Proceedings of the

Toward a Surge in Health Services

May 20-21, 2008

Institute of Medicine/National Academy of Sciences

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Iraq Health Symposium:
Toward a Surge in Health Services
May 20 - 21, 2008
Proceedings

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Iraq Health Symposium: Toward a Surge in Health Services - May 20 - 21, 2008

Executive Summary

Heath system stabilization and reconstruction support is a vital component of stability and reconstruction operations. Iraq's health system is suffering from decades of conflict, mismanagement and sanctions, as well as the effects of the ongoing insurgency and sectarian influence. Iraq has some of the poorest health indicators both in the region and in the world.

In light of recent security gains and the appointment of a new Minister of Health, there is a renewed opportunity for increased engagement with, and support to, Iraq's health system in order to promote a surge in health services for Iraq, and answer calls for a 'civil' surge to complement the military surge.

To address the above, the Department of Defense (DoD), the Department of Health and Human Services and the Embassy of Iraq co-sponsored the Iraq Health Symposium: Toward a Surge in Health Services, May 20 - 21, 2008 at the Institute of Medicine's National Academy of Sciences Building in Washington, DC. (Agenda – Appendix A)

The goals of the Symposium were to:

- Introduce the new Iraqi Minister of Health to key stakeholders
- Share updates regarding Iraq's security situation and health sector issues, initiatives, and challenges; and discuss goals and objectives for ongoing efforts
- Promote a 'surge' in health services in Iraq to capitalize on recent security gains
- Promote and facilitate non-governmental organization (NGO), private sector, international donor and academic engagement in and partnership toward the Iraqi health sector
- Inform stakeholders of the Iraqi Minister of Health's subsequent strategic planning conference in Iraq

The Symposium elicited tremendous turnout and participation, with over 30 leading international expert speakers and panelists and over 170 senior leader and expert participants. (Summary of Remarks – Appendix B)

The Symposium stimulated renewed energy and enthusiasm for improvement of health sector reconstruction efforts in Iraq. Key recommendations included:

- Security, stability and health are interconnected and interdependent. Continued focus on improving security is essential to provide the appropriate environment for health system reconstruction.
- Reform the pharmaceutical and medical supply procurement and distribution system (Kimadia).
- Cultivate supra-ministerial and inter-ministerial political will and collaboration on health system reconstruction efforts.
- Improve collaboration between the Ministry of Health and the Ministry of Defense to improve health services for the Iraqi Security Forces.
- Enhance Provincial Reconstruction Team efforts through improved strategic planning and coordination of health efforts and increased public health expertise.

- Promote and facilitate NGO, academic and private sector partnerships with Iraq's health institutions.

Participants identified policy issues and recommendations for institutional representatives to take back to their leadership. The Symposium fostered invaluable networking, including vital connections and linkages among health stakeholders. The findings and Proceedings will be published and disseminated and will be used to inform the Minister of Health's strategic planning forum in Baghdad. Similar efforts to review Afghanistan health issues and AFRICOM's emerging and evolving civil-military public health mission are under consideration. Finally, the findings of the Symposium will inform those involved in ongoing DoD efforts to improve medical stability operations capabilities.

Iraq Health Symposium: Toward a Surge in Health Services - May 20 - 21, 2008

Event Summary

Introduction/Background

The people's health, along with an effective healthcare system, is a critical component of stability and reconstruction operations. Four broadly accepted 'pillars' of reconstruction operations are: stability and security, essential services, effective governance, and economic development. A functional, responsive health system is an intrinsic element of each. In fact, health could be considered the '*quint*'- essential service, as it impacts every citizen directly. In recognition of this, the World Health Organization and the US Military Health System promote the concept of "Health as a Bridge for Peace." (1)

From the start of Operation Iraqi Freedom, the Coalition has played a leading role in support of Iraq health system reconstruction efforts. Under the Coalition Provisional Authority (CPA), the Coalition provided a team of up to 30 advisory personnel to Iraq's Ministry of Health (MOH) and well over $1 billion in direct support to Iraq health system reconstruction efforts. However, with the drawdown of Coalition health advisory personnel at the dissolution of the CPA in the summer of 2004, and with the adverse sectarianism and politicization of the Ministry of Health, Coalition abilities to positively impact health system reconstruction have eroded.

The lingering effects of decades of war and UN sanctions, the ongoing insurgency, and the inability of the Iraq government to adequately remedy health issues

create dire circumstances for Iraq's health system. Every aspect of Iraq's health system is under serious strain. This is reflected in Iraq's dismal health indicators, which continue to be among the worst in the region; although there are signs of improvement. Iraq faces a unique 'triple burden' of disease; with prevalent acute respiratory and diarrheal infectious diseases typical of a developing country and a high incidence of chronic disease such as cancer, diabetes, and cardiovascular disease typical of a developed country, coupled with the ongoing emergency care, trauma, and mental health burden created by the insurgency. These challenges are made all the more difficult in light of the exodus of large numbers of Iraqi health professionals due to threats of violence.

A recent US Government Accountability Office (GAO) report on Iraq reconstruction identified shortfalls in strategic planning for, and coordination of, international support to Iraqi ministries. (2) In addition, the report of the Iraq Health Sector Reconstruction After-Action Review highlights the need for improvements in current US government, international, and Iraqi health sector reconstruction support efforts. (3)

Recent developments in Iraq call for a renewed dedication to health system reconstruction and merit tempered optimism. First, the military surge has yielded improved security and stability, creating a window of opportunity for improvement of essential services, especially in the health arena. In fact, many leaders have called for a 'civil' surge to complement the ongoing military surge and capitalize on recent security gains. Second, and related, there are signs that adverse sectarian influence is waning, including within the MOH. The recent appointment of a new Minister of Health, presents an opportunity to re-engage and re-energize Iraq health system reconstruction efforts.

To seize these opportunities, the Office of the Assistant Secretary of Defense for Health Affairs, the Department of Health and Human Services (HHS) and the Embassy of Iraq decided to co-sponsor the “Iraq Health Symposium: Toward a Surge in Health Services.” The mission of the Symposium is to inform and energize Iraq health system reconstruction efforts and capitalize on the gains of the military surge.

This year’s symposium is the third in a series of events (co-sponsored by DoD) to share information on the status of healthcare in Iraq, following the initiation of US military operations in 2003. The first symposium was held in August of 2004, and was entitled "Symposium on Reconstructing the Healthcare System in Iraq: Lessons Learned and Future Prospects." This event was co-sponsored by the Institute of Medicine, DoD and the Iraqi Ministry of Health. A report of this event is available on the Institute of Medicine Web site, at http://www.iom.edu/CMS/3783/21530.aspx.

In January of 2007, the "Iraq Health Sector Reconstruction After-Action Review" symposium was held, co-sponsored by DoD, HHS, and the Uniformed Services University of the Health Sciences. This effort produced a comprehensive analysis and after action review of health system reconstruction efforts. The report from these proceedings can be found at http://www.cdham.org/Resources/Reference/tabid/84/Default.aspx.

Public Health and Military Significance

The public health significance of Iraq health system efforts is clear, especially in light of Iraq’s poor health indicator statistics. Iraq health system reconstruction has broad implications for the entirety of Iraq’s populace, impacting 28 million Iraqis, including the

gamut of traditional public health considerations, such as primary care, mental health, preventive medicine, immunizations, disease surveillance, population health, etc.

Iraq health system reconstruction also has clear military relevance. DoD Directive 3000.05 recognizes the increasing role of DoD in stability operations and directs that stability operations shall be given priority comparable to combat operations. Recognizing the critical role of health (and DoD medical personnel) in stability operations, it directs DoD to ensure the development of medical stability operations capabilities. (4) The link between health and conflict is increasingly recognized. This concept was well-summarized in a report from the Centre for the Study of African Economies: "Health programs may be important in the post-conflict setting not because they lower the burden of disease, but because they lower the level of tension within a society and reduce the high-risk conflict recidivism." (5)

Iraq Health Symposium – Goals and Content

The parameters for the conduct and content of the Symposium were formulated by senior expert representatives of the co-sponsors (DoD, HHS, Embassy of Iraq) in coordination with a number of senior experts from stakeholder institutions, including the Iraqi MOH, US Embassy/Baghdad, Department of State, Multi-National Forces-Iraq (MNF-I), World Health Organization, the World Bank, the International Medical Corps, and Project Hope. The goals, critical topics, and agenda for the Symposium were shaped through a series of virtual and teleconference discussions and deliberations among these contributors. The goals of the Symposium were to:

- Introduce the new Minister of Health to key stakeholders
- Share updates regarding Iraq's security situation and Iraq health system issues, initiatives, and challenges and discuss goals and objectives for ongoing efforts
- Promote a 'surge' in health services in Iraq to capitalize on recent security gains
- Promote and facilitate NGO, private sector, international donor and academic engagement in and partnership with the Iraqi health sector
- Inform stakeholders of the Minister of Health's subsequent strategic planning conference in Iraq

The critical topics identified for discussion at the Symposium were: perspectives from key stakeholders (Iraqi MOH, Iraqi Ministry of Higher Education, Embassy of Iraq, HHS, DoD, World Health Organization, World Bank, NGOs, US Embassy in Iraq/Health Attaché, MNF-I Surgeon); Iraq health system strategic planning; Iraq health system financing, inter-ministerial cooperation in Iraq's health system; mental health issues in Iraq; refugee and internally-displaced person health issues; and the promotion of NGO, academic, and private sector partnerships. These critical topics formed the core of the detailed agenda for the Iraq Health Symposium. (Appendix A)

Iraq Health Symposium – Summary

The "Iraq Health Symposium: Toward a Surge in Health Services" was conducted May 20 – 21, 2008 at the National Academy of Sciences building in Washington, DC. The Symposium was co-sponsored by the Office of the Assistant Secretary of Defense for Health Affairs, HHS and the Embassy of Iraq, with the support of General Petraeus, Ambassador Crocker, the Iraqi Minister of Health, the Iraqi

Ambassador, the Secretary of Health and Human Services and the Assistant Secretary of Defense for Health Affairs.

A diverse array of over thirty senior international expert stakeholders with direct experience and knowledge of Iraq's health system were recruited to present or participate in panel discussions. The agenda was designed to maximize sharing of information and opinions as well as interaction and networking among participants. The symposium featured prepared presentations by senior international leaders and experts, panel discussions, and structured networking opportunities. Senior representatives from a variety of relevant organizations were invited to attend, resulting in participation by over 170 distinguished leaders and experts. (Appendix A)

Results/Outcomes

The Iraq Health Symposium yielded a significant turnout of senior international experts and leaders as speakers, panelists, and participants, who invariably described it as a stimulating and successful event. The symposium provided an invaluable opportunity to introduce the new Minister of Health, Dr. Salih Al-Hasnawi, to international stakeholders. This highlighted the waning sectarian influence on the Ministry of Health and conveyed renewed optimism and energy to US and international stakeholders interested in supporting Iraq's health system. The Ministry of Health delegation and the Multi-National Force – Iraq Surgeon provided first-hand assessments of the improving security situation in Iraq, which also renewed optimism for increased delivery of health

services and provided encouragement to the international community to directly assist with health system efforts.

Other developments and discussions created momentum toward a surge in heath services in Iraq to build on the security gains of the ongoing military surge. There was extensive participation by, and interaction with, non-governmental organizations, representatives of academia and private sector interests at the Symposium. This interchange stimulated interest in, and activity toward, the promotion of partnerships with the Ministry of Health. Additionally, the Symposium served as an invaluable foundation for Minister Al-Hasnawi's subsequent strategic planning conference in Baghdad. The Symposium provided the Minister and his team invaluable information, resources and support for his efforts. Finally, the Symposium identified a number of policy issues and recommendations for adjustment and improvement of efforts to support Iraq health system reconstruction. Participants will take these back to their institutional leadership for deliberation. A summary of speaker presentations and remarks can be found at Appendix B.

Conclusions

The Iraq Health Symposium identified a number of critical findings and conclusions, which are detailed in the summary of remarks (Appendix B). The key conclusions are summarized here. First, the Symposium identified a number of policy issues and recommendations for improvement of efforts to support Iraq health system

reconstruction. Participants will take these back to their institutional leadership for deliberation.

The overarching, central conclusion was that security, stability and health are interdependent. Continued focus on improving security by maintaining and solidifying the gains of the military surge is essential to provide the necessary environment for health system reconstruction. Conversely, improvements in health services are essential to the promotion of security and stability, as well as confidence in the Iraqi government. Another conclusion bolstered by the visit of the MOH delegation, and the Iraq Health Symposium, is that the new MOH leadership presents a renewed opportunity for engagement in Iraq health system efforts. Coalition, NGO, and international actors should reach out to the new leadership and offer assistance, especially technical assistance and capacity-building. Prospects are encouraging, as another outcome of the MOH delegation visit and the Iraq Health Symposium, was a renewed commitment among US, NGO, and international actors to support Iraq health system efforts.

Some widely-recognized conclusions were re-affirmed at the Symposium, such as the need for a comprehensive, collaborative strategic plan for Iraq's health system, including health system financing and a focus on public health and primary care (with a particular emphasis on mental health and emergency medical services). However, the Symposium elucidated the need for a relook at, and rededication to, the above in light of recent and evolving circumstances in Iraq. These include the new Ministry leadership, recent security gains, and increased budgetary resources. Frequently cited, and reaffirmed at the Symposium, was the need to reform Iraq's pharmaceutical and medical

supply system (Kimadia), including a reduction in the diversion of abusable medicines for non-medical purposes.

Another consensus was the need for supra-ministerial and inter-ministerial political will and collaboration on health system reconstruction efforts. The contributions and collaboration of Iraqi professional and civic society are essential. Such a 'whole-government' and 'whole-society' approach could potentially be jumpstarted via an inter-ministerial health leadership summit in Iraq.

Of particular importance, and related to inter-ministerial cooperation, Iraq needs improved collaboration between the Ministry of Health and the Ministry of Defense to improve health services for the Iraqi Security Forces who are suffering increasing casualties as they take on more operational responsibility and independence.

US/Coalition Provincial Reconstruction Teams (PRT) were identified as valuable tools to link health efforts from the national to the provincial and local level. However, this will require a coordinated and well-communicated strategic approach, in full concert with Iraqi MOH officials (at the national, provincial, and local levels), as well as increased public health expertise on the PRTs.

A final conclusion was the need to actively promote and facilitate NGO, academic, and private sector partnerships with Iraq's health sector. The USG and the international community should seek ways to encourage and foster such public-private partnerships.

Next Steps/Way Ahead

The Iraq Health Symposium has stimulated renewed energy and enthusiasm for collaborative improvement of Iraq health system reconstruction efforts as well as for enhanced consideration of the broader consequences of the links between health, security, and stability. A number of opportunities to capitalize on this momentum exist. First, the findings of the Symposium informed Minister Al-Hasnawi's subsequent strategic planning forum in Iraq. This event will be critical for shaping upcoming health sector priorities and efforts in Iraq and eliciting the political will to support health efforts in Iraq. Policy recommendations for improvement of international support to Iraq health system reconstruction should be refined, discussed and coordinated with senior institutional leadership. The many opportunities for establishment or strengthening of NGO, academic and private sector partnerships identified at the Symposium should continue to be actively pursued.

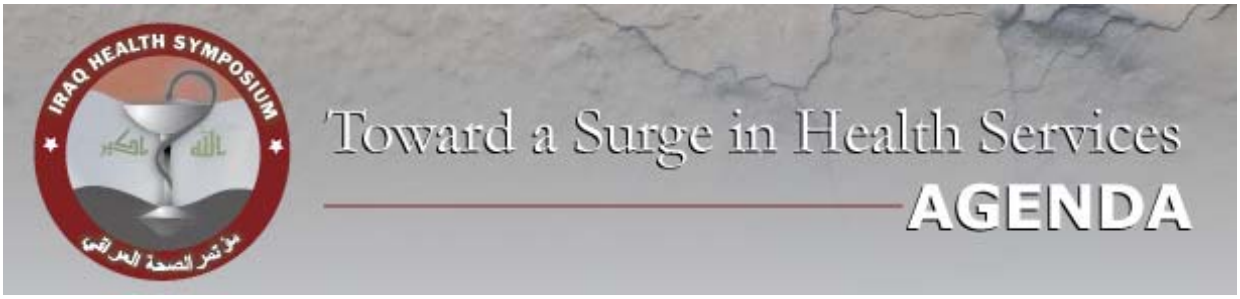
The Minister of Health of Iraq and the Kurdish Regional Government Minister of Health both highlighted the new opportunities made possible by the improved security situation. Hand-in-hand with the new opportunities, they expressed their dedication to self-determination. They intend to set their own priorities and define and resource their requirements, as would any sovereign nation. The MOH leadership, responsive to the health needs of Iraq's people of all sects and ethnicities welcomed the offers of NGO and international assistance on the road to self-sufficiency.

The findings and Proceedings of the Symposium will be disseminated and published. Similar efforts to review Afghanistan health system issues and AFRICOM's emerging and evolving civil-military public health mission are planned. The findings and

proceedings of the Symposium will inform ongoing DoD efforts to improve medical stability operations capabilities.

Appendix A:

Iraq Health Symposium – Agenda



Co-sponsors: Embassy of Iraq, Department of Health and Human Services, Office of the Assistant Secretary of Defense for Health Affairs/Department of Defense

Dates: May 20-21, 2008
Host: Institute of Medicine/National Academy of Sciences
Location: National Academy of Sciences Auditorium 2100 C St. N.W. Wash DC

Goals:

- Introduce the new Iraqi Minister of Health to key stakeholders
- Share updates regarding Iraq security situation and Iraq health sector issues, initiatives, and challenges and discuss goals and objectives for ongoing efforts
- Promote a 'surge' in health services in Iraq to capitalize on recent security gains
- Promote and facilitate NGO, private sector, international donor and academic engagement in and partnership toward the Iraqi health sector.
- Inform Iraqi Minister of Health's upcoming strategic planning conference in Iraq this summer

Agenda:

Tuesday, May 20, 2008
0800 – 0830 AM

- Arrival/Registration

0830

- Invocation, Dr. Mahmud Thamer

0830 – 0835

- Welcome – Dr. Ralph Cicerone, President, National Academy of Sciences

0835 – 0845

- Introductory Remarks – H.E. Samir Sumaida'ie, Iraqi Ambassador

0845 -- 0855

- Introductory Remarks/Department of Defense perspective – Dr. Stephen Jones, Principal Deputy Assistant Secretary of Defense for Health Affairs

0855 – 0905

- Introductory Remarks/Introduction of H.E. Minister of Health – Tevi D. Troy, Deputy Secretary of Health and Human Services

0905 -- 0925

- Keynote address – H.E. Dr. Salih Al-Hasnawi, Minister of Health/Iraq – Iraq MOH perspective re health sector issues, initiatives, challenges, progress, and reforms

0925 - 0940

- Symposium background/administrative matters – Dr. David Tarantino

0945 – 1000

- Break

1000 – 1015

- Dr. Zryan Yones, Kurdish Regional Government Minister of Health

1015 -- 1045

- International Organizations Perspectives – Dr. Naeema Al Gasseer/World Health Organization, Dr. Akiko Maeda/World Bank

1045 – 1100

- Non-Governmental Organization perspective – Dr. Rabih Torbay, International Medical Corps

1100 -- 1115

- US Government Support to Iraq's Health Sector – Dr. Bruno Himmler, Health Attache, US Embassy, Iraq

1115 -- 1125

- Civil-Military Health Issues – Col Joseph Caravalho, Multi-National Force – Iraq Surgeon

1125 – 1215

- International Perspectives – Baroness Emma Nicholson/EU Parliament and AMAR Foundation, Nickolay Mladenov/EU Parliament, Robert Sloane/UK DOH

1215 – 1300

- Lunch

1300 -- 1350

- Panel Discussion II – Iraq health sector strategic planning issues, support to Ministry of Health strategic planning efforts and upcoming conference in Iraq. Panel will discuss health sector strategic planning – including Master Planning - challenges, approaches, and recommendations
    - Panelists: H.E. Dr. Salih Al Hasnawi/Iraq MOH, Dr. Naeema Al Gasseer/WHO, Dr. Akiko Maeda/World Bank, Dr. Zryan Yones/KRG Minister of Health

1350 -- 1440

- Panel Discussion III – Health Sector Financing/National Health Accounts. Panel will discuss health sector financing, national health accounts, and national health insurance approaches and challenges
    - Panelists: Dr. Akiko Maeda/World Bank, Dr. Naeema Al Gasseer/WHO

1440 – 1500

- Break

1500 -- 1600

- Panel Discussion IV – Development and use of Clinical Guidelines in Iraq. Panel will discuss the development and use of clinical guides in international settings and in Iraq
    - Panelists: Dr. Eman Al Emami/Iraq MOH, Jean Slutsky/AHRQ, Dr. Emily Chew/NIH

1600 -- 1700

- Panel Discussion V – Inter-ministerial cooperation, health support to Iraqi Security Forces. Panel will discuss current and potential future efforts toward inter-ministerial cooperation on health issues, including health support to the Iraqi Security Forces
    - Panelists: H.E. Dr. Salih Al Hasnawi/Iraq MOH, Dr. Hadi Al Khalili/Iraq MOHE, MOD rep, Dr. Bruno Himmler/US Health Attache

1700 – 1705

- Project Hope perspective – Dr. Hal Timboe

1705 – 1730

- Iraq Embassy Perspective and Introduction to Reception/Cultural Event – Dr. Hadi Al Khalili, Cultural Attache – Embassy of Iraq

PM

1730 -- 1930

- Reception/Cultural Event (same location)
    - Appetizers, refreshments, cultural entertainment

Wednesday, May 21, 2008

0800 - 0830 AM

- Arrival/Welcome

0830 - 0840

- Iraqi Red Crescent Perspectie – Dr. Said Hakki, President, Iraqi Red Crescent

0840 -- 0930

- Panel Discussion VI -- Mental Health Issues. Panel will discuss mental health challenges, ongoing initiatives, and recommendations regarding mental health in Iraq
    - Panelists: Dr. Mohamed Al Kureishi/Iraq MOH, SAMHSA, Dr. Keith Humphreys/Stanford, Dr. Anita Everett/Johns Hopkins, Dr. Husam Alathari/NVMHI, Scott Portman/Heartland Alliance

0930 -- 1015

- Iraqi Refugee and IDP Health Issues -- Dr. Aqeel Sabbagh/Iraq MOH

1015 – 1045

- Extended Break

1045 -- 1100

- Iraq MOH issues – Dr. Mahdi Abdul Saheb/Iraq MOH

1100 -- 1145

- Panel Discussion VII -- Promoting partnerships with NGOs, academia, private sector. Panel will discuss challenges, ongoing initiatives, and recommendations concerning the promotion of health sector partnerships with NGOs, academia, and private sector
    - Panelists: Michele Cato/International Relief and Development, Dr. Randall Williams/Medical Alliance for Iraq, Mr. Scott King, Fred Gerber/Project Hope

1145 -- 1230

- Concluding Panel – Conclusions/Next steps/Way ahead
    - H.E. Dr. Salih Al Hasnawi/Iraq MOH, H.E. Samir Sumaida'ie/Iraqi Ambassador, Dr. S. Ward Casscells/ASD HA, Dr. Zryan Yones/KRG Minister of Health, Dr. Bruno Himmler/US Embassy-Iraq

1230

- Adjournment

NOTE: This is a closed press event. Official photography only.

"He who has health has hope,
and he who has hope has everything"
-- Arab Proverb

Facilitators/Points of Contact: Dr. Hadi al-Khalili, Dr. Shakir Jawad, Dr. David Tarantino – dtarantino@usuhs.mil

Iraq Health Symposium
Invited Participants:

Iraq Health Symposium: Open to all relevant stakeholders by invitation

- Iraq MOH – Minister of Health, other MOH reps as available and appropriate – including Kurdish region and other governorate reps
- Iraq MOD – representative of ISF SG
- Iraq MOHE
- Other Iraqi government reps as available and appropriate (MOP, MOF)
- Iraqi medical association/specialty society reps
- Iraq Red Crescent
- Iraq Embassy in USA – Ambassador, Health Attache
- Regional representatives – Jordan Embassy or Ministry of Health, others as available and appropriate
- Dept of HHS – Asst, Secy for Health, OGHA, PHS, SAMHSA, CDC, CDC/GID
- DoD -- OASD Health Affairs, OSD Policy, Joint Staff SG, line representatives, JFCOM SG, Service SGs, Central Command SG, Civil Affairs reps, MNFI-SG, MNSTC-I SG, BG Wolff, MG Granger, Col Gagliano
- Dept of State, PRT reps
- US Embassy Baghdad
- USAID – Global Health, Iraq regional
- NSC
- Coalition partners (UK, Italy, EU)
- WHO
- World Bank
- ICRC
- Iraqi-American Medical Society, Arab-American Medical Association
- Interaction
- IMC, Project Hope, CARE, Doctors Without Borders, MEDACT, CIR
- Other NGOs (including Iraqi NGOs)
- Medical Alliance for Iraq
- Institute of Medicine
- Representatives of medical/academic institutions – Johns Hopkins, Harvard/Mass General
- Representatives of US medical societies/organizations/journals – AMA, etc…
- Institute of Medicine

- Rand, CSIS, USIP
- Private sector representatives
- Mr. James Haveman, Mr. Bob Goodwin - former Senior Advisor for Health, Chief of Staff - CPA
- Members of Health Crises Contact Group (Note: Conference will be organized as a Health Crises Contact Group meeting)
- Representative of International Compact with Iraq Secretariat

Appendix B:

Iraq Health Symposium: Summary of Remarks

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May 20, 2008

Opening Remarks

Invocation – Dr. Mahmud Thamer

Welcome – Dr. Ralph Cicerone, President, National Academy of Sciences

Iraq Ambassador to the United States, H.E. Samir Sumaida'ie

Iraq has been subject to ideologies of hatred, as well as dark forces that want to keep us from establishing a stable and democratic government. However, despite these forces, the essence of Iraqi society is now beginning to emerge; a stable and thriving Iraq is no longer a "pipe dream." With new leadership, we are heading in a new direction. With the rejection of terrorism and violence, Iraq has a new spirit. Our government is carefully deliberating how to put Iraq back "on the right track." I would like to encourage you to put your faith and trust in the Iraqi people, as Iraqis will surpass your expectations.

Principal Deputy Assistant Secretary of Defense for Health Affairs - Dr. Stephen Jones

The essence of teamwork is coordinating individual accomplishments toward organizational achievement. We are confident that Dr. Salih Al-Hasnawi, Iraq's Minister

of Health, is the right person to do exactly that. Among Dr. Al-Hasnawi's goals are increasing physician salaries, developing human resources, establishing primary care, and increasing Iraq's hospital capacity. To this end, in January, a Continuing Medical Education / Continuing Professional Development (CME/CPD) forum was held in Baghdad. Also, Dr. Al-Hasnawi seeks to increase revenue to modernize the Iraqi health care system.

The Department of Defense has a keen interest in supporting of Iraq's essential services and increasing the capacity of Iraq's Ministry of Health. Now is the time for improvements in Iraq's health system, and a remarkable opportunity to make significant strides. Together, we will strive for improvement of overall health status in Iraq.

Deputy Secretary of Health and Human Services - Dr. Tevi Troy

Health is a common goal that brings everyone together. Being a physician is difficult in any circumstances; however, in present-day Iraq, it is a monumental task. Iraq's physicians must provide health care services for Iraq's people, while in an environment of degraded and vastly inadequate health care infrastructure. Many new efforts are needed to assist Iraq's physicians and the reconstruction of Iraq's health care system. Innovative efforts, such as the telemedicine networks at Johns Hopkins and Harvard Universities, are to be encouraged and developed further. Despite these challenges, Iraq's Ministry of Health should strive to build capacity to treat each individual, and particularly those affected by trauma. We would like to praise the work

of Dr. Salih and we look forward to assisting him in this task of rebuilding health services in Iraq.

Keynote Address –

His Excellency, Dr. Salih Al-Hasnawi, Minister of Health, Iraq

In the 1970's Iraq had one of the finest health systems in the Middle East. However, now Iraq is facing many challenges in the health sector, and must manage many competing priorities. Currently, emergency medicine is the first priority in Iraq. There is a severe shortage of medical supplies for Iraq's emergency departments, and also a need for sustainable supply and distribution of medicines and supplies for Iraq's Primary Health Clinics.

The overall goal is to increase capacity in each of these areas, as well as to improve the quality of services. There are particular needs in mental health care, shortages in many medical specialties, a need for rehabilitation of Iraq's hospitals, and improvements in patient safety. Additionally, there should be a change in the focus of health care providers from secondary and tertiary care, to primary care services and community health. There is an urgent need for collaboration with universities, NGOs, and various governments to attain these goals.

In the third week of June, there will be a strategic planning conference on reform of the health care system in Iraq. The first step towards reform will be enacting key legislation to support and expand health care services in Iraq. The common end goal is to establish health for all Iraqis, regardless of ethnicity, religion, or political persuasion.

Iraq Health Symposium Background - Dr. David Tarantino, MD, Commander, Medical Corps, United States Navy

This symposium is the latest in a series of events co-sponsored by the Department of Defense to share information on the status of healthcare in Iraq, following the initiation of U.S. military operations in 2003. The first symposium was held in August of 2004, and was entitled "Symposium on Reconstructing the Healthcare system in Iraq: Lessons Learned and Future Prospects." This event was co-sponsored by the Institute of Medicine, the Department of Defense, and the Iraqi Ministry of Health. Distinguished guests at this summit included Iraq's outgoing Minister of Health, Kudair Abbas, and the incoming Minister of Health, Dr. Alwan. A report of this event is available on the Institute of Medicine website, at http://www.iom.edu/CMS/3783/21530.aspx.

In January of 2007, the "Iraq Health Sector Reconstruction After-Action Review" symposium was held, co-sponsored by the Department of Defense, the Department of Health and Human Services, and the Uniformed Services University of the Health Sciences. This retrospective effort produced a comprehensive analysis and after action review of health sector reconstruction efforts to date. The report from these proceedings is available at http://www.cdham.org/Resources/Reference/tabid/84/Default.aspx. Today's (prospective) symposium, entitled "Toward a Surge in Health Services," is dedicated to determining the way forward in continuing reconstruction and rehabilitation efforts for Iraq's health care system.

A summary of the findings from the last symposium are as follows. The overall priority recommendation was improvement of the security and stability in Iraq; recognizing health as a critical component of any stabilization and reconstruction effort. Security is key to maintaining essential services in Iraq, which is in turn facilitated by stable governance and a functioning economy. An increase in so-called "constructive politicization" of the Iraqi Ministry of Health is urgently needed, as well as increased funding, accountability, and skilled technocrat leadership. Iraq's MOH should also pursue increased inter-ministerial and supra-ministerial cooperation in carrying out its endeavors, to include cooperation with the Ministries of Defense, Interior, Finance, and Higher Education. A National Health Sector Leadership Summit should be held. Reform of the Ministry of Health's Facilities Protection Service is urgently needed, as is reform or augmentation of the medical procurement and distribution system, Kimadia. An increased focus on Emergency Medical Services is also urgently needed.

Other recommendations from the 2007 symposium include increasing health expertise and representation on Provincial Reconstruction Teams (both US Government and civilian). Completion of the "Supplemental" health facilities construction projects is a high priority, to include 142 primary health care centers and the rehabilitation of 20 hospitals. This effort should include staffing and life cycle management. Promotion of health partnerships and linkages between US and Iraqi medical societies, academic institutions, and the private sector are also needed. Some examples include the collaborative Iraqi/SAMHSA (US Substance Abuse and Mental Health Services

Administration) efforts on mental health, the efforts of the Medical Alliance for Iraq, and Project Hope's work in support of the Basrah Children's Hospital. These and other such initiatives should utilize technology and distance learning to multiply their effects. Finally, it is necessary to stimulate international dialogue and action on how to improve Iraq's health sector.

This week's symposium, "Toward a Surge in Health Services," is a collaborative effort between the Embassy of Iraq, Iraq's Ministry of Health, the Department of Health and Human Services, and the Department of Defense. In addition, it serves as an event of the Health Crises Contact Group, which is co-chaired by HHS, DoD, the International Medical Corps, and Project Hope. The goals of this symposium are to introduce the new Iraqi Minister of Health to key stakeholders, share updates regarding Iraq's health sector issues, initiatives, and challenges and discuss goals and objectives for ongoing efforts. Other goals are to promote a 'surge' in health services in Iraq to capitalize on security gains, and to promote and facilitate NGO, private sector, academic and international engagement in and partnership toward the Iraqi health sector. Finally, these proceedings will also inform the Iraqi Minister of Health's upcoming strategic planning conference in Iraq this summer.

International Organizations Perspectives (Dr. Maeda, Dr. Al-Gasseer, and Mr. Torbay)

Dr. Akiko Maeda, World Bank

The World Bank is a development agency that is focused on "inclusive development" and "poverty reduction." The World Bank can be used as an instrument in a number of ways, including assistance to fragile and post-conflict countries. The hope is that these countries will move to the middle/high income bracket.

Assistance it is not one-size-fits-all. The World Bank struggles to find the best instrument that is user friendly and flexible. In addition, assistance must be partnered with good governance to move more quickly. In fragile and post-conflict countries, the challenge is how to move from humanitarian assistance to a development stage (World Bank is better suited for development).

The goal of World Bank assistance is to create a strong safety net, not to enter into a welfare mode. For example, outsourcing Emergency Medicine may prelude opportunities to develop local capacity. The World Bank also helps to re-establish central services in order to re-bond state and citizens and to increase security.

The Bank has a number of comparative advantages in fragile states, such as experience in large-scale reconstruction, a multi-sectoral approach to public sector management/governance, multi-donor trust funds, and flexible post-conflict funds for NGO's. Experience with public sector management has shown that there is a need for

more accountability. Pharmaceutical supply, for example, requires good governance of the procurement system.

In Iraq, the focus is on the emergency response to urgent needs, and, as of yet, has not shifted to medium and long term objectives. The World Bank is working collaboratively to provide financial assistance and technical expertise. Ongoing World Bank supported projects include, the Emergency Health Rehabilitation Project, a catalyst/template for other emergency health projects, the Emergency Disability Project, the Emergency Health Assistance Program to the Burn Unit in Karama Teaching Hospital Baghdad, the Emergency Assistance Program for Primary Healthcare in the Southern Iraqi Marshlands Project, and the upcoming Regional Emergency Health Response Project in Kurdistan. The World Bank is also providing technical assistance through health policy and master planning seminars, capacity building, and sustainable financing.

The World Bank looks forward to collaborating in these areas and sharing experiences and lessons learned from other transitional countries with similar challenges.

Dr. Naeema Al Gasseer, World Health Organization, Iraq

We should be proud that healthcare for Iraq is increasingly in the hands of the Minister of Health and that Dr. Al-Hasnawi is the leader. There is no WHO strategy for Iraq as the strategy comes from the Iraqi Minister of Health.

In 2003/2004, the direction of healthcare in Iraq was outlined, and, with the approval of the President, it was decided that a primary health system would be

advanced. The vision was for an accessible, affordable, available, safe, open, scientifically-based and financially sound system.

WHO views healthcare as a bridge to peace. WHO provides humanitarian assistance (short-term), rehabilitation (medium-term), and development/technical assistance (long-term) in order to increase access to quality health services, reduce under-5 and infant mortality and morbidity, enhance disease control, enable healthy lifestyles, and ensure emergency preparedness and response. With help from WHO and other organizations, the public health system in Iraq has controlled avian influenza, emergency medicine is improving, and drug safety is increasing, among other gains.

The 2003 Iraq Trust Fund brought the UN and NGO's together on a diversity of programs. Also, there is a wealth of data available via reports and surveys, such as the Iraq Family Health Survey, the Nursing and Midwifery Strategic Plan, Chronic Non-Communicable Diseases Risk Factor Survey, and Mental Health System in Iraq report.

Other areas of progress include: Primary/Community-based healthcare, a Central Public Health Lab that has been recognized for several international requirements, information technology, equipment, security, school health screening (began in Basrah), a water quality control center, a decrease in Leishmaniasis, a decrease in malaria, polio immunization days with MOH's own vaccine stockpile, a decrease in measles, cholera interventions, and capacity building.

Nonetheless, there are a number of challenges to healthcare reconstruction. Security continues to be a barrier requiring heavy protection of assistance teams, there has been a decrease in international UN staff because 25 days advance request is required

for travel to Iraq, and Provincial Reconstruction Teams need improved coordination with and guidance from the MOH.

In summary, assistance organizations and agencies must trust the locals. Hope is there; the surge is there. Collaboration is the theme.

Civil-Military Health Issues in the Iraq Theater of Operations - Colonel Joseph Caravalho, MNF-I Surgeon

2007 was the "Year of Security" for the Government of Iraq. Strategic efforts were concentrated in building capacity of the Ministry of Defense and the Ministry of the Interior. 2008 is meant to be the "Year of Essential Services" in Iraq, with establishment of power, water, sewer, housing, and trash services among the highest priorities. Establishment of these services helped to improve the public health of the Iraqi people; however, they were not specifically focused on the provision of healthcare to the Iraqi people. As we approach 2009, we hope to focus more directly on building capacity in health services.

The Iraqi Ministry of Health operates in a complex environment, with coordination necessary between US forces, the central and provincial governments, all in the background of the many competing forces of politics, NGOs, bureaucracy, sectarianism, public opinion, corruption, security concerns, geographic challenges, the economy, and others.

The overall goal of reconstructing health is to establish Iraq as a regional leader, with a healthcare system that provides comprehensive and equitable care to all its citizens. Rebuilding the pillars of human resources, infrastructure, and good governance, as well as enhancing legitimacy and security, will assist in achieving this goal.

At the strategic level, we have established a "Medical Fusion Cell," with representatives from not only key leaders in the Government of Iraq and key Iraqi ministries, but also from the operational and tactical level. Representatives from the operational level include regional healthcare and military leaders; at the tactical level, representatives from the provincial governments, as well as provincial reconstruction teams and non-governmental organizations are included.

Some strategies for the improvement of human resources in Iraq include encouraging physician reconciliation and repatriation, providing continuing medical education, and rebuilding Iraq's health education "pipeline." Also important in this effort is the development of healthcare "extenders" such as nurse practitioners and physician assistants. Strategies for improving population health include initiating a preventive medicine campaign, facilitating inter-agency operations, and enhancing emergency preparedness. Strategies to improve infrastructure include rebuilding the pharmaceutical and medical supply management system, improving the resource management system, and streamlining business operations. Several strategies to improve governance include expanding the Ministry of Health's authority and responsibilities, facilitating interdependence of the central agencies in Iraq's government, and clearly establishing which authorities and responsibilities will be centralized, versus decentralized.

Mr. Rabih Torbay, International Medical Corps

Since 1984, IMC has worked in health sector relief, capacity building and training in 25 countries, with 8,000 staff. Having worked in Iraq since 2003, we have built strong partnerships with Iraqi ministries and have responded to emergencies without losing sight of capacity and sustainability objectives.

There are a number of important issues facing Iraqi healthcare. Access is limited due to inadequate facilities and inadequate distribution of services. With respect to quality, physicians are generally qualified and eager to learn, but there is room for improvement. Primary healthcare services are inadequate, and there are nursing shortages, limited medical care in ambulances (as often there is just a driver), an inefficient pharmaceutical and medical supply distribution system, and mental health challenges at the professional and community level. There is a need for a healthcare strategy for the country; Minister Al-Hasnawi's June strategic planning conference will be critical. This strategy must be led by the MOH with political will behind it.

My recommendations are that there is a decentralized approach to healthcare and a rapid scale-up of service delivery. Also, quality norms and standards should be established for accreditation. Primary, secondary and tertiary healthcare should be strengthened. IMC is working with the MOH on EMT training and CME for Emergency doctors as this is a major need. In addition, IMC, MOH and MAI are working together to train physicians (third conference is this July) and establish a CME program in Jordan,

Syria, and Lebanon for those who left Iraq. Finally, NGO's in Iraq must partner with the health ministry and Iraqi health professionals.

Dr. Abdul Rahman Yones, Minister of Health, Kurdish Regional Government

Kurdistan has unique challenges and strengths due to its multicultural richness and size. The constitution of Kurdistan covers 4.2 million people – the size of France. In contrast to other regions in Iraq, there is peace and security in Kurdistan. However, there is insufficient funding for services, especially, since 2003, during which time basic health services have been underfunded. For instance, the last time a hospital was built was in 1983-84. There are 0.8 beds per 1000 people compared to 2.5 beds per 1000 people in neighboring countries. Under Saddam Hussein, there was poor training and morale. Consequently, medical knowledge today is inferior. Political parties exclude health as evidenced by the 60 dollars per head per year spent on healthcare compared to 550 dollars per head per year in Jordan. Instability has plagued the Iraq MOH as there have been 3-4 ministers in the last few years. Thankfully, Dr. Salih is an open-minded leader.

Because of lack of funding and manpower, the Kurdistan MOH is targeting the leading causes of death – heart disease, accidents, and cancer. Angiography centers are being built, plans are underway for acute emergency centers and ambulance centers in major cities (there is nothing currently), and cigarette smoking has been banned throughout Kurdistan for cancer prevention.

MOH initiatives are addressing three main areas: 1) prevention sites with a focus on maternal and child health; 2) legislation, such as the cigarette ban and a required test for thalassemia (1/4 of the population carries the gene) prior to receiving a marriage certificate; and 3) improved social services, such as an increase in disability allowance and child leave.

My recommendations are that we spend more on primary, not secondary healthcare and that we increase private sector involvement.

Health Diplomacy and U.S. Government Support to Iraq's Health Sector - Bruno Himmler, U.S. Health Attaché, Iraq

The health attaché provides advice and guidance to MOH and the Government of Iraq on how to improve access and quality and oversees Coalition health sector projects. Top priorities for the MOH include improving the medical supply system; improving facilities; monitoring medication, blood products, and food safety quality control; and enhancing the quality and quantity of medical staff. US Government priorities are focused on finding synergies in the following areas: healthcare professionals, supplies and drugs, and hospitals and clinics

With respect to facilities, construction of US-funded primary healthcare centers will be complete by September 2008. The Basrah Children's Hospital, a state-of-the-art hospital with a special emphasis on pediatric oncology, has been under construction since

2004 and is expected to be complete this year. This hospital will help Iraqis regain healthcare leadership in the Middle East. The Al-Furat General Hospital is being rehabilitated and the Ibn Sina Hospital is being readied for the MoH.

There are other accomplishments of note. Capacity building projects include the creation of an academy of health and science building. Emergency care is improving, mobile blood supply and mobile X-ray capabilities are increasing, and Kimadia is being reformed. The Minister of Defense is assisting with midwifery training and the establishment of prosthetic clinics.

International Perspectives (Nicholson, Mladenov, Sloane):

Baroness Nicholson, Member, EU Parliament

Baroness Nicholson speaks today from a variety of perspectives: as a British and European politician with a long-standing commitment to health improvement globally and nationally; as a Health Advisor to the Prime Minister and Government of Iraq, an appointment which she was honoured to accept; as World Health Organization Special Envoy, with a brief to advance Health as a Tool for Peace and Development internationally, but with a special focus on Iraq; and as Chairman of the newly-formed European Parliament's Delegation for Iraq.

Health is a human right and is second in significance only to security. The issue of public health has become the thermometer by which electorates judge their governments. An important question to address is what type of health system is needed in Iraq? This

system should be one in which the stewardship function of the Ministry of Health for health improvement and service delivery will be greatly strengthened. It must be pluralistic, transparent and democratically accountable to the public. The private sector may play a full role under Ministry and IMA stewardship. It should founded on values and principles, and be open to all. It should be based around the public health perspective and be focused on affordable, sustainable, basic health care provision, addressing the real needs of the whole population. Care must be accessible in economic and practical terms, comprehensive, and of good quality. The new service must offer health promotion and disease prevention, as well as therapy and rehabilitation. More primary health clinics are required, and clinics should provide enhanced care packages such as care for mothers and children and educational and preventive care for school children. Patient health records must be introduced at primary health level to form a basic building block of the system. Peer group scrutiny and training is needed to enhance the healthcare workforce.

Baroness Nicholson founded the AMAR International Charitable Foundation in 1991, based on the principles about which she had just spoken. The Foundation's priority is the provision of basic, sustainable healthcare. The Foundation works with governments and the UN in a number of issue areas, including refugee camps, clean water, maternal/child health, and primary healthcare, always focusing on the involvement and fullest participation of local communities and the employment and training of national staff. In addition to conducting health surveys, they have provided services including 1.3 million medical consultations, immunizations, food, clothing and clean water to refugees.

Since 2003, AMAR has been active in Iraq with health worker training/capacity building, fixed and mobile primary health care centers, women's health volunteer programs, health education in schools, and 1.5 million medical consultations. AMAR carries out this work in full cooperation with national ministries.

As Iraq's health sector is re-built, principles and practical experience are of the upmost importance. Iraq can be a leader again with explicit values, such as universal public health and primary healthcare. An investment in health is an important contributor to peace and reconciliation, and the provision of basic health services is a uniquely stabilizing factor. This is a rare chance to partner the political will of the MoH with enhanced professional competence to create a public health sector built on service to the people of which all can be proud. In conclusion, the "political opportunity is now" and "it may never come again."

Central/Eastern Europe Perspective – Mr. Nickolay Mladenov, Member, EU Parliament

There are similarities between current day Iraq and Eastern Europe. For instance, Eastern Europe has seen a transformation from centralized to democratic healthcare and there is a mix of religions in both regions. A common vision for healthcare creates solidarity amongst individuals, families and state.

However, lessons learned from Eastern Europe highlight the need for political consensus to achieve this vision. For instance, in Bulgaria, numerous revisions to the health insurance plan have made its system practically inoperable. As such, Iraq needs

sustained, predictable, and competent health sector leadership. Slovenia is a successful example in that it had a consistent team for healthcare reform for 10 years.

Also, healthcare reform must by holistic with other sectors. In Bulgaria, health and pension reform all occurred within 4 years.

Finally, communicating reform is important. Leaders must explain that healthcare reform is only one aspect of rebuilding the system. Culture, tradition, and personal responsibility are other aspects that should be emphasized. For example, look more carefully at Bosnia as a model for individual responsibility.

In summary, once plans are agreed upon, it is a big mistake to change along the way – "don't reform reforms". The single most important recommendation is the need for consensus amongst politicians

UK Department of Health Perspectives - Mr. Robert Sloane and Dr. Keyvan Zahir

The UK Department of Health has developed, with appointed contractor HLSP, the largest UK DoH international partnership program to date involving 400 physicians. The 2 year program entails training Iraqi physicians, selected by an MoHE and MoH umbrella organization through placements in the United Kingdom. Selection for this program is competitive. Royal Colleges assist HLSP in developing the syllabus and British Medical Journal Open Learning provides access to all journals and interactive modules. The Royal College of Nursing, the National Health Service in the UK, and Crown Agents are also involved.

The UK DoH is a third of the way through the program with over 100 physicians having been trained. There is also incorporated within the clinical training and development program a specialized program for policy makers. The former (4 thus far) involves a total of eight weeks in the UK – six of these are clinical training and the other two are related to change management and train the trainers workshops. The policy makers program (1 thus far) trains senior MoH leaders in formulation of strategy, implementation, development and integration, as well as reviews with policy leads and operational attachments. Policy makers learn how the various components of an integrated health care system fit together.

Panel Discussion II: Iraq Health Sector Strategic Planning Issues (Minister Al-Hasnawi, Dr. Al-Gasseer, and Dr. Maeda)

His Excellency, Dr. Salih Al-Hasnawi, Minister of Health, Iraq

Iraq's Health Situation

Iraq has an urgent need for primary health care. There are 1,136 primary health care clinics (PHCCs) in Iraq. However, only 733 of these are supervised by a physician; the remainder (403) are operated without a qualified physician present. There is one PHCC for every 22,659 Iraqis, indicating a severe shortage of adequate primary health care services for Iraqis.

However, not all health news coming from Iraq is grim. Several key public health indicators have improved since the fall of the regime of Saddam Hussein. The infant mortality rate in Iraq - 34 per 1000 - is the lowest in 50 years, and drastically improved from the rate of 108 per 1000 in 1999. Similarly, the under-5 mortality rate has decreased from 131 per 1000 in 1999 to 41 per 1000 as of 2006. Maternal mortality has sharply improved as well, from one of the worst in the world - 294 per 1000 - to 84 per 1000 in 2006, the most recent figures available.

Iraq has a total of 216 hospitals; 156 of these are public (43 of them teaching hospitals), and 60 of them are private. There are a total of 32,641 hospital beds in Iraq, or 11.3 per 10,000 people. This figure ranges by region, with 6.7 per 10,000 in Al Mothana governorate, to 16.5 per 10,000 in Basra governorate. There are a total of 1,660,114 surgical operations, 1,660,114 inpatient visits, and 19 million outpatient visits. There are a total of nearly 500,000 births in Iraqi hospitals each year.

There are a total of 20 million laboratory studies performed, 1.7 million radiographs, 825,000 ultrasounds, 65,000 CTs, and 26,000 MRIs. All of these studies are performed free of charge.

Iraq has a total of 4982 physician specialists, or 1.9 per 10,000; there are 11,012 non-specialist or general physicians, or 4.3 per 10,000 Iraqis. Among dental professionals, there are 349 specialists or .14 per 10,000, and 3116 general dentists, or 1.2 per 10,000. Among pharmacy professionals, there are 71 specialists, and 3268 non-specialists. Iraq has a total of 31,782 trained nurses, or 12.3 per 10,000. These nurses are predominantly male, with a male to female ratio of 4:1. There are a total of 35,863 health workers in Iraq, or 13.6 per 10,000, with a male to female ratio of 2.6 to 1.

Key future goals for public health in Iraq include increasing the number of hospital beds to 2-3 per 1000; implicit in this task is also the modernization of Iraq's hospitals. Other goals include improvements in patient safety, providing equity of services to all Iraqis, building Iraq's human resources in the health professions, strengthening medical and health education, and collaboration with non-governmental organizations in achieving all of these goals.

Dr. Akiko Maeda, World Bank

Strategic Planning for Health: A Conceptual Framework

In order to strengthen health systems, strategic goals must be defined. The strategic goals that the World Bank has proposed are the following: first, to improve health outcomes, with focus on equity and protection of vulnerable groups; second, to prevent poverty due to illness by offering financial protection for households and individuals; third, to ensure financial sustainability of health programs and consistency with sound macroeconomic and fiscal policy; and finally, to strengthen governance, accountability, and transparency in the health sector.

The health systems framework includes several components. First is the State, which has essential public health functions to include policy and regulation. Financing is another component of the health systems framework, which includes collection, pooling, redistribution, and purchasing. System Inputs are defined as knowledge, health workers,

pharmaceuticals, technology, and infrastructure. These two components combine to contribute to service delivery, which includes population-based programs, clinical services, and community-based programs. This in turn leads to improved health outcomes, financial protection, quality, and consumer choice. All of these functions take place as a result of the social participation and market demand of the citizens and community.

In order to make health services easier to deliver, it is necessary to achieve standardization and empowerment. Empowerment includes support for self-care and family-oriented care. Standardization includes population-oriented tests and guidelines to detect and address common health conditions such as reproductive health, HIV, TB, nutrition, child health, and malaria.

Health care planning should be based upon utilization and demand for health services, both actual and projected. An example scenario would be projecting the frequency of illness, consumption of medication, and use of health services in a four week period.

A framework for planning of health services is the "Health Master Planning." This is a planning tool for moving from strategic options to implementation of a health plan. Health Master Planning serves to establish appropriate service standards and guidelines to ensure affordable, effective, and safe health care services. It also serves to ensure effective distribution of health care services, based on existing health services in public and private sectors, as well as future investment plans. Such planning also serves to improve the physical and functional design of facilities, and identify human resources, operational, and investment requirements.

The Health Master Plan is used at various levels: the National, Regional, District, Municipality, Community, and Facility levels. A number of factors are taken into account, to include the demographic and epidemiologic profile, socio-economic status, geographic characteristics, as well as future investment plans and economic projections. The bottom line is to define the basic health package - a minimum package of health services to be provided at each level of care. It is also necessary to translate this basic package into investment and operational requirements, to include physical infrastructure, staffing, equipment, supplies and operating costs.

A part of the health master plan is health support services. This includes an ambulance service system, establishing blood banks, public laboratories, central medical supply stores, repair and maintenance services, and medical waste handling. The establishment of public health programs is also needed, to include health surveillance, school health programs, maternal and child health (especially immunization), and health promotion and education. Programs are also needed regarding environmental health, food safety, water and sewage, as well as road safety. Finally, a linkage to social protection programs, such as a "safety net" to support disadvantaged groups is necessary. This includes disabled persons, sheltered housing, vocational training, and care for the elderly.

Dr. Naeema Al-Gasseer, World Health Organization

The World Health Organization is ready to provide lessons learned for the Iraqi Ministry of Health. There is a need to develop the health work force, to create the

technical competence that is essential in health systems development. In these efforts, information should be shared as widely as possible. In order to have a well-functioning health system, it is necessary to have strong leadership and governance, as well as accountability of the Ministry of Health. It is also necessary to integrate the services of NGOs in these efforts. Recently, the WHO held an 8 day learning course, in conjunction with the Ministry of Health and the CDC. These courses emphasized principles of governance and leadership, as well as the importance of public health.

One question that was raised was if there was a plan to engage NGOs in these efforts. Until the security situation improves, NGOs that are not yet willing to enter Iraq can be based in Kurdistan, and UN agencies could locate in Kurdistan.

Panel Discussion III: Health Sector Financing and National Health Accounts (Dr. Maeda, Dr. Al-Gasseer)

Dr. Naeema Al-Gasseer, World Health Organization Representative in Iraq

Spending on health has been increasing worldwide and in the Eastern Mediterranean region. These increases in expenditures have been spurred by improvements in medical technology, population growth, income growth, and overall

health system development. However, there are increased inequalities in health spending between and within countries. Thus, health care financing is at the center of most health policy reforms.

Despite these increased expenditures, there is an under-utilization of health facilities and health professionals in the Eastern Mediterranean region, as well as a high share of expenditures on medicine. There is also an extensive reliance on fee-for-services as a method of provider payment. Improvement in health care financing can lead to financial resource generation, as well as economic efficiency and equity. Elements of economic efficiency include allocative efficiency (producing the "right thing") and technical efficiency (producing "things right").

Functions of a health care financing system include collection of funds, pooling of funds, and purchasing of needed items, equipment and infrastructure. Financing reforms need to deal with revenues, risk pooling, management of funds, and payment. Smooth operations in all of these areas will lead to efficient health services provision.

Some key concerns in health care purchasing include efficiency, access, equity, quality and monitoring. The WHO's response to this is the development of analytical tools and norms (National Health Assessment, cost assessments, household expenditure analyses, development of payment schemes, data collection, technical documents, establishment of a website, and more). Capacity building in this regard is necessary both at the regional and the country level. The WHO can also serve as an advocate, provide technical support, and help build alliances.

Some issues in health care financing for low-income countries, which constitute 46% of the Eastern Mediterranean Region, are low health status, an early stage of the

epidemiologic and demographic transition, and a large informal sector for health care. Among these countries, life expectancy at birth is 58.2 years, health care expenditure as a percentage of GDP is 2.9%, and total health care expenditure per capita is 20 dollars. Such countries also have few "self-help" mechanisms and also are in need of external assistance.

Some options for reforms include revitalization of public infrastructure, development of social health insurance (a formal sector), and improvements in contracting with NGOs and the private sector. WHO's role includes the development of economic tools (cost effective interventions, hospital cost analyses, financial simulation models, etc.). WHO's role in technical cooperation includes technical assistance in policy development, capacity building in health economics and health care financing, institutional development in the Ministry of Health, and the development of analytical tools. The WHO also seeks to build partnerships for health development with international organizations, bilateral institutions, academia, and the private sector.

Some conclusions in the area of health care financing include the necessity to strengthen institutional weakness through analytical tools, economic tools, and technical support. The value of equity of health care should be upheld, and to that end universal health coverage supported. There is also some interest in prepayment schemes, as most of health sector reforms focus on social health insurance development and strengthening. There should be an expansion of employer-based insurance, strengthening of public infrastructure, and a policy debate on health care financing among funding agencies.

Health Financing and National Health Accounts - Dr. Akiko Maeda, World Bank

Some strategies of measuring health systems performance include monitoring revenues, health services performance, and health outcomes. In the area of revenues, distribution effects, administrative efficiency, and risk-pooling function should be measured. In the area of health services performance, allocative efficiency, micro-economic efficiency, and clinical efficacy should be measured. In the area of health outcomes, aggregate health measures, disease-specific indicators, and socio-economic factors should be measured.

The flow of funds through a health system is complex and multi-dimensional, from sources to financing intermediaries, to providers. National Health Accounts help to define financial flows from sources to service outputs. A general budget for health care financing is most desirable (versus a payroll tax, which tends to be regressive.)

A national health account (NHA) is an internationally accepted methodology and is one of the essential tools for policy makers in the health sector. NHAs provide a comprehensive financial picture of countries' health sectors. They describe the flow of funds and answer the following questions: Who spends in the health sector, how much do they spend, and what types of health services are bought? NHAs are desirable due to the limitations of traditional data sources. Government budget data are organized by administrative categories. Information on health spending is often incomplete, especially in the private sector. Spending data are often fragmented, and gaps or duplication might exist. Inconsistent classifications and definitions undermine the validity of comparisons.

Some options for health financing in developing a medium-term strategy are as follows. First the Ministry of Health must define revenue sources, to include general revenues, payroll contributions, and other public financing mechanisms. The Ministry must also target public subsidies, such as those for public health programs and other "safety net" health care programs. The ministry must manage the financial risk pool, and determine exactly what agency manages it. Potential instabilities in revenues must be addressed, and financial reserves established. Additionally, introducing new provider payment systems for strategic purchasing is necessary.

Gaps in knowledge and processes must also be addressed. An analysis of existing information used to make decisions should be accomplished, as well as dissemination of information, and participation of stakeholders in information gathering and analysis. Information about private expenditures and services on health should be made available, as well as expenditures outside the health sector that have broad public health impacts (such as water and sanitation).

The challenge of health care financing in Iraq must be addressed within the societal and organizational context. The impact of conflict on supply of services and demand behaviors is profound. Establishing a solidarity-based behavior and trust in public institutions is critical to providing stable health care financing.

Panel Discussion IV: Development and use of clinical guidelines in Iraq (Dr. Asim, Jean Slutsky, Dr. Chew)

Director General for Technical Affairs, Iraq Ministry of Health - Dr. Eman Asim

Evidence-based clinical guidelines for patient care are needed in Iraq. These guidelines are key in maintaining patient safety and protecting society from medical errors. They also reduce the cost of care through standardized care by practitioners. These guidelines provide quality control and assurance to ensure quality of care, and also help to budget for health care expenditures.

The establishment of clinical guidelines in Iraq is a step towards more standardized care. The Iraqi Ministry of Health has established several task forces to formulate guidelines based on evidence and priority health needs in Iraq. The priority areas are based on recent health surveys conducted in Iraq, in conjunction with organizations such as WHO. Some priority areas for clinical guidelines include emergency medicine, management of obstetrical cases, management of tuberculosis, management of selected chronic diseases, the integrated management of childhood illnesses with support of the WHO, UNICEF, and USAID, and guidelines to make pregnancy safer.

Several protocols developed include the Ministry of Health Drug Guide, which has been disseminated and distributed to all the hospitals and clinics, and covers the aspects of appropriate drug use. A drug protocol for specific diseases is also in the process of development, through the Iraq National Medicine Policy forum, which engages experts from academia and the private sector.

The Integrated Management of Childhood Illness (IMCI) program is an example of a successful initiative using health guidelines and training. IMCI refers to a broad WHO/UNICEF initiative that was launched globally in 1995 with the objective of reducing under-5 mortality, morbidity, and disability, as well as improving child growth

and development. Its "provocative" challenge was to move from the vertical disease-specific approach of traditional programs to a more integrated horizontal approach, in line with the philosophy of primary health care.

The IMCI program was implemented in Pilot Primary Health Care Centers (PHCC) from 2005 to 2007. The printing and dissemination of IMCI registry books and copies of IMCI training modules was funded jointly by the WHO, UNICEF, and USAID. 84 Iraqi physicians and 40 nurses who worked in the pilot PHCCs were trained on IMCI program guidelines during this time. A series of training courses in Baghdad, Karkh, Rusafa directorates and in Nassiriya province were held.

Some achievements of IMCI implementation in Pilot Primary Health Care Centers were as follows. The implementation occurred in 10 PHC centers in 3 governorates as a pilot. Another three governorates - Mosul, Basrah, and Najaf - will begin implementation, as physicians and nurses there have already received their training on case management. Follow up of the training, to measure effectiveness, will be conducted to evaluate impact of implementation on quality of primary health care services for mothers and children under five.

There will be expansion of the IMCI program implementation in another four centers in Baghdad and Nassiriya governorates. The goal is to implement the IMCI program to reduce under five morbidity and mortality from the three most lethal illnesses: acute respiratory tract infections, acute diarrheal disease, and malnutrition.

From an implementation perspective, the three main challenges today are as follows. First, we must determine how to deliver existing, effective interventions to those who need them most in the community, particularly the most vulnerable. We must also

determine how to accelerate implementation to reach maximum coverage while sustaining the achievements made and maintaining the quality of interventions. Further, we must make resources available to support implementation and ensure expansion of programs. The expansion of this program will ensure that children attending PHC centers will receive quality service in terms of integrated approaches for tackling childhood illnesses at the primary care level.

Dr. Emily Chew, National Institutes for Health and American Academy of Ophthalmology

Preferred Practice Patterns - Adding Practical Value to Daily Practice

Preferred Practice Patterns (PPPs) were defined by the National Academy of Sciences in 1990 as "systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances." These guidelines have grown in number from 700 in 1989 to over 2000 by various national medical organizations. PPPs were developed by the American Academy of Ophthalmology (AAO) to help maintain quality eye care as defined by the profession in response to changing health care delivery, cost containment, third-party payer policies, the accelerating pace of technology, and the expanding base of the scientific literature. These guidelines synthesize the best available evidence into clear recommendations for daily practice. They are easily put into place by community physicians.

These guidelines are beneficial to physicians in that they are an easy reference to clinical conditions commonly encountered in daily practice. They also help to manage the growing complexity of care, and help keep physicians up to date with new clinical evidence. They also identify areas for learning and professional development for physicians. They are beneficial to the profession in that they define quality of care, and can be used as tools to defend the quality of care. PPPs in some instances have been used to help counter insurer policy, and have been used in the medico-legal realm to defend physicians.

The PPPs are developed in a structured process. First, an expert panel is selected, to include, clinicians, researchers, subspecialty society representatives, and others. An evidence-based approach is used to analyze the data. The guidelines are reviewed by other societies and national organizations, and updated every five years or sooner if there are new developments. In the "evidence based approach," key references are identified and their quality assessed. Literature searches are performed for additional studies as needed.

References used to determine these guidelines are assigned a numerical level based upon their quality. For Level I evidence, at least one well-designed, properly conducted randomized controlled trial is needed. For Level II evidence, well-designed controlled studies without randomization are needed, to include cohort or case-control studies. Level III evidence consists of descriptive studies, case reports, or reports of committees or organizations. Evidence is also rated on its level of importance to care, with Level A being the most important, Level B being moderately important, and Level C being relevant, but not critical. Examples of recommendations include having

antioxidant vitamin and mineral supplements recommended for intermediate age-related macular degeneration in one eye. This particular recommendation was rated A:I. When evidence is lacking, it is necessary to rely on expert consensus.

Some future directions for clinical guidelines include the need to consider the ethics and acceptability of these guidelines, the availability of resources to enact them, and the overall cost. Examples of preferred practice patterns are available at www.aao.org.

Jean Slutsky, Agency for Health Research and Quality

The National Guideline Clearinghouse website is available at www.guideline.gov. This website allows you to compare various clinical guidelines, which you may add to a collection. This website also supports the US Preventive Services Task Force guidelines.

Panel Discussion V: Inter-ministerial cooperation and health support to Iraqi Security Forces (Minister Al-Hasnawi, Dr. Al-Khalili, COL Caravalho, and Dr. Himmler)

Dr. Salih Al-Hasnawi, Minister of Health, Iraq

The Ministry of Health provides health services to all Iraqis. The Ministry of Health and Ministry of Higher Education, however, conduct a great deal of shared

planning for the training and education of physicians and other health care providers. Education in hospitals requires cooperation between the Ministry of Health and the Ministry of Higher Education. Another example of inter-ministerial cooperation includes the planning committee for avian flu, which comprises a number of Iraqi ministries, to include the Ministries of Agriculture, Finance, Health, and Planning. To this end, Memorandums of Understanding are critically needed to facilitate interagency planning.

Another example of successful inter-ministerial cooperation involves water quality testing and reporting. Many ministries are a part of this effort, and have jointly formulated a standardized report for this purpose. This collaborative success can serve as a template for future joint endeavors.

Cultural Attaché, Embassy of Iraq / Iraqi Ministry of Higher Education - Dr. Hadi Al-Khalili

Iraq has a long and proud tradition in the practice of medicine, with many "firsts" achieved in medical care by Iraqi physicians. A period of stagnation and regression followed, until the modernization of Iraq, and by the middle of the 20th century, Iraq had one of the finest health care systems in the Middle East. Under the rule of Saddam Hussein, there was a massive decline in health education, with a continuous loss of doctors and other academics. The period from 2003 to 2007 witnessed thousands of killings of physicians, numerous kidnappings, and a mass exodus of additional health professionals. Many leading academics were killed during this time.

In this context, we can better appreciate the need for inter-ministerial cooperation to rebuild the health care system. There are always conflicts between the ministries of health and higher education, and the relationship between the ministries depends on the personalities of the individuals and ministries. The main question then is "How to get along?"

The Deputy Minister of Higher Education for Health has set future targets and strategies for rebuilding physician capacity in Iraq. Major priorities include funding for research, and certification / recertification efforts for physicians. The establishment of a national licensing exam is a necessary step in developing a certification program. The achievement of higher medical standards is more attainable with the use of a USMLE-type exam. The USMLE (U.S. Medical Licensing Examination) was in use in Baghdad in the 1960's, and there were exam centers in different parts of the country. This practice should be reinstated to adequately assess and train Iraqi doctors. There should also be a framework for conducting research in Iraq. Ideally, the research would be organized along a framework, according to the need of such endeavors. The reality is that research is often conducted solely according to an individual's preference.

To further help rehabilitate physician knowledge, there should also be access to e-learning resources to the greatest extent possible, as well as a vision of advancement of medical education in Iraq that is formulated jointly between ministries, and addresses both short term and long-term needs in physician educational capacity building.

Multinational Forces – Iraq Surgeon – Colonel Joseph Caravalho

Ministry of Defense Issues

U.S. forces are currently working with the Iraqi Ministry of Health and the Ministry of Defense toward a plan for the health care of Iraq's Security Forces. The goal is to provide high quality care to the Iraqi Security Forces. There are many challenges in keeping soldiers in the Iraqi armed forces, and access to quality health care may contribute to retention of qualified personnel. The Ministry of Defense is also seeking training opportunities for its physicians, and to that end we are working to pioneer partnerships with the Ministry of Health for physician training. This collaborative effort has been and will continue to be a success story for all Iraqis.

U.S. Health Attaché, Iraq - Dr. Bruno Himmler

The phenomenon of "stovepiping" or limited inter-ministerial cooperation goes beyond the Iraqi Ministry of Health and Ministry of Defense, and extends to many of the other Iraqi Ministries. However, at this point we are beginning to see some inter-ministerial cooperation. It is critical to continue to build upon these cooperative efforts. Iraq also is in need of the support of many other governments, as well as the resources within the U.S. State Department, to make this effort work. The Iraqi government is expressing a desire to rise above the conflicts among health care providers and between ministries to attain the reforms which the health care system so critically needs.

Ministry of Higher Education Perspective – Dr. Hadi Al-Khalili, Ministry of Higher Education, Cultural Attaché, Iraqi Embassy

Iraq has an ancient and proud tradition in the history of medicine. As the cradle of civilization, the region that is now Iraq had over three dozen "firsts" in the fields of government, philosophy, ethics, medicine, and other fields. The regulations of the profession of medicine were first outlined in the Code of Hammurabi, providing rules for physician fees and punishment. The snake, the traditional symbol of medicine, is also an Iraqi first. An Arab physician, Arazus (864-932) was the first to suggest psychotherapy. Another Arab physician, Ibn Al-Nafis (1210-1289) was the first to describe the pulmonary and systemic circulation, 300 years before it was described by Harvey. The Arab physician Al Zahrawi, wrote a surgical book and invented 200 surgical instruments. Iraq's Mustansiriya University was established in 1233, and is one of the oldest Islamic Universities. Iraq then went through a period of stagnation and regression until Early Modern Iraq. The Baghdad University College of Medicine was established in 1927.

During the time of Saddam Hussein, wars and the UN sanctions caused a massive deterioration in health and education, and there was a continuous loss of doctors and academics, due to killings, kidnappings, and a mass exodus - by 2007, over 300 of Iraq's top academic faculty had been killed. After 2003, there was widespread destruction and looting of the medical facilities.

Iraq has 22 universities related to the health professions - medicine, nursing, pharmacy, and dentistry. Under the Iraqi Medical Board, there are 22 medical specialties and 12 subspecialties. Some of the current main issues in Iraqi medical education are

redefining the role of the Ministry of Health and the Ministry of Higher Education, establishing a national medical licensing exam and perhaps use of the US Medical Licensing Exam (USMLE) in Iraq), reforming the curriculum of medical schools, increasing the number of e-learning resources, and targeting medical research to key problems.

Health services and education are shared between the Ministry of Health and the Ministry of Higher Education. At times relations between these ministries are contentious. The recommendation is to establish a joint committee which takes care of medical education and health services. The objectives should set future targets and strategies in medical and health fields. They should also seek to establish high quality health centers, establish a framework for health research, and establish parameters for certification and recertification of health professionals. Finally, they should look into the administration of hospitals and health professions training programs.

The use of the USMLE is sought as a means of credentialing the highest quality physicians in Iraq; it was used in Baghdad in the 1960s. Research should be targeted to solve local health problems and advance health services and medical education. We need to encourage and support non-governmental organizations in health and education to establish a high class standard for health education in Iraq.

Iraq Embassy Perspective and Cultural Outreach - Dr. Hadi Al-Khalili, Cultural Attaché, Embassy of Iraq

This lecture described the activities and achievements of the Iraqi Cultural Office from March 2006 to March 2008. Thus far, the cultural office has facilitated the travel of 38 Iraqis to the United States for graduate degree studies, despite difficulties in obtaining visas, and overcoming the lack of TOEFL and GRE scores. The cultural office has also sponsored several cultural events, to include the "Iraqi Museum: Past, Present and Future" event, held jointly with the George Washington University and attended by nearly 200 individuals. The office also facilitated the Iraqi Fine Art and Heritage Music performances at the American University. Other lectures were sponsored at George Washington University and Georgetown University, to include seven scholarly talks and eight students who read verses, highlighting the work of Nazik Almalaka.

The office has also facilitated meetings with the Iraqi community in eleven U.S. cities, as well as a conference in Amman in 2008 featuring leading academics, physicians, and representatives from the World Health Organization. The office facilitated the donation of a Mobile Surgical Operating Theater worth $2.5 million, donated by the country of Italy and made in Vermont. Donations of 20 packages of books to medical schools, 50 packages of medical journals to hospitals, surgical instruments and other supplies were also facilitated. Thus far, the office of Cultural Outreach has supported IRD in their donation of nearly 300,000 books to Iraqi universities, to include significant donations by Iraqi Americans. One of our proudest achievements is the commitment of 100 training opportunities for physicians at the Henry Ford Hospital in Michigan for free. In addition, the office organized a big conference jointly with the Library of Congress on Iraq issues of health and education. It was

attended by many US Government agencies (Department of State, Defense, Education and Health), NGOs, UN, World Bank and many others.

The Cultural Office further serves as a liaison between U.S. and Iraqi Universities, conducting lectures and arranging visits between heads of universities for the purposes of facilitating educational partnerships, which will further help to rehabilitate Iraq's health care system. In the future we seek to strengthen these links to promote education, science, technology and innovation in Iraq.

A Glimpse of Mesopotamian History and Archaeology - Behnam Abu Al Soof, Ph.D., Brown University

Iraq is unique in being at the cradle of civilization, in ancient Mesopotamia, established 15,000 years ago. Some of the first flint tools were found here, as well as the first agriculture in 6,700 B.C. The earliest evidence of domesticated sheep was in Mesopotamia in 9000 B.C. One of the oldest cities is at Tell Alsawan, which was established in 6000 B.C., and there is still archeological evidence of this city. The earliest form of written expression, cuneiform (non-pictographic) writing, was invented and developed in what is now Iraq from 4000 to 3500 B.C. The Epic of Gilgamesh is perhaps the oldest written story on Earth, written in cuneiform.

Other firsts in ancient Mesopotamia and Sumer were the potter's wheel, the first wheeled vehicles, the first oil-burning lamps, and the invention of bread and beer, all approximately at 3000 B.C. Sargon the Great was the founder of the first known empire

in 2400 B.C. The first war of liberation was fought in 2100 B.C. in Uruk, what is now southern Iraq.

By the 18th century B.C., what is now Iraq was composed of the kingdoms of Ashur, Babylon, and Ur. The Code of Hammurabi, the first set of written laws, was established at this time. Many of Iraq's most treasured ancient artifacts were looted from the Iraq Museum in Baghdad in 2003, although many of these artifacts have now been returned. There is a critical need for protection of this priceless ancient heritage of Iraq.

May 21, 2008

Dr. Said Hakki – President, Iraqi Red Crescent Organization

Panel Discussion VI - Mental Health Issues (Dr. Humphreys, Dr. Al-Kureishi, Dr. Everett, Dr. Alathari, and Mr. Portman)

Dr. Keith Humphreys, Stanford University School of Medicine

Because the panelists you are about to hear have a high level of expertise and detailed knowledge of their particular specialties, I will limit my opening remarks to making three overarching points that tie together our collective efforts to improve mental health services in Iraq.

First, in much of the world, mental health services are simply not a priority. This is true even in many countries that have highly prevalent addictive and psychiatric disorders. Iraq is therefore fortunate to have had consistent, strong leadership on mental

health issues. Health Minister Abbas appointed Dr. Sabah Sadik as National Mental Advisor immediately after the fall of the old regime. This was important not only because Dr. Sabah is an enormously talented, effective professional, but also because the MOH appreciated that they *should* have a national mental health advisor in the first place; many nations do not. Mental health continues as a priority under Minister Al-Hasnawi, who as you may know is trained as a psychiatrist. I believe he is the only psychiatrically trained Health Minister in the region, and I know from working with him before he became Health Minister that his psychiatric skills and knowledge are impeccable. We thus have good reason to believe that mental health will continue to be a priority in Iraq health care reconstruction.

Second, improving mental health services is largely about enhancing human capital. There are medications and medical procedures in psychiatry, but as a specialty it has markedly less need for high-tech equipment and costly laboratory assays than do other medical specialties. Indeed, if you looked at the budgets of mental health and substance use disorder treatment programs in the U.S., you would find that most of them spend 80% of their resources on paying and training staff. The implication for Iraq is that we do not have to wait until expensive equipment can be purchased and installed or until Iraqi professionals have training in the use and maintenance of such high-tech equipment. We can start our work immediately by increasing the knowledge, skills and confidence of the health professionals themselves, for they are the engine that makes the mental health service system run.

Third, continuing on the theme of building human capital, in the past 4 years we have built a strong, large network of mental health professionals spanning Iraq, the U.K.

the U.S., and a number of other countries. We are in regular contact about a variety of initiatives, for which I want to publicly thank SAMHSA, which helped establish the infrastructure that holds us together. The network allows us to share information, to plan at a national level, and to enhance human capital in a variety of ways. As a point of contrast, my colleague Dr. Bob Norris went to Iraq a few months ago to teach the first CME course on emergency medicine. He had to start from scratch by calling around to find a team that would go and do this very important course. In contrast, our network is so large and well-established that we have a large pool of potential instructors for our CME events in Iraq. This allows us to pre-poll our Iraqi colleagues in advance and find out what they most want to know, and then we send the particular teaching team that can respond directly to those needs.

Dr. Mohamed Al-Kureishi, Iraqi Ministry of Health

Recently, in conjunction with the World Health Organization, the Iraqi Ministry of Health released a report on the mental health care system in Iraq. Some of the main findings from this report were the need to develop community mental health services, the need to downsize large mental hospitals, the need to develop a mental health component in primary health care, and the need to develop human resources within the field of mental health. Other aims derived from this report were the need for mental health advocacy and promotion, the need for human rights protection, upholding equity of access to mental health services across different groups, providing financing mechanisms

for mental health care, and finally enacting a quality improvement and monitoring system for mental health care.

The Mental Health Services agency within the Iraqi Ministry of Health was established in 2004. The main goals of this agency are to formulate and implement mental health policy, mental health legislation, substance abuse policy, and a national mental health program. The Mental Health Services agency contains members from a variety of other Ministries, as well as the Ministry of Health, including the following agencies: The Ministry of Higher Education, the Ministry of Labor and Social Affairs, the Ministry of Justice, the Ministry of Human Rights, and the Ministry of the Interior. This agency also oversees the mental health outpatient facilities, of which there are 25 throughout Iraq. The agency also oversees the community-based psychiatric inpatient units, of which there are 14 in the country. There are no community "residential" or long-term mental health facilities in Iraq.

There are currently 8 rehabilitation projects for mental health facilities in Iraq. There were 6 new construction projects during 2006-2007, totaling $2.8 million US dollars, and an additional 7 projects during 2007-2008. There are 3 additional new projects proposed during 2008-2009, totaling $1.8 million US dollars.

There are 2 psychiatric hospitals in Iraq, with a total of 1374 beds. There are 250 "forensic" or involuntary psychiatric admission beds and 3 residential facilities for patients with mental retardation. There were a total of 3044 inpatient mental health visits in 2007.

Another main goal of the Iraqi Mental Health Services Agency is to provide training in mental health care for primary care staff. This training has been administered

to 7 percent of doctors, 1 percent of nurses, and 2 percent of other health care workers. There are a total of 89 psychiatrists in Iraq, 187 psychiatric nurses, and 57 psychologists and social workers. Most of the psychiatrists (31) and hospital beds (1489) are located in Baghdad.

Future areas for mental health education in Iraq include public mental health education and self-care, fighting the stigma towards mental health care in Iraq, and increasing psychosocial support for traumatized persons. Mental health care for students is being incorporated as part of the health promotion in schools initiatives. Development of human resources in the mental health field is paramount.

Iraq's Mental Health Services Agency is also being supported by the WHO in other ways, to include holding a research methodology conference, support to mental health research, and the creation of the Iraq Mental Health Survey which is to be launched in the near future. The objectives of the Iraq Mental Health Survey are to identify the prevalence of mental health disorders, to identify their impact in the adult population, and to provide policy and decision-makers and researchers with reliable, accurate and relevant data for the development of mental health care policies. The agency has also been working in conjunction with the US Substance Abuse and Mental Health Services Administration (SAMHSA) to update mental health resources and training. We have been working with other nongovernmental organizations such as the International Medical Corps, the Heartland Alliance, and Medicine du Monde, in addition to the World Health Organization, to rebuild mental health capacity in Iraq.

<u>Dr. Anita Everett, Johns Hopkins University School of Medicine</u>

Through this presentation, Dr. Everett wished to relate her experiences in Iraq and working with Iraqi mental health professionals as a part of efforts to reconstruct mental health services in Iraq. Dr. Everett traveled to Iraq as a part of the Psychiatry training Continuing Medical Education meeting sponsored by the International Medical Corps, which was held in Erbil, Iraq from April 21-24, 2008. Several international psychiatry faculty were present as leaders of various training sessions. Dr. Everett had the opportunity to interact with many Iraqi psychiatry professionals, to include physician faculty, residents training in psychiatry, and even Iraqi medical students with an interest in psychiatry. Through training sessions, meetings, and cultural events, participants in the conference formed lasting professional bonds, which are critical in Iraq's efforts to update its health education system and to nurture future mental health capacity in Iraq.

The statistics on Iraq's current mental health capacity are alarming. There are only .53 inpatient psychiatric beds for every 100,000 population in Iraq. There are only 0.7 psychiatrists per 100,000 population, 0.1 psychiatric nurses, and 0.05 psychologists. This is particularly concerning given the violence that has occurred in Iraq over the past few decades. Iraq has many traditional strengths, however, to build upon, such as a strong medical educational tradition, and strong social networks. These strengths may provide an opportunity to "skip ahead" in mental health capacity in Iraq. Some suggestions for improved professional opportunities include bringing individuals to professional meetings through fee waivers and travel funding, and enabling participation in professional communities and organizations through dues waivers, online access to

journals, and other access to e-resources. These efforts mark the beginning of a new era in mental health for Iraq.

Dr. Husam Alathari, NVMHI

Mr. Scott Portman – Heartland Alliance

Iraq Ministry of Health Issues - Dr. Mahdi Abdul Hussein, Iraqi Ministry of Health

Iraq's health sector has suffered from a progressive deterioration due to the previous regime, which did not consider health a priority and budgetary allocations did not reflect population needs. This decline was exacerbated by major wars, disastrous military campaigns, political and economic sanctions, and the scourge of terrorist attacks among Iraqi civilian populations during the last five years. Thus, the health system currently faces enormous challenges.

Iraq's population is an estimated 27 million. The major provider of health care services is the Ministry of Health. There is a health directorate in each of the 18 governorates. Outside of Kurdistan there are 216 hospitals (156 public and 60 private), with a total of 32,000 hospital beds. Most Iraqi health institutions had chronic problems. The infrastructure has dramatically deteriorated over the past several decades, and there

is a serious lack of medical equipment. There have been unstable services such as water supply, electricity, sewage, and garbage disposal. There is a severe shortage in nursing staff, physicians, and other medical workers, as well as a lack of financial resources for salaries. There is no system of general or family practice, and the medical records system is inadequate. There is overcrowding due to a lack of a referral system, as patients can visit any hospital without referrals. The emergency medical capacity of hospitals is also overwhelmed due to the ongoing violence.

There is a plan for quality improvement that has been instated in a number of Iraqi hospitals. One example is the Al-Hussein Hospital, in which there has been the establishment of a modern casualty unit, the construction of a modern consultation center, the rehabilitation of the ICU, the establishment of a modern burn unit, and a rehabilitation of a proportion of the wards in the hospital. There has been the construction of a modern pathology laboratory, an infectious disease unit, a modern radiology unit with X-ray, CT, and MRI, and a cardiac catheterization unit is nearing completion.

Some other suggestions for improvement include the establishment of a new 400 bed general hospital to absorb the burden on present hospitals, and the establishment of additional subspecialty centers. There is also a pressing need for training of medical and paramedical staff, as well as exposure to experiences in other countries. There should be an evaluation system for all the resident doctors according to CME regulations. There should be the establishment of a proper health referral system. Financial support in particular to female nursing staff is needed to reduce the shortage, as well as financial compensation for overtime work for health staff. Proper drug storage mechanisms are needed, as is rehabilitation of infrastructure for the housing of health professionals.

Iraqi Refugee and IDP Health Issues (Dr. Sabbagh)

Dr. Aqeel Salih, Iraqi Ministry of Health

Refugees are people who cross the border of their country into another country, because they fear for their safety at home. Internally displaced people are those who flee their homes for similar reasons, but remain in their own country. Many refugees and displaced people are victims of the group that has gained power, and is prejudiced against those of other ethnic groups, religions, nationalities, or political views. Women and children make up more than 80 percent of refugees and displaced people. This is due to the fact that men have often died fighting or have been forced to leave their families.

Refugees from Iraq have increased in number since the US-led invasion into Iraq in March of 2003. An estimated 2 million people have fled the country. The United Nations' High Commissioner for Refugees (UNHCR) estimated in a report released in November of 2006 that more than 4.2 million Iraqis have been displaced, and over 2 million of these within Iraq.

Most refugees ventured to Jordan and Syria, creating demographic shifts that have worried both governments. The United States has been slow to accept Iraqi refugees. Roughly 40 percent of Iraq's middle class is believed to have fled, according to the U.N. Most are fleeing systematic persecution and have no desire to return. Refugees are mired

in poverty as they are generally barred from working in their host countries. In Syria alone, an estimated 50,000 Iraqi girls and women, many of them widows, are forced into prostitution just to survive.

Internal displacement since 2003 has been due to the proliferation of armed militias, criminal and terrorist organizations, and due to religious discrimination. Many IDPs who had left Iraq during the 1990s to escape the repercussions of Saddam's regime following the failed Shia uprising in 1991, have now tried to move back to their original homes after the overthrow of Saddam's government in 2003. They returned from their place of usual residence in neighboring countries like Iran and Saudi Arabia and other Iraqi governorates like Kerbala, Baghdad, Babylon, Diyala, Kirkuk and Basrah . Many IDP returnees do not have their own land and are coming back to the southern areas where they had previously lived. IDP returnee families are living in public buildings; schools, police and military compounds; and some are living with their relatives in the cities. The majority of IDPs, over 300,000, are located in Baghdad.

There is a high prevalence of mental illness among refugees and internally displaced persons, especially post-traumatic stress disorder and depression. A multi-disciplinary, community-based and culturally appropriate approach will be necessary to support the mental health and well-being of IDPs. Teams of volunteers, primary care personnel, social workers, psychiatrists, religious professionals, and others will be needed to address these critical mental health needs.

All of the above personnel should be trained and educated on how to assist IDPs - how to identify those with mental disorders and help affected individuals to find an appropriate service provider. General practitioners should be trained on identification,

treatment, referral, and counseling, and should also be trained on how to appropriately address special issues such as rape and the somatic symptoms of distress.

Panel Discussion VIII - Promoting partnerships with NGOs, academia, and the private sector

Michele Cato - International Relief and Development: Iraq

There are several multi-sector development programs ongoing in Iraq. One is the Community Stabilization Program (CSP), which is a $544 million program sponsored by the US Agency for International Development (USAID). This program is ongoing in 15 key cities throughout Iraq, and to date, 34 health projects totaling $2.1 million have been undertaken.

The second is the Community Action Program (CAP I and II), which is another $108 million program administered by the USAID, and will be ongoing from 2003 to 2009. To date, 58 health projects under this program have been funded for a total of $1.5 million dollars. The Humanitarian Assistance Initiative (HAI) is a program funded with $28.5 million from the USAID's Office of Foreign and Disaster Assistance (OFDA), and $2.3 million from the UNHCR. This program is planned to be ongoing from 2003 to 2008. Provinces in which this program is operational include Nineva, Dohuk, Kirkuk,

Baghdad, Anbar, Babil, Najaf, Wasit, Erbil, and Sulemaniyah. To date, there are 221 health projects under the HAI that have been funded for a total of $10 million.

Some factors contributing to success in these programs include a direct partnership with Iraqis, close collaboration with relevant ministries and local governments, appropriate technical solutions, strategies tailored to the unique circumstances of each locale. Other factors include a flexibility to learn and change as we go, and implementation by Iraqis for Iraqis.

A new initiative is the Iraqi Mental Health Initiative, which has been administered by the US Embassy - Baghdad. This is a $3 million, 18 month project being conducted in the provinces of Baghdad, Erbil, Suleimaniyah, Dohuk, and Diwaniyah. The objectives are to increase capacity of Iraqi service providers to meet the mental health and psycho-social needs of conflict victims; to improve the quality of mental health and psycho-social service provision; to reduce the stigma and discrimination associated with mental illness by implementing national level advocacy and information campaigns; and to increase the access of IDPs and other vulnerable populations to mental health and psycho-social services campaigns.

The principal partners in the implementation of these efforts are the Hawler Medical University in Erbil; Suleimaniyah University; the Childhood Care and Sponsorship Organization (CCSO) in Baghdad; and the Psychosocial, Education, Treatment and Consulting Center (PSTEC) in Dohuk.

In the design and implementation of all of these programs, the concept of "Health Surge Thinking" has been adopted. This philosophy seeks to maximize synergies and economies of scope and scale by utilizing a multi-sectoral approach, even if budgets are

vertical and funding is incremental. We seek locally-appropriate, evidence-based technical solutions that will have the greatest potential health impact on the most vulnerable people. We also seek to recognize the links between psycho-social health and progress towards health goals and non-health socio-economic indicators. Finally, we seek to use NGOs to motivate targeted community-based behavior change, facilitate public-private sector alliances, provide technical assistance, and fill gaps in service delivery with the coordination of relevant ministries.

Medical Alliance for Iraq Dr. Randall Williams, MD, FACOG

The Medical Alliance for Iraq is a group of volunteer physicians from the United States and the United Kingdom that partner with Iraqi colleagues to help them improve medical care in Iraq. We are very dependent on and greatly appreciative of the work of others in Iraq, many of which are present at this symposium, who facilitate our work. Formed in 2004 and guided by Dr. Mike Brennan, MAI first went to Baghdad in February of 2004 where we met with Iraqi physicians from all over the country. We then started a process of developing individual component specialty societies (i.e. Iraq Ob-Gyn Society) to promote communication, continuing education, leadership and advocacy among physicians as a framework to improve patient care. In addition, it has been and continues to be our hope that this will enable our Iraqi colleagues to advance their efforts to interrelate and integrate with Specialty Societies throughout the world.

Due to security concerns, we shifted our trips to Erbil in 2006 where we put on a series of continuing education seminars which were very enthusiastically received. We are very

appreciative of the assistance from International Medical Corps which coordinated our trips and led to our receiving a grant from the State Department to expand our efforts over two years to Baghdad and Basrah.

We believe and it has certainly been our experience that the desire of physicians to help their patients gives physicians a commonality that transcends differences in geography and is transformational in that it makes all of us better physicians and improves patient care. We certainly learn much from our Iraqi colleagues about dedication and commitment to their patients which makes us better physicians. Therefore, our efforts are now focused on developing relationships with Iraqi physicians through the following efforts.

1. Ongoing Continuing Education Meetings monthly by different specialties, presently in Erbil and Baghdad and Basrah in the future. Our goal is capacity building so that we are very responsive to meeting the needs and requests of our Iraqi colleagues in what they want to learn. As we meet, we are also using our time to bring physicians together to develop specialty societies.
2. Development of Specialty Societies and the integration of those societies with other societies throughout the world. We ultimately want to serve as a bridge between the specialty societies in the international community and those that are formed in Iraq to facilitate assistance to Iraq.
3. Telemedicine to facilitate ongoing instead of episodic teaching and communication.

4. Increase awareness among physicians in the United States and United Kingdom of the difficulties physicians in Iraq face by increasing interaction and opportunities for them to meet physicians from Iraq. We would like to increase the number of training opportunities primarily in Iraq and when needed, abroad.

5. Collaborating with other organizations so that the colleagues we have met can take advantage of other agencies' programs. Our intent is to work with and assist different Ministries in Iraq as requested in a very collaborative manner.

In conclusion, we are thankful for the work of others that has allowed us to develop friendships and professional relationships with colleagues in Iraq. These relationships serve as the foundation of our efforts. We would recommend that these volunteer efforts be expanded since it has been our experience that physicians in Iraq very much appreciate them and have shown by their attendance, often at risk to themselves and with considerable effort to attend, that they are very determined and committed to improving the care of their patients.

Mr. Scott King

Fred Gerber - Project Hope - The Basrah Children's Hospital and Promoting Partnerships with NGOs

The first lesson of conducting development and relief efforts in Iraq is not to get involved if you don't have the "stomach" for the long term effort, or for people trying to kill you and those who help you. A number of the associates I have worked with in my time with Project Hope have been wounded, killed, or are in hiding from the threat of the same.

The mission of Project Hope was to equip and train the Basra Children's Hospital (BCH) with private funding. Specifically, we sought to equip a modern pediatric referral hospital focused on oncology with new, high-tech medical equipment, not to exceed $20 million USD in value. We also sought to develop the individual, organizational, and institutional capacity of the BCH staff and leadership to assume occupancy, open, and sustain operations of the BCH, with a cost not to exceed $10 million USD in value.

The mission of the BCH is to provide Basrah and southern Iraq with a modern, staffed, trained, and equipped pediatric hospital offering pediatric referral services, to include radiation therapy, diagnosis and treatment. We also sought to establish it as a teaching hospital.

The planned clinical services of the hospital were for 94 beds and 3 operating rooms, as well as an emergency room, a location for radiation therapy, and an imaging suite. Other planned services included an endoscopy suite, a neonatal intensive care unit, a pediatric intensive care unit, respiratory and physical therapy, and other modern services necessary for a pediatric oncology hospital. Project HOPE is providing modern new equipment, with a total of $26 million USD in value. All of this equipment is new, and from top-tier manufacturers.

In addition to the construction of the hospital, the establishment of the HOPE training program is in progress. In 2006, the program trained 92 Iraqi nurses in Jordan and Oman. In the mid-term (2007-2013), the program seeks to train 132 clinical interns, to include nursing, laboratory, and radiography professionals, as well as postgraduate medical training in pediatric oncology and radiation oncology. In the long term (2008-2020), the program seeks to train 56 degreed nurses, both in a Bachelor of Nursing program and an RN Nurse "Bridging Program." The overall goal is to have trained 280 nursing and support staff professionals trained by 2020. Thus far, the basic nursing courses have been conducted at the King Abdullah University Hospital in Irbid, Jordan.

To make this project a reality, we have obtained leveraging and matching funds from donors in Oman, Abu Dhabi, Jordan, and Kuwait. We have also established partnerships with governments in the Middle East as well as the United States and Japan, universities across the United States, and numerous corporations. We have also had a great deal of support from donors in the private sector. The annual operating budget of the hospital is estimated to be $35.8 million in year one, and then $18 million annually thereafter, which does not include an additional $23 million in salaries.

This project has faced a number of challenges, such as the high turnover in leadership of the Ministry of Health. However, this project is an example of what "could be" in the future of health care in Iraq. Additionally, we seek to illustrate that primary care is not the only need in Iraq; specialty care is also critically needed. Private donors are different from public donors, and want to know that their "investments" are protected and to see results from these donations. We will continue to conduct training both inside and outside of Iraq, as well as conducting clinically and culturally appropriate training.

Throughout this project we have and will continue to seize opportunities to build capacity in pediatric oncology training, which will be a model for hospitals throughout Iraq and the Middle East.

APPENDIX C: Symposium Participants

First	Last	Agency
Mahdi	Abdul Sahib	Iraq MOH
Caroline	Abla	OFDA
Hussain	Aboud	AMA
Adam	Abrahamzon	AFMIC
Behnam	Abu Alsoof	Brown University
Rawnaq	Agrawi	Physician
Hani	al Akbi	Iraq MOH
Shawki	al Attar	Physician
Eman	al Emami	Iraq MOH
Naeema	al Gasseer	WHO
Eaman	al Gobory	IOM
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Hassan	al Kazzaz	MoH/Iraq
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Mohamed	al Kureishi	Iraq MOH
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Dena	al Saffar	Musician
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Maggie	Habib Meawad	State
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Assad	Hassoun	Physician
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Stephen	Jones	OSD HA
Martin	Kandes	Varian Medical Systems
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Christophe	Michels	EU Parliament
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Anjali	Patel	JICA
Bryan	Paulus	AFMIC
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Salman	Rawaf	WHO collaborating center
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Cam	Ritchie	Army
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Peter	Roggero	Embassy of Australia
Laurence	Ronan	Partners/MAI
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Murray	Sagsveen	Amer Acad Neurology
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Appendix D:

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