Psychiatric Health Systems
(NAPHS)

Steven Davis, Ph.D.
Member, Mental Health
Statistics Program Policy Group
Director, Decision Support
Services
Oklahoma Department of Mental
Health and Substance Abuse
Services

**Paul H. Earley, M.D.,
F.A.S.A.M.**
Earley Associates, P.C.

Alexa Eggleston, J.D.
Deputy Director of National
Policy
Legal Action Center

Susan J. Fox
Founder, Fox Systems Inc.

Lewis E. Gallant, Ph.D.
Executive Director
National Association of State
Alcohol and Drug Abuse
Directors, Inc.

Vijay Ganju, Ph.D.
Director
Center for Mental Health Quality
and Accountability
National Association of State
Mental Health Program
Directors Research Institute

Pamela Greenberg, M.P.P.
Executive Director
American Managed Behavioral
Health Care Association

Andrew Hyman
Director of Government Relations
and Legislative Council
National Association of State
Mental Health Program
Directors

Jim Kretz
Senior Survey Statistician/Project
Officer, Surveys and Analysis
Branch
Center for Mental Health
Services, SAMHSA

Ted Lutterman
Director of Research Analysis
National Association of State
Mental Health Program
Directors Research Institute

Frank McCorry, Ph.D.
Director, Clinical Services
New York State Office of
Alcoholism & Substance Abuse
Services

Carol McDaid
Principal
Capitol Decisions, Inc.

Eileen McGrath, J.D.
Executive Vice President and
Chief Executive Officer (CEO)
American Society of Addiction
Medicine (ASAM)

Kay Miller
Senior Research Manager
Medstat

Mike Morris
Board Member, SATVA and
President, Anasazi Software

Stacia Murphy
President
National Council on Alcohol and
Drug Dependence

Kathleen M. Nardini, M.A.
Senior AOD Systems Research
Analyst
National Association of State
Alcohol and Drug Abuse
Directors

Jim Perrone, CPA
Chief Operating Officer
First Step, Inc.

Linda Rosenberg, MSW, CSW
President and CEO
National Council for Community
Behavioral Healthcare

Howard B. Shapiro
Executive Director
State Associations of Addiction
Services (SAAS)

Tom Trabin, Ph.D., M.S.M.
Summit Organizer and
Executive Director, SATVA

FEDERAL
REPRESENTATIVES

Sarah A. Wattenberg, LCSW-C
Public Health Analyst and Project
Officer, Behavioral Health Data
Standards Workgroup
Division of Services
Improvement, Organization and
Financing Branch
Center for Substance Abuse
Treatment, SAMHSA

Mady Chalk, Ph.D.
Director
Division of Services
Improvement, Organization and
Financing Branch
Center for Substance Abuse
Treatment, SAMHSA

**J. Michael Fitzmaurice, Ph.D.,
FACMI**
Senior Science Advisor for
Information Technology, Office
of the Director
Agency for Healthcare Research
and Quality, HHS

**Kenneth (Ken) Hoffman, MD,
MPH**
Medical Officer, Division of
Pharmacologic Therapies
Center for Substance Abuse
Treatment, SAMHSA

Jim Kretz
Senior Survey Statistician/Project
Officer, Surveys and Analysis
Branch
Center for Mental Health
Services, SAMHSA

Robert Lubran
Director, Division of
Pharmacologic Therapies
Center for Substance Abuse
Treatment
Substance Abuse and Mental
Health Services Administration

Ronald W. Manderscheid, Ph.D.
Chief, Survey and Analysis
Branch, DSCSD
Center for Mental Health
Services, SAMHSA

The National Summit on Defining a Strategy for Behavioral Health Information Management and Its Role within the National Health Information Infrastructure

American Educational Development Conference Center, 8th Floor
1825 Connecticut Ave. N.W., Washington, D.C.

Program Agenda

Day One: Thursday, September 29, 2005

- 7:00am Registration, continental breakfast
- 7:30am Welcoming Remarks, Introductions
Tom Trabin, Ph.D., M.S.M., Summit Organizer and Executive Director, SATVA
SAMHSA and the Importance of Information Management for Behavioral Health
Charles Curie, M.A., ACSW, Administrator, Substance Abuse and
Mental Health Services Administration
(presented in his absence by *Stephanie Colston, M.A., Senior Advisor to the*
Administrator, SAMHSA
- 8:00am The Emerging Nationwide Health Information Infrastructure: Benefits
and Opportunities
Keynote Speaker: David Brailer, M.D., National Coordinator of Health
Information Technology
- 9:00am SAMHSA Data Initiative and other Informatics Opportunities for Behavioral Health
Treatment and Prevention Services
Javaid Kaiser, Ph.D. Acting Director, Office of Applied Studies, SAMHSA
Ron Manderscheid, Ph.D., Chief, Survey and Analysis Branch, Center
for Mental Health Services, SAMHSA
Mady Chalk, Ph.D., Director, Division of Services Improvement, Center
for Substance Abuse Treatment, SAMHSA
Beverlie Fallik, Ph.D., Senior Public Health Analyst and CSAP Data Coordinator
Center for Substance Abuse Prevention, SAMHSA
John Paton, Past Chair and Board Member, Software and Technology
Vendors' Association
- 10:30am Break
- 10:45am General Session Panel: Informatics Opportunities and Issues for Behavioral Health
Settings Related to:
Privacy Concerns in the Emerging NHII
Mark Rothstein, M.D., Chair, Privacy Committee, National Committee for
Vital and Health Statistics
Complexities of Reimbursement and Reporting Requirements
Susan Fox, Ph.D., Founder, Fox Systems, Inc.
Adoption of Electronic Health Record Systems
Claudia Roth, Ph.D., President, Western Psychiatric Institute
Deni Carise, Ph.D., Director, Treatment Systems Research Section, Treatment
Research Institute

- 12:15pm Lunch
- 1:15pm Six concurrent discussion workgroups convene to focus on specific types of informatics opportunities, and the work ahead towards achieving potentials. Attendees are pre-assigned to one of the six workgroups and will stay in their respective workgroups when they convene during the two days. The workgroup co-leaders and recorders will also stay in their respective workgroups throughout the Summit. The topic areas and guiding discussion questions are described in detail on pages 3-4.
- 2:45pm Break
- 3:00pm Report back of discussion groups to the larger session with panel discussion and audience participation.
- 4:45pm End of Day One

Day Two: September 30, 2005

- 7:30am Continental breakfast
- 8:30am Summary of Day One, review of agenda for Day Two
Tom Trabin, Ph.D., Summit Organizer and Executive Director, Software and Technology Vendors' Association
- 8:45am Benefits of an Electronic Health Record and Other Uses of Technology for Delivery of Behavioral Healthcare Services
Kathleen Lysell, Psy.D., Associate Chief Consultant for Informatics, Mental Health Health Strategic Healthcare Group, VA Pacific Islands Healthcare System
- 9:30am Case Study of Successful Development and Implementation of New Data Standards for Behavioral Health Treatment and Prevention
Vijay Ganju, Ph.D., Director, Center for Mental Health Quality and Accountability, NASMHPD National Research Institute
Kathleen Nardini, M.A., Senior AOD Systems Research Analyst, NASADAD
Questions and comments from the audience for the morning speakers.
- 10:30am Break
- 10:45am The six concurrent workgroups resume, staying within their topic areas, but shifting the focus of discussion from challenges and opportunities to solutions and action plans.
- 12:15pm Lunch
- 1:15pm The workgroups resume their discussion with the focus becoming more specific and pragmatic. Each workgroup within its respective topic area should recommend specific action plans and next steps.
- 2:45pm Break
- 3:00pm Report back of discussion workgroups to larger session with panel discussion and audience participation regarding next steps.
- 4:45pm Adjournment

Workgroup Co-Leaders and Topic Areas

Workgroup #1: Developing and Maintaining Nationwide Behavioral Health Informatics Standards

Co-leaders: John Carnevale, Frank Ghinassi and Mike Morris (recorder)

Recognizing existing HHS and SAMHSA data sets, including the National Outcome Measures (NOMs), what additional behavioral health-specific standards are needed for data, information privacy and information exchange, and interoperability of information technologies? How should they be incorporated into existing standards? What are the benefits and work ahead to developing them? How do federal regulations (i.e. 42 CFR, Part 2, Confidentiality and HIPAA Privacy) impact development of the standards? Where in the current policy- and standard-setting environments for developing and modifying these standards are behavioral healthcare issues being addressed? Is there adequate representation of the behavioral health industry and understanding of the unique needs of behavioral health within this environment to assure a successful resolution of these issues? Are the existing mechanisms within this environment able to sustain ongoing development and maintenance of behavioral health informatics standards development indefinitely? If not, what should be done additionally to create a sustained and effective effort?

Workgroup #2: Developing and Maintaining Nationwide Initiatives to Facilitate Increased Adoption of Electronic Health Record Systems by Behavioral Health Services and Their Participation in Health Information Networks

Co-leaders: John Bartlett, Allen Daniels, and John Paton (recorder)

At the national level, what educational information and other types of technical assistance; grants and other types of financial and non-financial incentives; and other forms of assistance would be most useful to help behavioral health organizations adopt electronic health record systems and participate in the NHII? How can informatics standard-setting help improve the quality and value of software for behavioral health services? Where in the current environment of nationwide policy-setting by both governmental and non-governmental entities are these types of assistance being addressed? Is there adequate representation of the behavioral health industry and understanding of the unique needs of behavioral health within this environment to assure successful development and implementation of solutions? Are the existing mechanisms within our current nationwide environment able to sustain ongoing development and implementation of these types of assistance indefinitely? If not, what should be done additionally to create a sustained and effective effort?

Workgroup #3: Addressing Issues within Behavioral Health Organizations to Improve Their Implementation and Effective Use of Information Management and Electronic Health Record Systems

Co-leaders: Dick Dillon, Ray Wolfe, and George Pashel (recorder)

How might information management and electronic health record systems be most useful to behavioral health organizations for improving their executive decision making, quality improvement programs, effectiveness of care and prevention services, and organizational success? What are the types of costs, including human resources? What are the financial challenges at the beginning of the journey into developing or acquiring and implementing electronic health record systems, and how do those change later in the process? What financial incentives would be helpful to administrators of these behavioral health organizations, and at

what point in the development/acquisition and implementation processes would those incentives be most needed? In developing and/or acquiring and then implementing information management and electronic health record systems, what changes must organizations undergo in such areas as their privacy policies, workflow processes, and staff training? What kind of assistance do diverse behavioral health organizations need to realize the benefits of computerization most efficiently and effectively? What are the potential resources that might provide that assistance to them?

Workgroup #4: Addressing the Complexities of Reimbursement, Regulatory and Reporting Requirements

Co-leaders: Susan Fox, Judy Hall, and Tony Lewis (recorder)

What aspects of the current reimbursement and regulatory oversight of the behavioral health industry create unnecessary burden and redundancy? How costly is this to the behavioral health field? In what ways does that impede the delivery of services? How might the process be simplified and streamlined to become less costly? Can the reporting requirements be made more consistent and less duplicative? Should (and can) the privacy policies for mental health and substance abuse treatment and prevention services be made more consistent across states? What would be the most effective mechanisms through which to achieve any or all of these goals?

Workgroup #5: Addressing Issues for Consumers and their Family Members and for Clinicians and Other Service Providers Related to Adoption of Electronic Health Record Systems

Co-leaders: Paul Earley, Sylvia Caras, and Sharon Hicks (recorder)

How will automating behavioral health services and record-keeping impact consumers, clinicians, and other service providers? What will they perceive as the benefits and the drawbacks? How would these stakeholders each determine the best balance between respecting the privacy of consumer data and improving care coordination through increased data access to service providers? What do each of these stakeholders regard as the most valuable benefits of clinical decision support tools, and what are their primary concerns about them? How can these stakeholders work through national associations and government organizations to address their concerns and help optimize the potential benefits of computerization?

Workgroup #6: Facilitating Interconnectivity and Information Exchange between Mental Health and Substance Abuse Treatment and Prevention, and other Service Systems (e.g. General Medical, Justice, Child Welfare, etc.)

Co-leaders: John Ernst, Steve Davis, and Even Brande (recorder)

What are the potential benefits of improved information sharing across service systems? How can information technology help service systems achieve those benefits? What privacy and other concerns exist that would discourage increased information sharing across service systems? At the policy level, do we currently have a satisfactory balance between support for care coordination through appropriate exchange of consumer information and respect for privacy and other concerns? If not, what might be some mechanisms to improve that balance? At the technology level, what are the barriers in the current environment to improved interconnectivity between service systems for appropriate exchange of consumer information? What technology-related solutions might be most effective to overcome those barriers?

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**American Educational Development Conference Center, 8th Floor
1825 Connecticut Ave. N.W., Washington, D.C.**

Day One: Thursday, September 29, 2005

SAMHSA and the Importance of Information Management for Behavioral Health

*Charles Curie, M.A., ACSW, Administrator, Substance Abuse and
Mental Health Services Administration*

*(presented in his absence by Stephanie Colston, M.A., Senior Advisor to the
Administrator, SAMHSA)*

Each Summit participant brings valuable insight and experience to the issue of information technology in behavioral health care. Participation in the Summit will help SAMHSA create a clearer vision for improving information technology to better serve those who struggle with mental illness and addiction.

Earlier this spring, Secretary Leavitt announced his “500-Day Plan,” which identifies action items to be accomplished during a 500 day period that will have subsequent impact on our nation during a longer 5,000 day period. As part of this plan, Secretary Leavitt has shared his vision to link nearly all health records through an interoperable system that protects privacy as it connect patients, providers, and payers – resulting in fewer medical mistakes, less hassle, lower costs and better health. SAMHSA has an important role to play for the people the agency serves.

At the most fundamental level, electronic access can benefit both the consumer and the provider of services. Consumers can access their own health care records and use them to help shape their own treatment. Providers can gain a more complete picture of their patients' overall health as well as better access to the latest research-based information. Technology can also enhance service delivery by providing data on which prevention and treatment services work best. Having access to consistent measures enables payers to assess quality of care and eliminate redundancy.

SAMHSA is developing an overall data strategy to standardize measurement of outcomes and consolidate data across Agency programs. The agency is designing an electronic system for collecting and reporting substance abuse prevention and treatment service data from all SAMHSA-funded programs, and importantly, is examining questions raised by the new technologies, including issues of privacy, confidentiality, ethics, standards of care, and licensure.

In collaboration with the States, SAMHSA has identified ten domains as our National Outcome Measures, or NOMs. The domains we have identified embody meaningful, real life outcomes for people who are striving to attain and sustain recovery, build resilience, and work, learn, live, and participate fully in their communities. Our goal is to achieve a performance environment with true accountability. We are looking at the data we are collecting and asking why we are collecting it. And, we asked how we are using it to manage and measure performance. If we are not using the

data collected, we are taking steps to stop collecting it. Our emphasis on a limited number of national outcomes and related national outcome measures is built on a history of extensive dialogue with our colleagues in State mental health and substance abuse service agencies and, most importantly, the people we serve.

We can all clearly see the promise of modern information technology, yet the mental health and substance abuse prevention and treatment systems have lagged behind in implementation. The Summit should explore some of the reasons behind the lag and create a strategy to address it.

Hurricanes Katrina and Rita have clearly pointed to the need for solutions now. Among the many lessons learned from the hurricanes, is the lesson that electronic health records, which can be made available anywhere, are critical to public health especially in times of crisis and chaos.

SAMHSA Administrator Charles Curie is committed to exploring all strategies that may help stakeholders move from today's health care information system to tomorrow's, with the goal of building resilience and facilitating recovery for all people with or at risk for substance abuse and mental illness.

The Emerging Nationwide Health Information Infrastructure: Benefits and Opportunities

Keynote Speaker: David Brailer, M.D., National Coordinator of Health Information Technology

Last year, President Bush called for the widespread use of electronic health records (EHRs) within 10 years. Despite the demonstrated benefits to care delivery, studies have found use of EHRs remains low among physicians, hospitals and other health care providers. The Office of the National Coordinator for Health Information Technology (ONC) has set the foundation for adoption of interoperable EHRs through the following major initiatives:

1. American Health Information Community

The American Health Information Community (the Community), chaired by Secretary Mike Leavitt, was convened to guide the country's effort to achieve the President's goal of having most Americans using interoperable electronic health records within 10 years. Sixteen Commissioners were selected to represent the diverse stakeholder of healthcare and health information technology. The Community is addressing four breakthroughs that will create realizable benefits to consumers in two to three years. At its November 29, 2005, meeting, the Community recommended the formation of four workgroups to address the four breakthroughs. Each workgroup will develop a plan to realize a specific charge within one year that is visible to the American public and that works toward a broader charge over time. The meetings of the workgroups are public and all documents discussed can be made available to the public.

Biosurveillance.

Broad Charge: Make recommendations to the Community to implement the informational tools and business operation to support real-time nationwide public health event monitoring and rapid response management across public health and care delivery communities and other authorized government agencies.

Specific Charge: Make recommendations to the Community so that within one year, essential ambulatory care and emergency department visit, utilization, and lab result data from electronically enabled health care delivery and public health systems can be transmitted in standardized and anonymized format to authorized public health agencies within 24 hours

EHR Adoption

Broad Charge: Make recommendations to the Community on ways to achieve widespread adoption of certified EHRs, minimizing gaps in adoption among providers.

Specific Charge: Make recommendations to the Community so that within one year, standardized, widely available and secure solutions for accessing current and historical laboratory results and interpretations is deployed for clinical care by authorized parties.

Consumer Empowerment

Broad Charge: Make recommendations to the Community to gain wide spread adoption of a personal health record that is easy-to-use, portable, longitudinal, affordable, and consumer-centered.

Specific Charge: Make recommendations to the Community so that within one year, a pre-populated, consumer-directed and secure electronic registration summary is available to targeted populations. Make additional recommendations to the Community so that within one year, a widely available pre-populated medication history linked to the registration summary is deployed.

Chronic Care

Broad Charge: Make recommendations to the Community to deploy widely available, secure technologies solutions for remote monitoring and assessment of patients and for communication between clinicians about patients.

Specific Charge: Make recommendations to the Community so that within one year, widespread use of secure messaging, as appropriate, is fostered as a means of communication between clinicians and patients about care delivery.

2. Standards Harmonization Process

HHS awarded a contract valued at \$3.3 million to the American National Standards Institute, a non-profit organization that administers and coordinates the U.S. voluntary standardization activities, to convene the Health Information Technology Standards Panel (HITSP). The HITSP will bring together U.S. standards development organizations and other stakeholders. The HITSP will develop, prototype, and evaluate a harmonization process for achieving a widely accepted and useful set of health IT standards that will support interoperability among health care software applications, particularly EHRs.

3. Compliance Certification Process

HHS awarded a contract valued at \$2.7 million to the Certification Commission for Health Information Technology (CCHIT) to develop criteria and evaluation processes for certifying EHRs and the infrastructure or network components through which they interoperate. CCHIT is a private, non-profit organization established to develop an efficient, credible, and sustainable mechanism for certifying health care information technology products. CCHIT will be required to submit recommendations for ambulatory EHR certification criteria in December 2005, and to develop an evaluation process for ambulatory health records in January 2006. Criteria will include the capabilities of EHRs to protect health information, standards by which EHRs can share health information and clinical features that improve patient outcomes.

4. Privacy and Security Solutions

HHS awarded a contract valued at \$11.5 million to the Health Information Security and Privacy Collaboration (HISPC), a new partnership consisting of a multi-disciplinary team of experts and the National Governors Association (NGA). The HISPC will work with state and territorial governments to assess and develop plans to address variations in organization-level business policies and state laws that affect privacy and security practices that may pose challenges to interoperable health information exchange. Overseeing the HISPC will be RTI International, a private, nonprofit corporation who has been selected as the HHS contract recipient.

5. Nationwide Health Information Network

Contracts have been awarded by HHS totaling \$18.6 million to four consortia of health care and health information technology organizations to develop prototypes for the Nationwide Health Information Network (NHIN) architecture. The contracts were awarded to: Accenture, Computer Sciences Corporation, IBM, and Northrop Grumman, along with their affiliated partners and health care market areas. The four consortia will move the nation toward the President's goal of personal electronic health records by creating a uniform architecture for health care information that can follow consumers throughout their lives.

6. Health Information Technology and Health Care Anti-Fraud

ONC is undertaking a project to look at how automated coding software and a nationwide interoperable health information technology infrastructure can address healthcare fraud. The project is being conducted through a contract with the Foundation of Research and Education (FORE) of the American Health Information Management Association (AHIMA)

7. Health IT Adoption Initiative

HHS awarded a contract valued in excess of \$1 million to the George Washington University and Massachusetts General Hospital Harvard Institute for Health Policy to support the Health IT Adoption Initiative. The new initiative is aimed at better characterizing and measuring the state of EHR adoption and determining the effectiveness of policies to accelerate adoption of EHRs and interoperability.

8. Proposed Changes to Self-Referral and Anti-Kickback Rules

HHS announced proposed rules that would ease self-referral and anti-kickback restrictions, which many providers say impede adoption of health IT. The two proposed rules would change how the Centers for Medicare & Medicaid Services and the Office of the Inspector General enforce the Stark amendment, which prohibits hospitals from giving physicians access to hardware, software or related training. The proposals were published in the *Federal Register* (October 5, 2005).

9. Digital Health Recovery for the Gulf Coast

HHS has entered into agreements with the Southern Governors' Association and the State of Louisiana Department of Health and Hospitals. Under these agreements, local leaders and national experts will plan for and coordinate the adoption of electronic health records and the development of regional health information sharing in the Gulf States.

SAMHSA Data Initiative and other Informatics Opportunities for Behavioral Health Treatment and Prevention Services (first panel presenter)

Javaid Kaiser, Ph.D. Acting Director, Office of Applied Studies, SAMHSA

SAMHSA's matrix of program priorities and cross-cutting principles was developed to focus SAMHSA's efforts towards its vision of "a life in the community for everyone." One cross-cutting principle in this matrix is the collection of data that will be used to increase accountability by measuring and reporting program performance.

An important step towards these goals is SAMHSA's establishment and implementation of the National Outcomes Measures (NOMs). The ten domains of NOMs embody meaningful, real life outcomes for people who are striving to attain and sustain recovery, build resilience, and work, learn, live, and participate fully in their communities. SAMHSA intends to produce and report on these NOMs domains for all programs. The ten domains are 1) Abstinence, 2) Employment/Education, 3) Crime and Criminal Justice, 4) Stability in Housing, 5) Access/Capacity, 6) Retention, 7) Social Connectedness, 8) Perception of Care, 9) Cost Effectiveness, and 10) Use of Evidence-Based Practices.

To reach the full promise of NOMs as established by the Administrator, SAMHSA plans to consolidate the NOMs, Government Performance and Results Act (GPRA), and Program Assessment Rating Tool (PART) measures, develop outcome measures for administrative functions, emphasize data-based decision-making, and produce management reports to establish compliance and oversee the implementation of NOMs.

Further, resources at SAMHSA will be realigned to meet the goals of NOMs. SAMHSA plans to identify IT solutions to collect, disseminate and analyze the NOMs performance and service data. In order to have sustained impact, SAMHSA will coordinate State data infrastructure efforts and support performance management at both the State and Federal levels.

Data for reporting on the NOMs will come primarily from the States. States will be supported in their efforts by SAMHSA with infrastructure and technical assistance through a new State Outcomes Measurement and Management System (SOMMS), supported by the SOMMS Central Services contract. An important function of this contract is to assist approximately 15 States per year in data infrastructure upgrades to aid in reporting NOMs as well as establish Technical Consultation Groups to further aid the States in NOMs implementation. The SOMMS Central Services will also conduct analyses with NOMs data in order to advance the field of substance abuse and prevention and provide support for data-based policy development and decision-making at both the State and Federal levels.

The first step in the SOMMS and NOMs implementation in the substance abuse treatment system was to modify the ongoing Drug and Alcohol Services Information System (DASIS) contract to begin to establish the State relationships necessary to collect NOMs data. This modification will separate Treatment Episode Data Set (TEDS) into subcontracts for each State. States complying with the NOMs requirements will receive a payment of up to \$150,000 in addition to the TEDS payments they have been receiving. States will be required to link their TEDS admission and discharge data using a unique client ID. Data editing, quality, and integrity will be the responsibility of the States and not that of SAMHSA. All States must submit a plan for full compliance by FY 2007. Currently, 11 States are able to report across 5 NOMs domains, 18 States can report across 4

domains, 6 States can report across 3 domains, and 18 States can report across fewer than 3 domains. As SAMHSA works with each of the States by supporting their development of IT infrastructure and implementation of NOMs, the number States able to report will increase.

The shift to the NOMs and SOMMS system will be a multi-year process. The expected outcomes of the NOMs program are standard data definitions, data quality improvements, more efficient business practices, reduced burden on States and grantees, more efficient and integrated IT support, cost savings, and the coordination/consolidation of multiple client data systems. It is SAMHSA's hope that this new direction will decrease the data collection burden placed on the States and improve the overall quality and usability of the data collected.

SAMHSA Data Initiative and other Informatics Opportunities for Behavioral Health Treatment and Prevention Services (second panel presenter)

Ron Manderscheid, Ph.D., Chief, Survey and Analysis Branch, Center for Mental Health Services, SAMHSA

For the past several years, the Center for Mental Health Services (CMHS) has been engaged in the development of Decision Support 2000+ (DS2K+). This initiative has two primary components: (1) a national minimum set of data standards for mental health that reflects the key domain of the public health model, and (2) a national electronic data platform for the mental health field. Work on the national minimum set of data standards is nearing completion; the national electronic data platform currently is in prototype form. Only the latter work will be discussed here.

The national electronic data platform has been designed with a range of functions. These include: the capacity to upload, process, and benchmark population, service, client, clinical outcome, and performance measurement data; the capacity to support online Federal surveys and to host online surveys being conducted by other organizations; the capacity to support online completion of consumer perception of care surveys; the capacity to host online data workgroups; the capacity to link to key national projects and to display detailed data from these projects. Examples of the latter include the Uniform Reporting System (URS)/National Outcome Measurement System (NOMS) and the CMHS Medicaid, Medicare, and the Private Insurance Analysis Project.

Each of these capacities has been demonstrated in the prototype, and efforts are now being made to extend these functionalities. For the first time, the 2006 CMHS Client-Patient Sample Survey will be conducted online using the DS2K+ prototype. Similarly, work is currently being planned to conduct the 2006 CMHS Survey of Mental Health Organizations online. In addition a contract has just been awarded to add online capacity to assess personal recovery, as well as the characteristics of services that promote recovery.

EHRs/PHRs/LHII

Beyond the DS2K+ electronic prototype, a major project has been undertaken to develop a prototype electronic health record (EHR) and a prototype personal health record (PHR) for behavioral health care. Work on this project is at an early stage, with the formation of a technical advisory group and review of current operational EHRs that are being used by the private and public sectors.

This project will also begin work to develop the capacity for mental health consumers to host local websites that provide guidance to consumers and for consumers to partner with the project in the development of PHRs. A final component of this project will be the exploration of current examples of local health information infrastructures (LHII) and the role that behavioral health care plays in these networks.

Work on this project will be coordinated with the activities of the Behavioral Health Care Data Standards Workgroup conducted jointly by the Center for Substance Abuse Treatment (CSAT) and CMHS. Of particular concern will be the development of common minimal data standards for the EHR and the PHR, progress on resolving the problem of interoperability, and coordination activities with the HHS Office of the National Coordinator for Health Information Technology (ONCHIT).

Related Infrastructure Needs

In order for the full benefit of information technology to be achieved for behavioral health care, it will be essential to develop additional capacity at the local level and State levels. At the local level, individual providers and service organizations will only be able to take advantage of the technology described above if they have appropriate hardware and software, together with high speed and broadband connection to the Internet. At the State level, work will need to progress in building electronic bridges between local providers and State government. Data Infrastructure Grants operated by CMHS are taking initial steps in this direction.

Looking to the Future

Information technology holds much promise to improve the quality of behavioral health care service delivery and to empower consumers and family members. These goals will best be achieved if information technology for behavioral health care is closely coordinated with parallel developments in primary health care. We will need to work hard to achieve effective coordination.

SAMHSA Data Initiative and other Informatics Opportunities for Behavioral Health Treatment and Prevention Services (third panel presenter)

Mady Chalk, Ph.D., Director, Division of Services Improvement, Center for Substance Abuse Treatment, SAMHSA

Not Available

SAMHSA Data Initiative and other Informatics Opportunities for Behavioral Health Treatment and Prevention Services (fourth panel presenter)

Beverlie Fallik, Ph.D., Senior Public Health Analyst and CSAP Data Coordinator Center for Substance Abuse Prevention, SAMHSA

CSAP uses its data and technology to support SAMHSA's (Accountability, Capacity and Effectiveness (ACE) Strategy in achieving its vision of supporting and improving a life in the community for all. We are moving aggressively to collect valid and reliable data and report on our progress in achieving the three goals of the ACE Strategy. Through our grants and contracts, CSAP promotes the collection and reporting of data that can be used to assess how well we:

ACCOUNTABILITY: (1) Measure and report program performance, (2) Track national trends, (3) Establish measurements and reporting systems and (4) Develop and promote standards to monitor service systems

CAPACITY: (1) Increase service availability, (2) Support service expansion, (3) Assess resources and needs, and (4) Improve services organization and financing.

EFFECTIVENESS: (1) Improve service quality, (2) Assess service delivery practices, (3) Identify and promote evidence based approaches, and (4) Implement and evaluate innovative services.

CSAP has implemented a comprehensive Strategic Prevention Framework (SPF) model of five steps forming a feedback loop that can be followed by States, Communities and local programs to assure effective and efficient implementation of substance abuse prevention programs. This model includes:

1. **ASSESSMENT:** Organize the Community to Profile Needs, Including Community Readiness;
2. **CAPACITY:** Mobilize the Community & Build Capacity to Address Needs;
3. **PLANNING:** Develop the Prevention Plan (Activities, Programs, & Strategies)
4. **IMPLEMENTATION:** Implement the Prevention Plan
5. **EVALUATION:** Evaluate for Results and Sustainability.

The evaluation is then examined in the context of the needs assessments to evaluate the impact of the programs, strategies and policies implemented. Sustainability and cultural competence efforts are required at each step of the process. Data from each step enable midcourse corrections to be implemented as necessary.

Aside from the unique data needs relevant to any prevention activity, CSAP/SAMHSA is working to finalize and implement its National Outcome Measures System (NOMS). These consist of common domains across the Agency, within which each Center will require common measures across its programs to be used to measure and monitor Center performance in achieving its National outcomes. The NOMS under consideration for CSAP at the time of the IT Summit including the recommended data sources are:

Abstinence Domain: 30-day substance use: nonuse/reduction in use (National Survey on Drug Use and Health, otherwise known as NSDUH); age of first use (NSDUH); perception of disapproval/attitude (NSDUH); perceived risk/harm of use (NSDUH); binge drinking (NSDUH); perceived availability (NSDUH)

Employment/Education Domain: workplace AOD use (NSDUH); perception of workplace policy (adult) NSDUH; ATOD-related suspensions and expulsions (youth- DoEd records)

Crime/criminal justice Domain: alcohol related car crashes and injuries (Fatal Accident Reporting System); drug related crime (Uniform Crime Reports); alcohol and drug related arrests*(NSDUH); antisocial behavior*(NSDUH)

Access/service capacity domain: # of persons served by age, gender, race, ethnicity (Minimum Data Set otherwise known as MDS)

Retention Domain- developmental

Social Support/Connectedness Domain: *collective efficacy (NSDUH); *Community Involvement (NSDUH); *Family communication-drug use (NSDUH)

Cost Effectiveness Domain: increase services provided within cost bands (within universal, selective and indicated programs) (grant reports)

Use Of Evidence Based Programs Domain total # of evidence based programs and strategies (MDS)

CSAP has made substantial progress in improving the quality of the data that it collects and analyzes through the implementation of a Center-wide Data Coordinating Center (DCC). Among the various functions of this contract, the DCC performs data processing, analysis and reporting; quality control and feedback to grantees on data submitted; warehousing of data for historical purposes and secondary analyses; develops data inventories; identifies and promotes the use of valid common measures; performs analyses and produces reports on the performance of CSAP's portfolio and provides web access to data and reports. The ultimate goal is to provide this access to the public as much as feasible while still preserving confidentiality and privacy of grantees and their program participants.

CSAP's Prevention Platform provides CSAP grantees and the public access to technologies that assist them to help communities follow the SPF framework and assess their needs, readiness and resources; plan strategically to develop infrastructure and sustainability; select & implement evidence-based prevention approaches; and conduct evaluations measuring progress, impact, & outcomes.

The Platform includes web-based data collection/reporting systems such as CSAP's Minimum Data Set system for tracking program level data on such areas as participant demographics and service characteristics, and the Data Base Builder which enables providers to link programs to outcomes. The Platform also references other privately-developed systems e.g. Kit solutions and Everest systems, as well as those developed for state-specific use. CSAP maintains its commitment to future hosting and service needs, and supports the use of whichever systems help states and other grantees to best address their needs.

The DCC and Prevention Platform have newly been merged, along with other data related activities into our new Data Coordination and Consolidation Center (DCCC). We are excited about this more efficient and streamlined approach to managing data Center-wide, and its planned ability to link

with and funnel data to the Agency level, thus enabling SAMHSA to perform performance monitoring and reporting at the Agency level more easily.

Of course, data systems are evolutionary, sometimes revolutionary, and it is a challenge to keep up with the exciting IT changes as they develop quickly. There are many challenges and decision points which are currently being addressed and which surely will need to be revisited over time. For example, while publicly available data systems exist on the DCCC, we must assure compatibility so that we can link to alternative systems that are currently in use. To promote transparency in government we want to, as much as possible, provide public access to data, reports and systems. Performance measurement is not very useful until an approach to the use of common vs. comparable measures is in place along with ensuring that common standards and data definitions are used. Finally, we want to assure that what is implemented is useful to state, local and program levels incurring the least burden necessary so that the benefits of implementation outweigh the costs.

SAMHSA Data Initiative and other Informatics Opportunities for Behavioral Health Treatment and Prevention Services (fifth panel presenter)

John Paton, Past Chair and Board Member, Software and Technology Vendors' Association

From its very inception, the National Summit was intended to provide strategic direction to the art and science of information technology as it is applied to Behavioral Healthcare. The vision of the National Summit was driven, in part, by the members of the Software and Technology Vendor's Association (SATVA) and their desire to bring order to the disparate initiatives and standards, to facilitate interoperability between systems, and to improve the effectiveness of software development, maintenance, and implementation. SATVA believes that the best, and perhaps only, way such results can be achieved is through a public-private partnership. The National Summit was the first step in establishing such an on-going partnership. SATVA's Mission is: 1) to facilitate the delivery of more efficient and effective care through use of information technology to behavioral health and human services consumers, 2) to promote the use of technology solutions in behavioral health and human services settings, and 3) to help formulate and support the highest industry standards. SATVA sees its role primarily to promote education for the industry, develop best practices for implementation of electronic health records (EHR), to help agencies formulate effective IT policy, and to drive quality improvement. SATVA believes that effective information technology and information management are essential for improving services for consumers, and its member companies are uniquely qualified to help the industry formulate more effective and realistic plans, to develop workable and practical solutions, and to advise the industry on best practices.

Central to SATVA's mission and role is the need for standards. Standards are essential to achieve operating efficiency, EHR transportability, system interoperability, and offer consumers quality and continuity of care. We believe that the broad viewpoint offered by a public/private partnership provides the best basis for such standards, and SATVA is well positioned to assist in their development, implementation, and adoption. Furthermore, as the EHR imperative progresses, the essential principles of quality and safety make effective standards indispensable.

The widespread adoption of EHRs is fundamental to realizing the challenges of evidence-based practice in a consumer-centric healthcare system. SATVA believes that this requires funding for behavioral healthcare informatics through incentives such as grants for implementation, incentives for payors, and possibly regulatory relief in special cases. We also believe that education is necessary to promote the value of information for improving patient safety, efficiency and consumer satisfaction. Education is also necessary for clinicians to effectively utilize decision support tools and processes; and educated clinicians are better prepared for the organizational culture change that accompanies an EHR implementation. Consumers must also be educated in the risks and benefits of an EHR. We believe that the industry must carefully consider how to create a well-informed and information-savvy consumer community, if a consumer and family driven health record is to be achieved, as urged by the President's New Freedom Commission. But before any EHR can bring value to either the organization or the consumer, it must be properly implemented. The industry needs to know and accept the importance of a well-planned and carefully executed implementation process, that a successful system is not simply a matter of choosing software.

SATVA believes that one of the most expensive and intractable aspects of nationwide behavioral health information technology is the complexity (and cost) of compliance with the varying state mandated reporting and billing requirements. The lack of interstate standards creates an obstacle to

electronic data interchange (EDI) for financial reporting and the reimbursement of claims. In fact, SATVA estimates that the behavioral health industry nationwide spends over \$10 billion annually in reimbursement-related expenditures, much of which relates to the preparation, adjudication, and application of service reimbursement. Much of the variance between states can be attributed to inconsistent benefit plan content. We encourage the development of standard formats for benefit plan content and presentation to facilitate compliance and simplify software implementation.

Interoperability and interconnectivity between disparate systems in the broader healthcare arena is essential, and prerequisite to widespread EHR adoption. Without effective access to shared clinical records, for example, it is difficult to assure treatment coordination and continuity. Furthermore, sharing of information simplifies consumers' entry into treatment/service. Of course, a potential barrier to such shared information is the need – indeed the legal requirement – for consumer privacy. SATVA believes that effectiveness the evolving EHR initiatives may depend on a balance between the privacy safeguards and quality/continuity of care.

SATVA's hope is for an active and long-term partnership with all healthcare system stakeholders, including federal programs, state programs, non-governmental organizations, standards organizations, reimbursement authorities, service providers, and consumers. SATVA members represent the majority of information technology used in behavioral healthcare today. More than just project-to-project involvement, SATVA wants to be a long-term strategic partner in matters related to behavioral health information use and management. Let us help develop policy, rapidly deploy standards, improve quality & efficiency, and bring value to consumers.

**General Session Panel: Informatics Opportunities and Issues for Behavioral Health Settings
Related to: Privacy Concerns in the Emerging NHIN**

Mark Rothstein, M.D., Chair, Privacy Committee, National Committee for Vital and Health Statistics

The National Health Information Network (NHIN) is being developed under the leadership of the United States Department of Health and Human Services. Although its contours and operations have not yet been finalized, the NHIN will be a national, comprehensive, interoperable, longitudinal system of individual electronic health records, together with individual clinical decision support and analytical capability. Similar systems are being developed in many countries to take advantage of new health information technology.

The NHIN promises to have many advantages over the current system of fragmented, largely paper-based medical records. It will permit immediate access to current and complete medical records, including when someone becomes ill away from home; it will provide critical information during medical emergencies when the patient may be unable to communicate; it will eliminate the need for repetitive history taking; it will eliminate possible errors in patient recall of diagnoses or medications; and it will document prior adverse reactions to medications. In addition, decision support capabilities will advise physicians of the latest research findings and clinical protocols. Other potential benefits involve syndromic surveillance for public health and quality assurance in health care services.

Despite these potential benefits, members of the public are deeply concerned about possible harms from the ability to aggregate and disclose vast amounts of personal health information electronically. Frequent breaches of security in the financial, consumer, and even the health care sectors raise concerns that more comprehensive health record networks could result in more significant problems in the event of an inappropriate disclosure. Ironically, the main privacy protection in the current system is its inefficiency and fragmentation. What measures will be in place to protect privacy and confidentiality in an efficient and integrated system?

Of the numerous health privacy issues yet to be resolved in the NHIN, the most important one is the degree to which individuals should be able to control the contents of and access to their health records. Should individuals have the right to decide whether their records are a part of the NHIN? Should they be able to delete, withhold, or block certain information? Should any special privacy protections apply to certain sensitive information, such as those related to mental health, substance abuse, domestic violence, genetic predisposition, or sexually transmitted diseases?

It is important that the myriad privacy and confidentiality issues be addressed and resolved as the architecture for the NHIN is developed and before implementation. If not, and development precedes decision making on privacy, it may be impossible or infeasible to add adequate privacy protections in the future. The NHIN represents an extremely promising use of technology to improve health, but it will be doomed to failure unless the issues of privacy, confidentiality, and security are resolved carefully and promptly. Without such protections there will be no public trust or no confidence in the health record system – a situation worse than our current system's inefficiency.

**General Session Panel: Informatics Opportunities and Issues for Behavioral Health Settings
Related to: Complexities of Reimbursement and Reporting Requirements**

Susan Fox, Ph.D., Founder, Fox Systems, Inc.

(Not Available)

**General Session Panel: Informatics Opportunities and Issues for Behavioral Health Settings
Related to: Adoption of Electronic Health Record Systems**

Claudia Roth, Ph.D., President, Western Psychiatric Institute

(presented in her absence by Sharon Hicks, MSW, Chief Information Officer, Comprehensive Behavioral Care)

Claudia Roth

This presentation describes a successful software implementation project in a large system. Within the organization, Western Psychiatric Institute and Clinic of the University of Pittsburgh Medical Center, we have had the unique situation of both building a custom computer application, and also with buying and installing a commercially available application. Part of the presentation focuses on the comparison of the two and the final section is a summary of lessons learned.

A brief description of the organization is required before proceeding to the discussion of the implementation. Western Psychiatric Institute and Clinic is the lead organization of the Medical Center's Behavioral Health Division. The overall behavioral health program is quite large, treating nearly 40,000 patients each year. Behavioral health, in total, represents about \$500 million in annual revenue for the parent corporation or about 10% of the total.

In our current EHR we have close to 400,000 unique patients, 1800 named users, 3.8 million clinical transactions and 4.5 million clinical documents. At any given time we have approximately 350 users of the system logged in and entering data. All of our staff use the system including physicians.

The University of Pittsburgh Medical Center is a \$5.5 billion per year health care organization that includes 20 hospitals, two health care insurance companies, and numerous ancillary service companies, including software companies. In 2005 UPMC was again named one of the 100 Most Wired hospitals and health systems in the United States; being one of only 9 organizations nationwide that have made the list all seven years of the awards.

In 1994 we began an internal development initiative to create an application to support the clinical services of Western Psychiatric. The application was designed to allow clinicians to create and store progress notes on line and have those notes be available to other clinicians, with appropriate security permissions, to review those notes without having to pull charts. By 1996 the application had been fully deployed to the outpatient programs at Western Psychiatric and we had one of the first fully operational, clinically focused, behavioral health applications in the country. Our system included treatment history, charge capture, specialized clinical documentation and basic authorization management.

After that deployment, we continued to work on enhancements to the product and built modules to handle the correction of credits from the hospital billing system, a medical records module, and

better ways to manage the many authorizations that were required by the various insurance companies. However we realized that we needed to buy a commercially available software because of the expense associated with innovation and constant product improvement.

In addition to the financial issues, another factor in the decision to buy rather than continue to build, is innovation. Good software vendors employ people whose jobs are to ensure that the software that they sell is continuously improving and innovating. Because of the nature of competition, software vendors have incentives to add functionality and improve performance on a routine basis. It is very difficult, even in an organization as large and varied as Western Psychiatric, to allocate staff whose primary job is to design improvements to the software. In fall, 2001 we began the implementation of the software we selected, PsychConsult[®] Provider by Askesis Development Group, Inc. We had learned many lessons that we believe really helped us plan and execute a more successful implementation. First and foremost is that leadership is the most important component. If you don't have strong and consistent support from the highest level, the implementation will fail.

The process that we use at Western Psychiatric includes three levels of oversight work:

1. Executive committee: This committee is responsible for setting the priorities and direction for the implementation. For example they decide in which phase various components of the application will be implemented.
2. Steering committee: This committee meets every two weeks and includes one representative from the Executive Committee. This group is made up of program level leaders and the technical team that is working on the implementation. This committee also includes representatives from the software company.
3. Advisory committee: This is the front line group. They meet at least once per week, can be more as needed, and should include representatives from the actual end-users including billing, clinical, medical records and administration as well as from IT.

We have learned the following lessons:

1. Allow people to complain but in a controlled way
2. Set very realistic expectations about what you hope to achieve
3. Realistically estimate the time that the effort will take
4. Training is the single most important task... Don't skimp on the training dollars
5. Set up initial training before go-live and then follow-up training one month after go-live
6. Involve clinicians in the design and set up of the system in a meaningful way
7. Give clinicians clear and measurable examples of the clinical benefits of the system
8. Don't be afraid to put performance standards in the contract with your software vendor

In summary, our implementation has been an ongoing process that has taken a number of years. Having to train over 1800 staff and faculty, and to develop workflows for over 100 clinical programs has been a huge undertaking. As a result, this effort has yielded the following benefits: 1) clinical decision support, 2) access to reliable data for trending, quality, outcomes analyses and research, 3) increased administrative efficiency, 4) improved access for patients, and 5) a more empowered workforce.

General Session Panel: Informatics Opportunities and Issues for Behavioral Health Settings Related to: Adoption of Electronic Health Record Systems--Can the National Addiction Treatment Infrastructure Support the Public's Demand for Quality Care?

Deni Carise, Ph.D., Director, Treatment Systems Research Section, Treatment Research Institute

As part of a larger study of a national substance abuse treatment system (www.densonline.org) we had the opportunity to interview the directors and key staff from a nationally representative sample of 175 drug and alcohol treatment programs. Through the process of collecting what we thought would be basic administrative information from those program directors, we uncovered surprising findings about the instability of the treatment system, and indications about its ability to meet the complex needs of the entering patients and the expectations of the referral agencies. For example, results indicated the intake process typically required 2 – 4 hours to collect data required by managed care, city, state and federal agencies. Very few programs had computers for clinical operations or decision support. There was 53% turnover among directors and a similar rate among counselors within the prior year. By far the predominant form of treatment was abstinence-oriented group counseling. Further results are presented below.

Organization and Administrative Infrastructure - The organizational and administrative infrastructures of many programs are inadequate and unstable. About a sixth of the programs in our sample had closed or stopped providing addiction treatment. This finding is consistent with the 16% annual closure rate among private, for-profit treatment programs documented by the national contractor maintaining the national treatment registry as well as several other groups. In addition, we found that almost a third of the remaining programs had undergone some type of major reorganization in the prior year. Importantly, although there were computers and information systems in four fifths of the programs, these were generally isolated and dedicated to administrative and financial record keeping, not clinical services. Only a handful of programs used a clinical information system for conducting or monitoring care.

Data Collection - Treatment programs are choking on data collection requirements. The data collection and reporting requirements for most of these programs were truly daunting. Program directors reported dedicating one or more full-time clinical staff to collecting information required by government agencies and managed care organizations. Many admission intake procedures were reported to take 2 - 4 hours. To make this already problematic situation worse, staff indicated that almost none of the data collected were used in clinical decision-making or program planning – it was just “paperwork.”

Program Directors - Fifteen percent of program directors had no college degree, 58% were bachelors degreed and 20% were masters degreed. Only one program was under the direction of a physician. Only 72% of the directors were employed full-time; the rest worked part time, and 54% of the program directors had been in their position less than one year.

Complement and Tenure of the Treatment Staff - Apart from counselors, there were very few other professional disciplines represented in most of these programs. For example, only 54% of the programs could get a physician to come on-site for any medical problems or assessments. Outside of methadone programs, less than 15% of programs employed a nurse. Social workers and psychologists were rarely mentioned.

Computer and Information Resources - Twenty percent of programs had no information services, e-mail or even voice-mail for their phone system. In contrast 30% of the programs (mostly those that were part of larger hospital or health systems) had access to seemingly well-developed information systems, e-mail and Internet services. The remaining 50% had some form of computerized administrative information system dedicated to billing or administrative record keeping. At the same time, these computer and information services were typically only available to the administrative staff. Only three of the treatment programs we contacted had an integrated clinical information system for use by the majority of their treatment staff.

Admission/Intake Process - All programs reported the collection of administrative forms for city, state, federal and managed care requirements, this administrative data was the *only* information collected by 30% of programs. Most of the programs had contracts with multiple managed care organizations and state agencies (justice, employment, welfare), each requiring different data. Almost no program director considered any of the data that were required for collection at assessment to be clinically or administratively useful (hence the phrase “paperwork”).

Summary

These data question the ability of the national addiction treatment infrastructure to adopt or support the many potentially effective new therapies, interventions and medications emerging from the National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA). NIDA and NIAAA-supported researchers have developed numerous effective medications for nicotine, alcohol and opiate dependence and empirically validated forms of individual therapy and multi-focal interventions for families. Unfortunately, all of these potentially effective methods involve sophisticated clinical personnel and information management resources that are not currently available in the great majority of the treatment programs we contacted.

There is need for leadership to consolidate data collection and reporting requirements around a core set of clinically relevant admission, treatment progress and discharge information. This could lead to three improvements. Immediately, programs and patients would have relief from a significant data collection burden. Second, managed care companies would feel pressure to accept these national standards rather than demand different types of data. Finally, national standards could create an attractive market for information management companies to develop decision support software and training in critical clinical processes such as initial placement, diagnosis, problem prioritization, service planning and referral, and long-term monitoring. Infrastructure development grants for Internet connections, computers, and basic computer training would further stimulate this necessary activity.

Day Two

Benefits of an Electronic Health Record and Other Uses of Technology for Delivery of Behavioral Healthcare Services

Kathleen Lysell, Psy.D., Associate Chief Consultant for Informatics, Mental Health Health Strategic Healthcare Group, VA Pacific Islands Healthcare System

I want to share with you now some of the features currently in use in the VA's CPRS that I believe hold benefit and promise for behavioral healthcare. I'll also talk about some features under development that really move us in the direction of patient involvement and patient self management of their care. I realize that the VA is the nation's largest integrated healthcare system and has a huge infrastructure and IT budget. While not everything that the VA does may be applicable to your specific settings, the features of the electronic health record that I will show you can be applied in a variety of settings and can be helpful to advancing the delivery of behavioral healthcare. I hope that you will look at this from the perspective of how you might be able to use this functionality in your own work environment.

Some of the VA staff's frustrations regarding limitations of the electronic health record for behavioral healthcare centered around difficulties with charting for groups and interdisciplinary documentation. We address them in the following ways:

- **Group Notes:** Group notes were developed particularly to meet charting needs of behavioral healthcare programs, which provide a large amount of care in group settings. This is a separate application which allows for entry of common information across all patients in a group, then individualizing portions of the note to apply to specific patients, and finally applying an electronic signature across all patients, with the completed note being stored in each individual patient's health record. As shown in the slide for this presentation:
 - A group appointment is selected. All of the patients in the group are listed (in this case, colleagues), and common text is entered
 - Then, an individual patient is selected, and in this section below, individualized text is entered
 - The completed note appears in the patient's record with both the common and individualized text presented.
- **Interdisciplinary Notes:** Another documentation function is the use of interdisciplinary notes. Typically, this is one of the areas that is hardest to move from paper to computer. How do different people write one comprehensive note? The ID note functionality allows for separate documents to be grouped together and read as one document in the chart. So, if you have an interdisciplinary assessment in your program, each individual can write their assessment in a progress note, and the case manager then links them all together under one heading. The example shown in the slide for this presentation is a standard required form for admission that includes assessments from different disciplines.
- **Clinical Reminders:** Computerized clinical reminders were introduced in the VA in 1999. They are perhaps a more sophisticated or complex aspect of an electronic health record. Clinical reminders are designed to reduce the likelihood that a particular aspect of care will be overlooked during a visit, ensure that care is well documented, and increase standardization across care. While it is easy to produce "reminder overload" with too many

reminders for an individual provider, reminders can be very useful, both in the individual care of the patient and in the implementation of standards of care. In the VA, the reminders most closely related to behavioral health include screenings for depression, alcohol problems, tobacco use and PTSD, along with tobacco cessation education. The reminder dialog presents an easy way for clinicians to complete screens, learn about practice guidelines, and access more information on a topic.

Using the clinical reminder technology, we can also create customized templates that will display different elements depending on specific features of the patient. These can include demographics, diagnoses, medications the patient may be taking, to name a few. We use this functionality to document tobacco cessation counseling—presenting it regularly for those patients who actively use tobacco, less often for those who have recently quit, and not at all for those who have never smoked.

- **Specialized Order Menus:** Electronic order entry is an obvious, significant benefit of an electronic health record for many reasons. It is possible to maximize the benefit by creating order menus specific to the needs of a specialty area. This example centers around diabetes management, but can be applied to a wide range of clinical areas. The benefit is grouping orders together to facilitate ease of access for the clinician. It also presents typical labs or preferred starting dosages for particular medications used with a given diagnosis. Text can be added to explain processes specific to your facility, or to enhance use by trainees. And, again, links can be entered to quickly provide easy access to more in-depth information.
- **Remote Data Views:** Another feature of the VA’s electronic health record that is a direct result of being a large integrated system of care is the availability of data from other VAs. In a slide for this presentation, I showed an example of being able to quickly, literally with just a few mouse clicks, access a patient’s information from another facility.
- **Integration of Graph and Tabular Information to Aid in Decision Support:** Presenting information in a graphical format can be very beneficial for both clinical staff and patients.
- **Future Developments:** Increasing focus on patient participation in treatment decisions, involved in management of chronic diseases. Two specific initiatives include home Telehealth and a web based Personal Health Record, *MyHealtheVet*

In the home Telehealth arena, PTSD is a targeted area. Using a home health buddy product, the veteran completes home monitoring on a variety of pre-agreed upon topics. Scripts are being developed, and then are customized to the specifications of a particular facility. If responses are outside the “normal range”, an alert is sent to the case manager electronically, and the veteran is also instructed to call. Likewise, if the self monitoring is not completed in the pre-arranged time frame, the case manager is alerted for f/u.

The VA has also developed a web based personal health record, called *MyHealtheVet*. The tool was premiered on Veteran’s Day, 2004, and has a phased implementation. It provides links to health education resources and screening tools. Additionally, registered participants can enter data such as vitals, and view information such as medications and appointments. The ability to refill prescriptions on-line was added August 31 of this year, and the next

phase will allow the patient to identify specific elements from his/her CPRS health record that s/he would like to have displayed in the *MyHealthVet* record. The veteran can then allow others, such as VA providers, community providers, or family members to access the record.

A mental health and substance abuse specific portal is under development. The intent is to have subject matter experts develop content for mental health and substance abuse topics and screening assessments. Veterans are participating in the process through focus groups. A continuous recovery module is being designed to allow the veteran to work in conjunction with a care provider to identify aspects of his/her illness that can be self managed using such tools as structured monitoring assessments and diaries.

Wellness reminders have been piloted, to inform the veteran about routine screenings and preventative health measures. A more informed patient can then be prepared to discuss these issues with their healthcare provider.

Case Study of Successful Development and Implementation of New Data Standards for Behavioral Health Treatment and Prevention

Vijay Ganju, Ph.D., Director, Center for Mental Health Quality and Accountability, NASMHPD National Research Institute

Background:

This presentation describes the effort to develop standardized behavioral health codes for HIPAA. The National Association of State Mental Health Program Directors (NASMHPD), the National Association of State Alcohol and Drug Abuse Directors (NASADAD) and the National Association of State Medicaid Directors (NASMD) developed a coordinated process for new HCPCS procedure and modifier codes which were submitted for approval. This presentation describes the process for developing the codes with broad input from the field, and implications for future initiatives related to behavioral health data standard development.

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) required the U.S. Department of Health and Human Services (HHS) to standardize the electronic transmission of administrative and financial transactions, including claims and billing transactions. As applied by HHS, all covered entities were required to have the ability to accept claims and billing transactions using standardized procedure codes and format when a particular transaction is completed electronically.

At that time, health plans required providers to bill for services under any set of billing or procedure codes it had developed or utilized. In order to implement HIPAA, HHS developed a process for approval of a standardized code set. Existing code sets that were approved for use under HIPAA included: International Classification of Diseases, 9th Edition, Clinical Modification (ICD-9-CM) for diseases, injuries, impairments, and other health-related problems; National Drug Codes; Code on Dental Procedures and Nomenclature; a combination of Health Care Financing Administration (HCFA) Common Procedure Coding Systems (HCPCS) and Current Procedural Terminology, Fourth Edition (CPT-4) for physician services and other health-related services; HCPCS for medical supplies; and certain codes for billing for mental health services which are discussed below.

Under HIPAA, all local codes were to be eliminated. Local codes are codes developed by individual states and used by healthcare providers to bill for Medicaid transactions. In many states, local codes were also used by providers to bill state mental health agencies for non-Medicaid services, so the impact on the public mental health system was significant.

Development Process

Belatedly, there was recognition that the 27,000 local codes used for Medicaid billing did not conform to any of the standardized data code sets. Representatives of various disciplines and programs were convened by the HCFA to address this issue: behavioral health was identified as a specific disciplinary group. Over 3,000 local codes related to behavioral health were identified cutting across several service domains including child welfare, crisis intervention, community support, and case management.

In response to the need for standardized codes, a NASMHPD Research Institute Workgroup was established to work closely with National Association of State Medicaid Directors (NASMD) and HCFA. This Workgroup, supported by SAMHSA's Center for Mental Health Services, met three times to develop and refine recommendations regarding standardized procedure codes and modifiers

for mental health services. This workgroup had broad representation from the field, including private and public organizations; representatives of federal state, and local governments; consumers; providers and advocacy groups. Input was also obtained from members of the Mental Health Liaison Workgroup, an organization of approximately fifty organizations that relate to mental health services.

In May 2001, NASMD and NASMHPD jointly submitted to the HCPCS panel a recommendation for additional procedure codes and modifiers. The HCPCS panel scheduled a special meeting on July 19 to review this submission, along with submissions by others requesting certain substance abuse codes and modifiers. Many of the proposed codes were accepted by the HCPCS panel and were recognized as being needed for operations.

However, the panel denied or delayed action on several other recommended codes. Some of the reasons: the panel felt that our breakouts were too fine (that is, some of the requested codes were for procedures that were considered to be substantially the same); the panel felt that some codes were included in the recently revised CPT code set; the panel felt that there were substantial similarities in mental health and substance abuse treatment procedures and that the requests for new codes and modifiers could be consolidated.

This resulted in the reconvening of the workgroup with the National Association of State Alcohol and Drug Abuse Directors (NASADAD) and after several meetings and a broadbased, extensive review and comment process, resulted in a joint submission for codes by both mental health and substance abuse organizations. The 3000 mental health local codes were consolidated to 50 mental health procedure codes, common to mental health and substance abuse, and 7 behavioral health modifier codes. Subsequent to this submission, clarifications were sought, adjustments were made, but, as a result of this development process, these codes were included as part of the HCPCS standardized set.

Implications for Future Behavioral Health Data Standards Initiatives

Several lessons were learned from this experience. First, the need for behavioral health “champions” in the broader health and human service arena was critical. Behavioral health receives short shrift without adequate “voice” and representation. Second, there was recognition that there was knowledge and expertise within various mental health organizations that could be brought together rapidly to develop the necessary response. NASMHPD, NRI, NASMD, and other organizations were instrumental in making this happen. Federal resources and support facilitated this process. Third, the broadbased participation and consensus developed across the field versus the efforts in individual organizations helped the promotion and adoption of the codes. The collaboration across private and public organizations, the partnership across mental health and substance abuse, and the inclusion of professional and provider organizations were key to the success of this initiative. Finally, the commitment and energy of the leadership for the project were essential ingredients for the success of the fields need for such standardized codes.

Case Study of Successful Development and Implementation of New Data Standards for Behavioral Health Treatment and Prevention

Kathleen Nardini, M.A., Senior AOD Systems Research Analyst, NASADAD

A need existed to develop standard substance abuse treatment and prevention procedure codes for billing services to meet the Administrative Simplification Provisions for the Electronic Transactions and Code Sets under the Health Insurance Portability and Accountability Act (HIPAA). The National Association of State Alcohol and Drug Abuse Directors (NASADAD) led the substance abuse code development effort, and received approval from the Centers for Medicare and Medicaid (CMS) for substance abuse procedure codes and behavioral health procedure and modifier codes. This paper describes the code development process and the successful results of this effort. Accomplishments are highlighted and code implementation and refinements are noted. Coordination, collaboration, and consensus development led to successful outcomes and should be considered as behavioral health data standards are developed in the future.

It was necessary to streamline the substance abuse service codes and replace the local codes that could no longer be used, with national standard codes that met HIPAA requirements and compliance deadlines. Unlike other codes, there was no existing code set (i.e., CPT- 4 codes) for substance abuse codes that could be adopted under HIPAA. NASADAD, a non-profit organization that represents State and Territorial Alcohol and Other Drug (AOD) Directors who manage the public substance abuse treatment and prevention system assumed a leadership role in the code development process. NASADAD worked with its members, other behavioral health organizations, and SAMHSA/CSAT representatives as it prepared three separate code requests and submitted them to CMS for approval over several years.

The first code package was prepared and submitted to CMS in 2000 by the Ohio State AOD Agency, on behalf of NASADAD. The agency identified, defined, and requested approval for a core set of substance abuse procedure codes. The codes, and the business justifications and code definitions were based on the substance abuse treatment and prevention codes used in the State of Ohio but were also considered representative of the field. CMS approved this core group of codes, effective January 2001 and the field had its first set of HCPCS Substance Abuse Procedure Codes.

The second code package was prepared and submitted to CMS in 2001 by NASADAD. The NASADAD HIPAA Workgroup, composed of State AOD Directors and/or their designated State representatives, was created to identify and define additional needed substance abuse codes that were not included in the first code submission. The group used a consensus development approach and held numerous face-to-face meetings and conference calls as they responded to the need to develop additional codes. Other members of the workgroup included the National Association of State Mental Health Program Directors (NASMHPD), the American Managed Behavioral Healthcare Association (AMBHA), and the Substance Abuse and Mental Health Services Administration/Center for Substance Abuse Treatment (SAMHSA/CSAT). The Workgroup produced a second code package that included new substance abuse codes, substance abuse codes developed by the National Medicaid EDI HIPAA Workgroup (NMEH), and behavioral health modifier codes prepared by NASMHPD. CMS approved the substance abuse codes requested by NASADAD and NMEH, effective January 2002.

The third joint NASADAD/NASMHPD code submission was prepared and submitted to CMS in 2002. The CMS HCPCS Advisory Group provided feedback on NASADAD's and NASMHPD's

previous individual code requests, and interacted with both organizations. The NASADAD HIPAA Workgroup made necessary adjustments to their code request package and joined forces with NASMHPD to strengthen the code package. NASADAD and NASMHPD coordinated the code development work and collaborated on several behavioral health procedure codes. The final joint package included a request for substance abuse, mental health, and behavioral health procedure codes, and behavioral health modifier codes. CMS's review and approval schedule and HIPAA compliance dates guided the timing of the submission of the joint code package. CMS approved most of the procedure and modifier codes, effective January 2003. The approved HCPCS codes are listed on the following three Websites: www.nasadad.org, www.hipaa.samhsa.gov, www.cms.hhs.gov/medicare/hcpcs.

The effort to streamline service codes and develop standard substance abuse treatment and prevention codes and behavioral health procedure and modifier codes for the field was successful. The key to success was the approach that was used that included coordination, collaboration, and consensus development among the national behavioral health associations and other stakeholders. NASADAD used a consensus development approach with its members and established itself as a leader and resource for the substance abuse HCPCS codes and the code development process, and a contributor to behavioral health data standards. This work led to the formation of and NASADAD's participation in the Behavioral Health Data Standards (BHDS) Workgroup sponsored by SAMHSA.

The HCPCS code implementation has also been successful as demonstrated by use of the codes across the nation today. NASADAD is refining the code implementation by working with its members to identify coding gaps to determine the need for new codes or to modify existing ones. NASADAD is developing an unofficial standard Substance Abuse HCPCS Code Working Definitions Guide using a consensus development approach with the NASADAD HIPAA Workgroup and the broader NASADAD membership. Also, NASADAD provides technical assistance and guidance on the use of the codes as well as on the code development process.

The successful development and implementation of new data standards for behavioral health treatment and prevention described in this case study is an example of how progress can be made in setting behavioral health data standards. Consensus development, coordination, and collaboration among behavioral health organizations and other stakeholders can help to create a needed voice in the behavioral health field and can move the field forward to meet the behavioral health information management challenges in the future.

Workgroup Findings and Recommendations

Six concurrent discussion workgroups convened to focus on specific types of informatics opportunities, and the work ahead towards achieving potentials. Attendees were pre-assigned to one of the six workgroups and stayed in their respective workgroups when they convened during three 90-0minute periods during the two days. The workgroup co-leaders and recorders also remained in their respective workgroups throughout the Summit. The topic areas, guiding discussion questions, findings and recommendations are as follows:

Workgroup #1: Developing and Maintaining Nationwide Behavioral Health Informatics Standards

Co-leaders: John Carnevale, Frank Ghinassi and Mike Morris (recorder)

Recognizing existing HHS and SAMHSA data sets, including the National Outcome Measures (NOMs), what additional behavioral health-specific standards are needed for data, information privacy and information exchange, and interoperability of information technologies? How should they be incorporated into existing standards? What are the benefits and work ahead to developing them? How do federal regulations (i.e. 42 CFR, Part 2, Confidentiality and HIPAA Privacy) impact development of the standards? Where in the current policy- and standard-setting environments for developing and modifying these standards are behavioral healthcare issues being addressed? Is there adequate representation of the behavioral health industry and understanding of the unique needs of behavioral health within this environment to assure a successful resolution of these issues? Are the existing mechanisms within this environment able to sustain ongoing development and maintenance of behavioral health informatics standards development indefinitely? If not, what should be done additionally to create a sustained and effective effort?

There now exists no common definition of data that exists in EHR

A primary issue identified is that there is no common definition of the data set that comprises an EHR. The information needed at the federal level is different from that needed at the state and local government levels. A substance abuse provider has distinctly different requirements than a mental health provider, as does a primarily inpatient provider from a prevention or recovery provider. Furthermore, many agencies combine data derived from different modes of treatment. Commonalities in EHR data sets are now largely dictated by requirements of oversight entities and purchasers of services.

Recommendations

Oversight agencies should be cognizant of this issue and strive to design outcome measures, data transporting standards and other electronic reporting requirements to allow the data to be derived from the clinical workflow such that data collection should simultaneously satisfy clinical, certification and oversight requirements.

Agencies should encourage use of structured data wherever possible, and associate text with structured data wherever needed to extend and clarify responses. All data, including free text responses, should be recorded in an EHR as clearly identified data elements

A single healthcare record containing medical, mental health and substance abuse data should be maintained so long as the patient has control to limit access to some portion or all of chart. A single

EHR does not necessarily require that the data reside in a single place. The EHR could be present as a distributed record available to all providers as a result of interoperability and/or transportability capabilities. This means that the EHR data set must span the entire continuum of care, including prevention and recovery and all modes of outpatient, residential and inpatient treatment.

An interim step towards having full access to all EHR information from all agencies is to strengthen and better define a continuity of care EHR subset or functional summary including a behavioral health problem list and other behavioral health specific information. This subset should include recovery data standards per recent SAMHSA and CMS initiatives, should be womb to tomb and should be able to support a Wellness Record concept.

Action items

SAMHSA, SATVA and other interested parties should involve themselves to the extent possible with HL-7 and other standard-setting entities (SNOMED, NCPDP) to assure that EHR requirements set by oversight agencies for substance abuse and mental health providers are addressed. The Behavioral Health Data Standards Workgroup is an existing forum for coordinating standards of this nature and should be leveraged to the extent possible.

Accreditation agencies, governmental and funding organizations should be encouraged to adopt common standards for data. These standards should encompass common definitions for common data elements to allow the data to be gathered seamlessly within the clinical workflow process. The standards should also include defined methodologies for transporting or accessing EHR data both as needed for outcomes measures and similar analyses and for providing a real or virtual single healthcare record.

A study needs to be conducted that assesses the impact of HIPAA on transportation of EHR data and on the need for any regulatory changes.

The clinical workforce and management need to be educated to build competencies for data and computer management along with performance evaluation. Consumers should be educated as to the availability and use of their Personal Health Record. SAMHSA, American Health Information Management Association (AHIMA) and the Addition Technology Transfer Centers (ATTC) have addressed this need.

Providers are the primary source of the original EHR data and providers have many competing priorities and are often hampered by lack of technical expertise. Absent effective EHRs at the providers no data exists to electronically transport. The Workgroup recommended that money be set aside in healthcare IT legislation to address the entire spectrum of Behavioral Healthcare EHR requirements.

There now exists no common standard for electronically recording and transmitting data related to the National Outcome Measures System (NOMS) and other state-level outcome measures and the like from providers to the states

Providers are the source of information for NOMS and for a plethora of state data warehouses. There is a disincentive for providers to gather and share information both for reporting to oversight agencies and for making the EHR available to other agencies due to competition for scarce

resources. The state data warehouses share the previously identified problem of no commonality of data definitions. In addition, there is no standardized method of communicating the information from the providers to the state. This makes data gathering expensive for the providers and possibly impacts the quality of the data.

Action items

SAMHSA should complete a thorough assessment and inventory of state data infrastructure systems, both for mental health and substance abuse. States should be categorized according to their ability to accept information required of providers in electronic format both as transportable EDI file formats and for online recording of data.

SAMHSA should promulgate a standard for electronically transporting information of this nature by developing a standard for communicating NOMS and similar information from the providers to the states and encourage the states to adopt that standard for all data provided to them by the states. Any existing similar standards such as HL-7 should be leveraged as appropriate.

Several problems were raised regarding the value of data being collected. First, it was noted that NOMS may be targeting outcomes which behavioral health providers may not be able to influence and for which they may not be able to obtain accurate data. Second, some consumers worry that an insurance company's or other entity's full access to their mental health and substance abuse history may hamper their access to community resources and consequently hamper their achievement of productive functioning. SAMHSA should develop a standardized method for evaluating the data required of providers to assure that it can be reasonably expected to be accurate and that it does not unduly infringe upon consumers' privacy concerns.

The ability of providers and states to implement data transportability standards is hampered both by the lack of current standards and by the costs of implementation. All stakeholders impacted by implementing data transportability capabilities require some method of deferring costs to assure a relatively rapid deployment. The Workgroup recommended that money be set aside in healthcare IT legislation to address behavioral healthcare EHR requirements.

Workgroup #2: Developing and Maintaining Nationwide Initiatives to Facilitate Increased Adoption of Electronic Health Record Systems by Behavioral Health Services and Their Participation in Health Information Networks

Co-leaders: John Bartlett, Allen Daniels, and John Paton (recorder)

At the national level, what educational information and other types of technical assistance; grants and other types of financial and non-financial incentives; and other forms of assistance would be most useful to help behavioral health organizations adopt electronic health record systems and participate in the NHII? How can informatics standard-setting help improve the quality and value of software for behavioral health services? Where in the current environment of nationwide policy-setting by both governmental and non-governmental entities are these types of assistance being addressed? Is there adequate representation of the behavioral health industry and understanding of the unique needs of behavioral health within this environment to assure successful development and implementation of solutions? Are the existing mechanisms within our current nationwide environment able to sustain ongoing development and implementation of these types of assistance indefinitely? If not, what should be done additionally to create a sustained and effective effort?

At the National Summit, Workgroup 2 represented one of the most fundamental strategic goals: How to achieve widespread adoption of information technology in behavioral healthcare. All the technology, standards, and integration will be ineffective if the results are not put into widespread use. And, of course, the converse is also true, that widespread use will be less than optimally effective if standards and interfaces are not available and enforced. The objective of this workgroup was to discuss issues and barriers to widespread adoption, and to define a process through which a strategy could evolve to achieve widespread adoption of information technology in behavioral healthcare.

The Workgroup began its consideration with the basic premise that there must be motivation for adopting technology, a return on the investment. Such a return on investment may come from reduced cost, increased revenue, improved cash collection, improved operating efficiency, etc. But motivation alone is not sufficient to achieve widespread adoption of a particular set of standards due to financial limitations, technology limitations, and regulatory barriers. So the workgroup also defined the need for *incentives* which could promote adoption more quickly and effectively. Two kinds of incentives were considered: financial and non-financial. Financial incentives could take the form of grants to acquire and implement information technology (IT), increased reimbursement if certain automated processes were employed, and modified funding mechanisms which, for example, might permit grant funds to be used for such capital purchases. The workgroup recognized that financial incentives could be primarily implemented through public policy and by using public funds. To realize financial incentives for behavioral healthcare organizations, the workgroup recommended that HHS policies specifically address issues of training, standards development, and implementation through technical assistance grants. Harmonization of disparate standards was also recommended as a financial (and also non-financial) incentive to lower the cost of adoption and increase efficiency of reimbursement. To help organizations better appreciate the value of new technologies, the Workgroup suggested that ONCHIT conduct regional presentations demonstrating how new technologies could be applied and where organizations might find return on their investment.

Non-financial, or perhaps indirectly financial, incentives are also important, and may be as effective in bringing about change. For example, compliance with regulations can be complex and expensive, posing a burden to smaller and less technically capable organizations. By offering

regulatory relief to agencies meeting a certain criteria (e.g. size), federal and state agencies could facilitate the adoption of specific technologies or reporting requirements. The development of standardized interfaces could improve utilization and reduce staff training requirements. Interoperability with general healthcare IT could improve continuity of care and accountability.

Beyond incentives, however, the widespread adoption and effective use of the newest information technologies are complex matters in terms of organizational culture, management style, and staff development. Current information technology is becoming a decision support tool rather than simply an information resource. The difference lies at the very heart of the implementation and adoption process. Whereas an information resource generally offers status monitoring, exception reporting, and periodic analyses, a decision support system operates at or near real-time emphasizing ad hoc reporting and analyses, where immediate results are essential and more query driven than scheduled. Decision support systems often provide the feedback loop necessary to support evidence-based practice. In order for behavioral health organizations to effectively utilize such capabilities, they must often change their record keeping procedures, workflow, policies, standards, etc. In addition, both management and staff must be trained and sometimes re-educated. The organizational culture must become information and accountability oriented, must operate with a high-level of uniformity, and be driven by outcome measurement and sound evidence of effectiveness. The Workgroup discussed how such issues could be addressed and came up with several recommendations:

- Promote greater involvement between The Annapolis Coalition and BH industry IT organizations to develop information-based standards for clinical training and practice, and general workforce development.
- Coordinate with accreditation organizations to encourage EHR adoption and use
- Develop peer learning and mentoring models to help remove barriers for necessary organizational culture change.
- Publish case studies of successful EHR implementation, emphasizing value returned, both financially and in quality of care.
- Develop standard core content to facilitate implementation and promote uniformity
- Coordinate with federal and state agencies to standardize data collection to develop useful benchmarks of operation and practice.

There was a strong consensus in Workgroup discussion that widespread adoption of information technology will depend on a closer coordination between the various stakeholder groups and regulatory/funding agencies. Specifically, the Office of the National Coordinator of Health Information Technology (ONCHIT) can play a major role by including behavioral healthcare considerations in all EHR initiatives, integrating BH requirements into general healthcare EHR guidelines, improving ease of use by developing healthcare standard user interface guidelines, and defining functional specifications for IT vendor certification (e.g. through the CCHIT project). Within SAMHSA, the Workgroup noted that the Office of the Administrator (OA) and the Behavioral Health Data Standards workgroup (BHDS) are in a position to promote and facilitate IT and EHR adoption by helping to identify the key influencers and organizations who can bring about change, helping accreditation organizations incorporate current EHR thinking, and generally developing consensus standards for EHR, outcome, and evidence-based practices. Furthermore, SAMHSA's involvement at every level is key to the evolving design and thought process behind consumer-driven EHR and practice.

There was uncertainty in the discussions around consumer-driven healthcare and how it could become a part of behavioral healthcare information technology, although the Workgroup's consensus was clear that consumers' perceptions and biases must be considered throughout the process if consumers are to play an effective part in directing their own care. Several recommendations emerged, however:

- Develop a consumer liaison group which would function across the various projects and initiatives
- Incorporate consumer advocacy into a stakeholder group to develop standards for privacy and confidentiality
- Integrate consumer viewpoint and requirements into specifications for certification and accreditation.

The Workgroup's recommendations and deliberations can be summarized fairly simply: achieving widespread, effective, and useful adoption of general IT and EHR in behavioral healthcare will require financial incentives from federal agencies; regulatory refinement and relief; standards development by governmental and private organizations; standards implementation and enforcement; standardized education in technology, management, and clinical care; and extensive liaison and coordination with all stakeholder groups, especially consumer advocacy. Perhaps most important of all, for progress to continue there must exist some mechanism and funding that will carry forward the thought process begun at the National Summit. Without a long-term commitment and an adequately funded process, an effective strategy to achieve widespread adoption is unrealistic.

Workgroup #3: Addressing Issues within Behavioral Health Organizations to Improve Their Implementation and Effective Use of Information Management and Electronic Health Record Systems

Co-leaders: Dick Dillon, Ray Wolfe, and George Pashel (recorder)

How might information management and electronic health record systems be most useful to behavioral health organizations for improving their executive decision making, quality improvement programs, effectiveness of care and prevention services, and organizational success? What are the types of costs, including human resources? What are the financial challenges at the beginning of the journey into developing or acquiring and implementing electronic health record systems, and how do those change later in the process? What financial incentives would be helpful to administrators of these behavioral health organizations, and at what point in the development/acquisition and implementation processes would those incentives be most needed? In developing and/or acquiring and then implementing information management and electronic health record systems, what changes must organizations undergo in such areas as their privacy policies, workflow processes, and staff training? What kind of assistance do diverse behavioral health organizations need to realize the benefits of computerization most efficiently and effectively? What are the potential resources that might provide that assistance to them?

This workgroup's focus was on the use of technology within service provider organizations. Most of our conversation focused on the question of how information management and electronic health record systems would be **most useful** to behavioral health organizations for improving their executive decision making, quality improvement programs, effectiveness of care and prevention services, and organizational success. The perceived principal benefits were associated with broader access to information; consistency of data gathering; potential for quality improvement; and, improved productivity. As we reviewed the costs of implementing technology the discussion centered on the limited availability of cash for capital expenditures and the consequent need for fund raising or debt to acquire such system. This is exacerbated in an environment where most funding is on an operating cost reimbursement model. Other costs included training for staff that may often have limited computer literacy. A sometimes 'hidden' cost is the frequent regulatory requirement that all records be maintained in paper form for government audit or reimbursement even if an electronic record is available.

The workgroup also reviewed the kinds of assistance that would be required by service provider organizations to implement information technology. The first kind of assistance would be to remove some of the disincentives in reimbursement regulations regarding how money can be spent. As noted above, information technology is a capital expenditure that many reimbursement regulations only fund as the items are depreciated, creating a cash flow hurdle on initial acquisition. Another secondary improvement would be to simplify the multiple data collection and reporting requirements and to create more uniformity so that the information systems can be less complicated and less expensive. A third issue is the variability in resources from state to state where the reimbursement to a nonprofit for the use of technology can vary significantly; this could be a major problem if standard federal requirements are imposed and the variability in state resources is not addressed.

Two more general issues were identified in our discussions. The first is the need to distinguish in any cost benefit analysis the difference between benefits to service providers from the use of information technology versus benefits generally of a national Electronic Client Record system. Net national benefits may not translate into net positive benefits within the service provider

organization. Also, it will be necessary to make the distinction relative to prevention activities and organizations, which do not focus on Electronic Client Records for individual clients, versus service providers, which must relate to individuals.

Challenges:

As a result of our conversations, the workgroup identified six major categories of challenges to the implementation of Electronic Client Records in human service organizations.

1. **STRUCTURE OF PROVIDER COMMUNITY:** The provider community consists of a wide range of principally not-for-profit organizations with varying financial capacities, structures, missions and internal resources. If implementation of information technology does not take into account this variability, the mix of service providers could be adversely affected as smaller community based organizations find they cannot afford technology or as highly diverse organizations find that the complexity of addressing multiple data requirements across multiple political jurisdictions is cost prohibitive.
2. **TRAINING:** There is a wide range of skills within provider organizations regarding the use of technology, to address which will require comprehensive yet flexible training programs. Moreover, funding for this training is not currently available which is particularly problematic in fee-for-service environments where staff providing billable services are not generating revenue while in training.
3. **FINANCIAL AND REGULATORY CONSTRAINTS:** There are limitations on how available funds may be used and there are record keeping requirements that add to the challenges of acquiring and implementing electronic health record systems. Moreover, in many environments, existing reimbursement methodologies are being converted to “fee-for-service” approaches which require more intense use of technology and involve transition costs. These added costs are not being recognized in many instances today and there is risk that this same lack of recognition and funding will take place in the coming transition to electronic health records. Maintenance and upgrade costs can permanently increase the cost of operations.
4. **CLINICAL PRACTICE:** Human service organizations are more likely to be community-based with distributed workers and offices than are single facility-based hospital medical systems encountered in the physical health care sector. Deployment of human service electronic client record systems must take into account:
 - a. The need to facilitate data entry from community based workers in the field
 - b. Training of and interaction with non-office-based field staff which is more challenging to accomplish than in hospital or clinician office-based settings
 - c. The need to accommodate part-time staff who may be proportionally higher in human service provider settings than in medical settings
 - d. Employee turnover in human service organizations that is likely to be higher than in many medical organizations leading to needed differences in Electronic Client Record system design, implementation and training
5. **CHANGE MANAGEMENT:** Management skills appropriate for sophisticated management techniques possible with enterprise data systems are not always in place, including specifically the capacity to manage the organizational changes that such enterprise systems can create.
6. **STRUCTURAL/BUREAUCRATIC INCONSISTENCIES IN OVERSIGHT STANDARDS:** Complex government data and reporting requirements in human services

significantly increases Electronic Client Record acquisition and implementation costs. This is exacerbated due to the high variability of these requirements from one geographic or political subdivision to another. Moreover, these requirements change frequently in often highly unpredictable ways rendering use of standardized records even more difficult. Licensing body and accreditation rules regarding acceptability of electronic versus paper based records, including the role of electronic signatures, are far from well established.

General Recommendation:

The Workgroup concluded with the general consensus that while Human Service providers are an important component of the national healthcare community facing many of the same information management issues, Human Service providers are also different from most healthcare providers. Consequently, while Human Services should remain a part of the broad electronic record initiative, this sector cannot be considered in the same way as one of the many medical subspecialties and instead should be recognized as different in the further development of the national electronic client record strategy.

Workgroup #4: Addressing the Complexities of Reimbursement, Regulatory and Reporting Requirements

Co-leaders: Susan Fox, Judy Hall, and Tony Lewis (recorder)

What aspects of the current reimbursement and regulatory oversight of the behavioral health industry create unnecessary burden and redundancy? How costly is this to the behavioral health field? In what ways does that impede the delivery of services? How might the process be simplified and streamlined to become less costly? Can the reporting requirements be made more consistent and less duplicative? Should (and can) the privacy policies for mental health and substance abuse treatment and prevention services be made more consistent across states? What would be the most effective mechanisms through which to achieve any or all of these goals?

Workgroup 4 was assigned the task of tackling the reimbursement and reporting mechanisms facing the BH provider. Perhaps more than any other workgroup, the conversations seemed to be “plowing old ground.” The challenges reviewed during day one were well-known and virtually universal. Similarly, on day two there was no shortage of suggestions for improvements. The consensus was that the suggestions had been known for as long as most of the challenges, but the issue was overcoming the inertia in the current system and getting any changes made.

The number one impediment to making progress in either of these areas is in the territorial perspectives of the regulatory, licensing and funding agencies. The regulations and requirements promulgated by these organizations are only considered relative to their needs, without regard to the impact of those mandates on the provider that must address them. In many cases, regulations, data requirements and reimbursement documentation standards are incompatible, if not mutually exclusive. Several examples were cited where regulations designed to minimize costs for the payer increased the cost to the provider by more than the savings. The reason that this process continues is that the costs do not accrue to the same organization that recognizes the savings. This is similar to the conundrum facing the computerization of the industry. The providers that must bear the primary costs for EHRs tend not to be the ones who reap the potentially substantial savings.

Since both the inefficiencies and the solution mechanisms were both well-known, the discussion quickly turned to finding an approach that would change the status quo. Since most of the sources of the regulations and reporting requirements are independent organizations (State and local governments, licensing and certification bodies and private fund sources, for example) there is no single entity that can require changes. The federal government, while perhaps best positioned to lead the effort, does not have the power to force the solutions. At the same time, even the various sub-divisions at the federal level don't have a consensus opinion on the best solutions to these challenges. The best mechanism available to them is constraints attached to funding. This approach works best for AOD funding, since the vast majority of that effort comes from the federal level. Many of the available dollars come from Medicaid and Medicare. With their broad focus on general health care, behavioral health has a real challenge getting the attention that it needs from these organizations.

At the State and local level, the regulations are usually put forth in response to specific requirements, either from the federal or local political entity. While often well-meaning, these data collection and reporting requirements are usually created in a relative vacuum, which leads to inconsistencies with data required by other bodies or locales. This incompatibility makes the use of data outside of the original requestor problematic at best. At the same time, it makes the collection

of data more expensive for the provider, who must come up with customized mechanisms to capture the needed information.

At the core, the actions that lead to the problems in reimbursement and reporting are not malicious, but the results are often disastrous from a cost perspective. The best suggestions that the group put forth were all focused around trying to make the decision-making process easier for the regulatory bodies. These suggestions fell in to several distinct categories:

- Provide standardized data elements and collection mechanisms that meet a wide range of the current requirements
- Make information available to organizations that have data requirements so that they can utilize more standard data (or perhaps even utilize existing reporting)
- Require organizations to justify the cost-benefit for reporting mandates.
- Provide a centralized “ombudsman” to act as a conduit between regulators, funding sources and providers. This resource could disseminate critical information, facilitate the resolution of conflicts caused by unclear or contradictory requirements and provide a single point of contact for both providers and regulatory organizations.
- Take advantage of the software vendors’ ability to encapsulate best practice methodology into the tools that providers must use to perform their work. Clarity and standardization would reduce the cost of software development, implementation and training.

In the end, all of these suggestions require an on-going, centralized and coordinated effort. Since the behavioral health arena is small in comparison with general healthcare, it is important not to fragment the message. The main requirements for a coordinating body is that it is properly funded to do the work required, represents a broad constituency and has a mandate to speak on behalf of the industry. Whatever form this entity takes, it cannot be a passive information source. Advocacy is needed to realize any significant benefits.

The number and scope of tasks facing the behavioral health industry far exceed what could be accomplished by any one organization. There are also many efforts already underway regarding software certification, interoperability, best practice, training and more. It does not make sense to duplicate any of those efforts. The goal of a behavioral health coordination group would be to make sure that industry perspectives are considered as new initiatives progress. In some cases, this may mean actually creating standards extensions or new standards that are focused on behavioral health requirements. Even within the existing behavioral health infrastructure, there are many projects underway, with structures and staffing already in place. These projects would benefit by having a communications mechanism with other efforts and an industry-endorsed point of publication and advocacy to deal with the broader healthcare field.

There was general pessimism about the current state of affairs in the reimbursement and reporting arena and the chances of seeing substantial improvement based on existing infrastructure. On the other hand, this behavioral health informatics Summit was viewed as a positive step in developing the type of dialog and sustained effort that will be required to see changes in the future.

Workgroup #5: Addressing Issues for Consumers and their Family Members and for Clinicians and Other Service Providers Related to Adoption of Electronic Health Record Systems

Co-leaders: Paul Earley, Sylvia Caras, and Sharon Hicks (recorder)

How will automating behavioral health services and record-keeping impact consumers, clinicians, and other service providers? What will they perceive as the benefits and the drawbacks? How would these stakeholders each determine the best balance between respecting the privacy of consumer data and improving care coordination through increased data access to service providers? What do each of these stakeholders regard as the most valuable benefits of clinical decision support tools, and what are their primary concerns about them? How can these stakeholders work through national associations and government organizations to address their concerns and help optimize the potential benefits of computerization?

Introduction and Format of the Minutes

This workgroup met over a two day period during the Summit. The group included representatives from a number of stakeholder associations including direct care providers, administrators, and consumer. The first day, the group listed the overarching issues associated with adoption of health information technology in the behavioral health market and attempted to sort those barriers into the series of questions that had been posed by the summit organizers. On the second day we continued the discussion on the issues that were raised during Day One.

Of note is the fact that most of the issues discussed during this workgroup have their solutions under the purview of a different group. Therefore the solutions consist mostly of recommendations to other groups for follow-up. Rather than list out the discussion of day one/day two, I will summarize the primary recommendations that were made.

Recommendation One

Ensure that consumer and family voices are heard. Consumer and family groups often play a more active role in mental health than they do in either physical health or substance use treatment. In general, mental health consumers feel ownership of their treatment and are best served when they are empowered to be a part of the overall treatment. Record formats that are designed solely for use by the clinician or his/her employer will serve to decrease the active role that many mental health consumers would like to have in their treatment.

Recommendation Two

There is a need to differentiate the electronic health record (EHR), which is clearly managed and owned by the entity that has provided the treatment, and the personal health record (PHR) which is the sub-set of the EHR that the consumer will own. The PHR is the portable record serving as a bridge to other treatment providers. This recommendation includes the need to be very thoughtful when determining the review/edit capability of the consumer for this record. Discussion included components that one would want to have deleted after a certain period (e.g., emergency room record from a fight that one was in 20 years earlier) and records that should never be deleted (e.g., adverse reactions to drugs). Concerns ranged from the difficulty of correcting components like diagnoses, to amending records with which the consumer does not agree.

Recommendation Three

Consolidate reporting requirements that overlap and add another layer of confusion to the already confusing landscape of required reporting.

Recommendation Four

Ensure that there is adequate training for all stakeholders in the process.

Recommendation Five

Ensure that prevention and recovery are included in the required model.

Discussion of Specific Items of Importance

Following are the issues and related recommendations that our group indicated as highest priority for inclusion in future informatics policy discussions.

1. Privacy protection versus information access to facilitate care coordination:
 - A. Evolving standards should address the appropriate level of detail that should be in the record
 - B. Evolving standards must take into account that consumers' behavioral health information is collected within a confidential interaction between a consumer and a clinician that should either not be shared with others at all or that should only be shared at the discretion of the consumer.
 - C. Special circumstances may require different rules for sharing information. In particular, it would be helpful to revisit standards for clinical emergencies, court-ordered care, involuntary commitment, and persons who are legally judged to be not competent to make their own decisions.
2. Individual rights versus public rights
 - A. Define who has control of the content of the record in what situations, and who has control over what gets transferred to another provider of care.
 - B. Define who has edit capabilities and the appropriate processes to enter edits.
3. Ensure that whatever is developed follows the IOM patient-centered principle with user-based and user-participatory design
4. Ensure that the EHR is user-friendly with easy-to-follow training, clear standards for interfaces and data labels, and incorporation of best practices for information technology development
5. Acknowledge that it is difficult to code business rules because the logic and protocols are not linear, and often the reporting and regulatory requirements are in conflict.
6. Ensure that there is broad-based training and skill building for both consumers and providers as part of the overall EHR implementation plan. Furthermore, the HER development process should include consumers in the training, planning and scope.
7. Clearly define role-based and emergency-based access capabilities
8. Clarify the current informatics landscape as a first step to development of the new landscape.
9. Clarify whose responsibility it is to inform consumers about established standards and policies and related issues regarding privacy and access.
10. Include in EHR systems a repository for behavioral advanced directives that is available to all who have access permission so as to assure continuity of care.

Workgroup #6: Facilitating Interconnectivity and Information Exchange between Mental Health and Substance Abuse Treatment and Prevention, and other Service Systems (e.g. General Medical, Justice, Child Welfare, etc.)

Co-leaders: John Ernst, Steve Davis, and Even Brande (recorder)

What are the potential benefits of improved information sharing across service systems? How can information technology help service systems achieve those benefits? What privacy and other concerns exist that would discourage increased information sharing across service systems? At the policy level, do we currently have a satisfactory balance between support for care coordination through appropriate exchange of consumer information and respect for privacy and other concerns? If not, what might be some mechanisms to improve that balance? At the technology level, what are the barriers in the current environment to improved interconnectivity between service systems for appropriate exchange of consumer information? What technology-related solutions might be most effective to overcome those barriers?

The focus for this workgroup was to facilitate discussion on the topic of exchanging information between key entities in the human services field. Our group consisted of approximately 20 individuals from a variety of agencies. Perhaps not surprisingly, there was a strong representation of individuals from the substance abuse field. Frequently substance abuse prevention and treatment agencies face the challenge of exchanging information with mental health, justice, and other clinical agencies.

Day One Conclusions: Challenges and Opportunities

Opportunities

The group quickly came to agreement on some key benefits of information exchange between different entities. Initial discussion centered on who exchanges information, but we soon realized that information exchange can include all entities in the human services network including, but not limited to, law enforcement, justice, employers, schools, behavioral health, substance abuse, medical, society at large, and the client's family. Continuity and quality of care (and the notion that better information to the right person at the right time leads to better quality of care and less disruption in services) were key issues our group identified. Furthermore, these lead to more cost-effective services and more efficient services since staff spends less time looking for and managing information, and more time providing services. The group also recognized patient safety, such as checking for potentially fatal drug interactions, following up in a timely manner, and getting risk notifications as great benefits. Other advantages include better accountability with alerts and notifications between agencies, more consistent research and outcome data through standardization and data normalization.

Challenges

The group identified a great number of challenges in implementing inter-agency information sharing. In summary, these challenges or barriers fall under five categories: trust, security, financial, technical, political, and legal.

Each barrier presents unique challenges, and perhaps not too surprisingly, the group generally agreed that the technical barriers to information sharing are the least of our worries. Most information systems developed in the last decade are built on industry-standard databases using industry-standard programming languages. Facilitating information exchange between these

systems is a relatively straight forward issue. As such, the cost of integration is also a relatively low barrier. The greater challenges deal with issues such as public trust, political turf, legality, and security. Balancing how much information to disclose for a given situation is a major point of discussion as there are few, if any, clear guidelines in this area. We also deal with a variety of federal security guidelines for information exchange with different rules applying in different domains (i.e., HIPAA in the medical field and the Family Education Rights and Privacy Act otherwise known as FERPA in education). Building security into the technology itself is another challenge, as there are few established guidelines for technical protocols across different domains. In the area of policy and law there is the question of who owns the data. Finally, there is the area of public trust and the issue of key parties disclosing the correct information.

Day Two Conclusions: Proposed Solutions and Action Items

Our group was not able to identify solutions for all of the challenges discussed on day one; however, we did address some solutions within the legal and security domains. The group generally agreed that the notion of a centralized electronic health record (EHR) is not going to work. Just as in the paper world, an EHR is decentralized with different portions of the record living in different systems. A client moving from one provider to another should be able to have provider A forward information to provider B. We suggest that the SAMHSA Behavioral Health Data Standards Group found a subcommittee to define who owns the different portions of a clinical record and who should have access. This committee would solve the question of what portions travel from one entity to another. For instance, when forwarding information to a pharmacy, we assume only the medication history portion of the EHR would travel but not other portions such as lab history. In short, the group agreed that a key issue to address is to define what agency types have access to what portions of an EHR.

The group also identified the need for better guidelines to assist agencies in determining the laws governing information exchange within their jurisdiction. For example, what laws in the State of Ohio govern the exchange of substance abuse history from a substance abuse provider to a general physician who may need to know what substances a client uses to avoid prescribing medications that have fatal interactions with those substances? Since each state has different laws governing data exchange, the group suggested an online expert system where users can fill in their state, the agencies that are exchanging information, and the information which needs exchanged. Then according to the data entered, the system would return the set of laws which governs the proposed information exchange.

The group suggested collaboration with federal agencies such as the Agency for Healthcare Research and Quality to identify/establish the criteria/standards for sharing behavioral health data within regional health information networks that they have funded.

We also need to develop clearer guidelines with respect to data ownership and determine who makes the decision of disclosure of information under what circumstances.

We need better monitoring over existing information-sharing initiatives (i.e., pharmacies sharing information with life-insurance companies) so as to prevent potential lawsuits which could set back all other initiatives.

As stated earlier, our group was unable to address all of the challenges identified on Day One. With very limited time we felt that we barely scratched the surface, but we believe we did make some good progress addressing some key legal and policy issues.