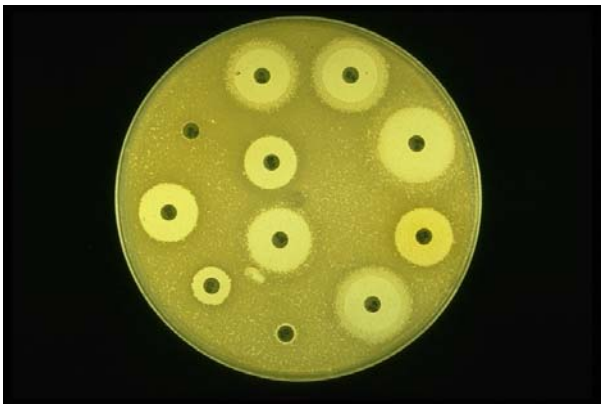

Quarterly Report

Third Quarter 2006

Antimicrobial Resistance Surveillance in Human Medicine

Consortium

Interaction in Health / Public Health Consultants
IDA Solutions
Trnava University

Date: 10 October 2006

Reference: MAT05/HR/9/2

Table of Contents

Acronyms

ABRES	Antibiotic Resistance (coordinating committee)
AGREE	Appraisal of Guidelines, Research and Evaluation
AR	Antimicrobial Resistance
ARC	Antimicrobial Resistance Control
CBO	Institute for Quality in Health Care (the Netherlands)
CLSI	Clinical and Laboratory Standards Institute
CME	Continuing Medical Education
DDD method	Defined Daily Dose
EARSS	European Antimicrobial Resistance Surveillance System
EU	European Union
EUCAST	European Committee on Antimicrobial Susceptibility Testing
ESCMID	European Society of Clinical Microbiology and Infectious Diseases
ESGAP	European Study Group on Antibiotic Policies
ESGNI	European Study Group on Nosocomial Infections
EVD	Economsiche Voorlichtings Dienst
FDA	Food and Drugs Agency
GPs	General Practitioners
ICM	Intersectoral Co-ordination Mechanism
ICT	Information and Communication technology
IDA	International Dispensary Agency
ISKRA	Intersectoral Society for Control of Resistance of Antimicrobials.
LIS	Laboratory Information System
MAFWM	Ministry of Agriculture, Forestry and Water Management
MHSW	Ministry of Health and Social Welfare
MPAP	Matra Pre-Accession Programme
MRSA	Methicillin Resistant Staphylococcus Aureus
NEQAS	National external Quality Assessment Services
NHG	Dutch Society for General Practitioners
RIVM	Dutch National Institute for Health and Environment
SIGN	Scottish Intercollegiate Guideline Network
SWAB	Dutch Working Party for Antimicrobial Policy
TB	Tuberculosis
TOR	Terms of Reference
VWS	Dutch Ministry of Health Welfare and Sport
WIP	Working Party on Infection Prevention
WHONET	World Health Organisation Network

1 Introduction

1.1 Terms of Reference and Consortium

The project Antimicrobial Resistance Surveillance in Human Health is financed by the Netherlands Ministry of Foreign Affairs through the EVD agency MPAP programme. The project started on 1 January 2006 and will last until 31 December 2007. The project aims to contribute to the accession of Croatia to the European Union. In particular, the project aims to assist Croatia in implementing EU-directives and recommendations in the field of antimicrobial resistance and the sound use of antibiotics.

The purpose of the project is strengthening the Croatian institutional structure engaged in surveillance of antimicrobial resistance.

The following project results are anticipated to be achieved:

1. An Intersectoral Co-ordination Mechanism (ICM) in the field of antimicrobial resistance established and functional;
2. A surveillance system for antimicrobial resistance and use of antibiotics established, based on national policy that is in line with the EU strategy for antimicrobial resistance;
3. Guidelines for sound use of antibiotics in the human sector formulated and implemented.

According to the Terms of Reference, the Ministry of Health and Social Welfare (MHSW) is the counterpart of the project and the National Reference Centre for Antibiotic Resistance Surveillance of the Ministry of Health and Social Welfare is the beneficiary of the project.

A consortium consisting of Public Health Consultants/Interaction in Health, IDA Solutions and Trnava University (Slovak Republic) is providing consultancy services, in collaboration with the Dutch Working Party for Antimicrobial Policy (SWAB), the Dutch National Institute for Health and Environment (RIVM) and the Dutch Ministry of Health Welfare and Sport (VWS).

1.2 Summary of the quarterly report

Chapter 2 of this report gives an overview of activities implemented.
Also an assessment of the ICT infrastructure was made, including possibilities for electronic communication. Plans were drafted for upgrading the hardware in the reference centre and improving software for data communication.
Chapter 4 reflects the plans for the next quarter.
In the annexes of the logical framework and the Gantt Chart are reflected and information concerning the study visit.

2 Progress in the reporting phase

2.1 Progress Report

2.1.1 Expected Result 1: Intersectoral Coordination Mechanism

During this quarter, the MHSW and the National Reference Centre for Antimicrobial Resistance continued to work on a draft ordinance and draft policy and action plan for the Ministry of Health and Social Welfare. The ordinance will outline the composition and the tasks of the Intersectoral Coordination Mechanism (ISKRA). The draft policy and action plan will be presented to ISKRA after the members have been appointed. After approval by ISKRA members, it will be presented to MHSW for endorsement. This approach is a slight alteration in comparison to the plan of the project, because appointed ISKRA members will discuss the policy, rather than prospective members. This will give the proposal more authority.
During the congress on infectious diseases (23 – 26 September) the draft composition and tasks of ISKRA were presented to the participants, coming from various professional backgrounds.

Result 1 : Intersectoral Co-ordination Mechanism (ICM) in the field of antimicrobial resistance established and functional						
		Expected starting date	started	Completed	In progress	Expected completion date
1.1	"zero" assess of implementation of EU recommendations on Antimicrobial Resistance Control	14/04/06	14/04/06	05/06/06	Small details still to be verified in MHSW	30/04/05
1.2	Study visit to the Netherlands	08/05/06	08/05/06	13/05/06		13/05/06
1.3	Proposal for structure and mandate of the ICM	01/06/06	05/06/06		01/10/06 Draft under production	01/07/06
1.4	Conference on control of antimicrobial resistance, presentation of design structure and discussion	23/09/06	23/09/06	26/09/06	Draft structure and mandate presented.	27/09/06
1.5	Presentation of the proposal to the MHSW, legal instruments for backing up the ICM	01/10/06				31/10/06
1.6	Outline document on policy development: topics and set-up of the document	01/05/06	05/06/06	05/06/06	01/10/06 Draft under production	31/05/06
1.7	Round table discussions with prospective members of the ICM on policy development	01/06/06			Postponed until members are appointed by Minister	30/06/06
1.8	Draft policy and circulation among relevant stakeholders	01/07/06			Postponed until members are appointed by Minister	31/07/06

1.9	Presentation policy during conference	23/09/06			Outline presented	27/09/06
1.10	Final version of policy and presentation to MHSW	01/10/06				31/10/06
1.11	Develop budgets for surveillance activities	01/12/06				31/12/06
1.12	Formulate financing proposals to relevant institutions	01/01/07				31/01/07
1.13	Develop growth scenarios based on available funding	01/05/07				31/05/07

2.1.2 Expected Result 2: Surveillance System

In this project the emphasis is on improvement of data communication between labs and data analysis, using software provided by WHO (WHONET).
The reference centre made an inventory of ICT in the labs involved in the surveillance programme. Ten labs use a Laboratory Information System (LIS) developed in Croatia (Justinic), which is also used for billing, procurement, etc. One lab uses WHONET, in parallel to the LIS. There are five labs, which do not use computers at all. All in all, five computers with internet connections are needed to realise data exchange. If necessary, the project could contribute to the purchase. Calipers for testing data entry in the WHONET and the LIS have been procured. If successful, in a later stage more will be procured for other labs.
A software engineer has been contracted to develop interface software for linking various versions of LIS to WHONET. Data will be analysed locally in the labs using WHONET and will be communicated to the National Reference Centre.
The procurement of a server for data storage of the national antimicrobial resistance surveillance ha started.
During the congress on infectious diseases, the information strategy was not presented, as it was not the right forum to present information on this highly technical issue. Instead, a workshop was organised on MRSA control in hospitals. The aim of the workshop was to bring the surveillance to a higher level: not only data collection on prevalence of MRSA resistance, but also planning for action to reduce resistance in hospitals. In the next quarter there will be further steps in development of national guidelines and subsequent actions in this area.

Expected result 2: Surveillance system for antimicrobial resistance and use of antibiotics established						
		Expected starting date	Started	Completed	In progress	Expected completion date
2.1	Inventory of automation in laboratories, information and communication	15/04/06	15/05/06	30/60/06		30/06/06
2.2	Study visit to the Netherlands	08/05/06	08/05/06	13/06/06		13/05/06
2.3	Plan for Improving ICT in Reference centre and labs	01/06/06	06/06/06		Software engineer working on interface	31/06/06
2.4	Improving ICT in Reference centre	01/07/06			Procurement hardware started	31/08/06
2.6	Presentation of communication strategy during national conference	23/09/06			Not presented, instead MRSA workshop	27/09/06

2.7	Implementing new communication system between labs	01/10/06				31/12/06
2.8	Testing of new communication system labs	01/01/07				31/07/07
2.9	Evaluation of new communication system	01/10/07				31/10/07
2.10	Final report National Surveillance System	01/10/07				31/10/07

2.1.3 Expected Result 3: Guideline formulation

During the workshop on 23 September 7 clinical guidelines, which were produced in Croatia in the past, were analysed using the AGREE guidelines. Strengths and weaknesses of the guidelines were identified. (See annex nn.) Although most of the guidelines contain useful elements, the guidelines have to be rewritten in a more systematic way, with a rigorous methodology and with the involvement of a wider range of stakeholders.
Part of the guidelines which were discussed during the workshop were produced in 2000, as part of a quality programme by MHSW. However, the programme was halted and guidelines were never introduced in practice.
It is suggested that working groups are initiated under responsibility of ISKRA, with the involvement of representatives from various professional backgrounds, e.g. clinical microbiologists, pharmacologists, General Practitioners, intensivists, and the patients and consumers association. Medical Societies can be requested to appoint people. Funding for the guideline development should be requested from the MHSW. The Matra project can contribute something and the local consultant can do some coordination work for the working groups. A facilitator is needed in the process of literature search for evidence, possibly a librarian.
During the workshop on 23 September the guidelines to start with were identified: Tonsillopharyngitis, Urinary Tract Infections, Surgical Prophylaxis, Otitis Media, and MRSA (without treatment).

Expected result 3: Guidelines for sound use of antibiotics in the human sector formulated and implemented						
		Expected starting date	Started	Completed	In progress	Expected completion date
3.1	Study visit to the Netherlands, discuss guideline development with NHG, SWAB	08/05/06	08/05/06	13/06/05		13/05/06
3.2	Inventory of existing clinical practice guidelines and protocols available in Croatia	01/06/06	05/06/06	01/08/06		01/08/06
3.3	Testing guidelines with AGREE instrument, workshop during conference, selection of priority guidelines	23/09/06	23/09/06	23/09/06		27/09/06
3.4	Workshop on guideline development with working groups	01/10/06				31/10/06
3.5	Development of pilot guidelines	01/11/06				31/01/07
3.6	Feed back on pilot guidelines from various stakeholders	01/02/07				30/04/07
3.7	Formulating of final versions of guidelines	01/05/07				30/09/07

3.8	Publication of guidelines and implementation tools	01/11/07				30/11/07
3.9	MRSA reduction strategy in collaboration with national nosocomial infection committee	01/10/06				31/10/06
3.10	Introduction of MRSA reduction measures and quality control in selected hospital	01/01/07				30/09/07
3.11	Evaluation of MRSA reduction strategy	01/11/07				30/11/07

2.2 Human Resource Utilisation

2.2.1 Result 1 ICM

	Home	Croatia
Dr. Jaap Koot		
Prof. Martin Rusnak		

2.2.2 Result 2 Surveillance

	Home	Croatia
Dr. Jaap Koot	4	4
Prof. Martin Rusnak	5	5
RIVM		
SWAB	2	6
Dr. Plavec		21
	11	36

2.2.3 Result 3 Guidelines

	Home	Croatia
Dr. Jaap Koot		
Prof. Martin Rusnak		

3 Implementation issues

3.1 Specific Issues

3.2 ICM

The creation of the Insectoral Coordination Mechanism (ISKRA) is in process through a ministerial ordinance, which outlines the membership and tasks. Originally it was planned to produce a policy and work plan in parallel. It was decided that it was more logic to nominate members of ISKRA first and use ISKRA to complete the draft policy and work plan.

3.3 Surveillance

The activities now concentrate on the software and hardware for communication between laboratories. This process is a bit slower than planned. The project has to decide to which extent it will fund for automation of labs, which have no computers at the moment.

3.4 Guidelines

In the process of guideline development it is important to involve a broader group of stakeholders in the process, and to compose working groups, which can speak with authority. Therefore working under the auspices of the ISKRA is important. Starting the working groups may therefore have to wait under ISKRA is formalised.

4 Plans for the next reporting period

4.1 Detailed work plan

4.1.1 Result 1 ICM

.
The ordinance for initiating the ISKRA is nearly ready and will hopefully be signed by the Minister in October.
There is a preliminary draft of the antimicrobial resistance policy and work plan, which will be presented to ISKRA during it first meeting. Hopefully, ISKRA can endorse it and submit it to the MHSW for approval.

4.1.2 Result 2 Surveillance

The interface software between LIS and WHONET will be completed soon. Communication software between callipers and WHONET is under development.
Procurement of hardware for the National Centre for Antimicrobial Resistance has started.
Before the end of the year the system should be up and running. Dr. Rusnak will coordinate the testing of the communication software.

4.1.3 Result 3 Guidelines

During the last quarter of 2006, working groups will be formed under auspices of ISKRA. Hopefully, it is possible to approach potential members in October and to nominate members officially in November. Tentatively it is planned to have a training in guideline development on 17 and 18 November. Thereafter the working groups can start.
It is also planned to institute a kind of guideline secretariat which will support the working groups in literature search and in administration. The experience of SWAB in guideline development will be used as much as possible in the process.

4.2 Human resources allocation

4.2.1 Result 1 ICM

	Home	Croatia
Dr. Jaap Koot	5	10
Prof. Martin Rusnak		
Prof. V. Krcmery		
Prof. J. van der Meer		
SWAB		
Dr. Davor Plavec		6

4.2.2 Result 2 Surveillance

	Home	Croatia
Dr. Jaap Koot	See under 1	See under 1
Prof. Martin Rusnak	2	4
RIVM		
SWAB		
Dr. Davor Plavec		6

4.2.3 Result 3 Guidelines

	Home	Croatia
Dr. Jaap Koot		
Prof. Martin Rusnak	2	6
Dr. Inge Gyssens	2	4
SWAB	4	8
Dr. Maja Vucetic	2	4
Dr. Davor Plavec		10

Annex 1 Logical Framework

LOGFRAME PLANNING MATRIX FOR PROJECT: Antimicrobial Resistance Surveillance in Human Medicine MAT05/HR/9/2			
Project duration: 1 January 2006 – 31 December 2007			
Overall Objective	**Objectively Verifiable Indicators**	**Means of Verification**	
The project aims to contribute to the accession of Croatia to the European Union. In particular, the project aims to assist Croatia in implementing EU-directives and recommendations in the field of antimicrobial resistance and the sound use of antibiotics.	Implementation of the Council recommendation (2002/77/EC) on the prudent use of antimicrobial agents	Questionnaire from EU document, COM (2005)684 final, SEC (2005)1746, Brussels, 22.12.2005	
Project Purpose	**Objectively Verifiable Indicators**	**Means of Verification**	**Assumptions and risks**
Strengthening the Croatian institutional structure engaged in surveillance of antimicrobial resistance and responsible for measures to reduce antimicrobial resistance	Indicators using in international projects, like EARSS and ESAC, data over 2007 compared to data over 2005	Official annual reports EARSS and ESAC, benchmarking against other European countries	Commitment of government, insurance and professional organisations toward structure, availability of funding

Results	**Objectively Verifiable Indicators**	**Means of Verification**	**Assumptions and risks**
1. an Intersectoral Co-ordination Mechanism (ICM) in the field of antimicrobial resistance established and functional;	Government MHSW ordinance for ICM, with composition, terms of reference and funding mechanism Policy document approved by Cabinet	Legal document (ordinance) issued by MHSW Budget for 2008, compared to 2005 increased Policy document published	MHSW is cooperative in establishing an ICM and other stakeholders are ready to participate in this structure
2. a surveillance system for antimicrobial resistance and use of antibiotics established, based on national policy that is in line with the EU strategy for antimicrobial resistance	National Surveillance System document approved Automated data communication in place, data collection of full year's samples, and data analysis	Documentation of National Surveillance System publication of annual reports	Financing for surveillance system made available during project period. Hospitals and general practices are willing to collaborate
3. Guidelines for sound use of antibiotics in the human sector formulated and implemented.	Series of guidelines developed, piloted and final versions published	Documentation on guidelines on official website Inspection reports by sanitary inspection	Willingness of stakeholders to collaborate in developing guidelines, piloting and publication. Capacity of hospitals to implement MRSA containment measures

		Remarks
Activities Result 1 Intersectoral Co-ordination Mechanism (ICM) in the field of antimicrobial resistance established and functional		
1.1	"zero" assess of implementation of EU recommendations on Antimicrobial Resistance Control	Implemented, details to be sorted out
1.2	Study visit to the Netherlands	Done
1.3	Proposal for structure and mandate of the ICM	First draft under production
1.4	Conference on control of antimicrobial resistance, presentation of design structure and discussion	Presentation made, not yet final design; only drafts
1.5	Presentation of the proposal to the MHSW, legal instruments for backing up the ICM	Not yet
1.6	Outline document on policy development: topics and set-up of the document	Done
1.7	Round table discussions with prospective members of the ICM on policy development	Not yet. Wait until members of ISKRA have been identified
1.8	Draft policy and circulation among relevant stakeholders	Not yet
1.9	Presentation policy during conference	Draft presented, not final policy document
1.10	Final version of policy and presentation to MHSW	Not yet
1.11	Develop budgets for surveillance activities	Not yet
1.12	Formulate financing proposals to relevant institutions	Not yet
1.13	Develop growth scenarios based on available funding	Not yet

Activities Result 2 **Surveillance system for antimicrobial resistance and use of antibiotics established, based on national policy that is in line with the EU strategy for antimicrobial resistance**		
2.1	Inventory of automation in laboratories, information and communication	Done
2.2	Study visit to the Netherlands	Done
2.3	Plan for Improving ICT in Reference centre and labs	First proposal made, to get approval from reference centre and EVD
2.4	Improving ICT in Reference centre and improving communication	Software under development, hardware under procurement
2.5	Presentation of ICT strategy during national conference	Not presented
2.6	Implementing new communication system between labs	Not yet
2.7	Testing of new communication system labs	Not yet
2.8	Evaluation of new communication system	Not yet
2.9	Final report National Surveillance System	Not yet

Activities Result 3 guidelines for sound use of antibiotics in the human sector formulated and implemented		
3.1	Study visit to the Netherlands, discuss guideline development with NHG, SWAB	Done
3.2	Inventory of existing clinical practice guidelines and protocols available in Croatia	Inventory made and presented on 23 September during workshops
3.3	Testing guidelines with AGREE instrument, workshop during conference, selection of priority guidelines	Done on 23 September
3.4	Workshop on guideline development with working groups, that will formulate guidelines	Not yet
3.5	Development of pilot guidelines	Not yet
3.6	Feed back on pilot guidelines from various stakeholders	Not yet
3.7	Formulating of final versions of guidelines	Not yet
3.8	Publication of guidelines and implementation tools	Not yet
3.9	MRSA reduction strategy in collaboration with national nosocomial infection committee	Not yet
3.10	Introduction of MRSA reduction measures and quality control in selected hospital	Not yet
3.11	Evaluation of MRSA reduction strategy	Not yet

Annex 2 Gantt Chart

	Antimicrobial Resistance Surveillance in Human Medicine	**Matra Project MAT05/HR/9/2**																							
	Gantt Chart and consultants contribution		**2006**												**2007**										
			J	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
	Inception phase																								
1	**Intersectoral Co-ordination Mechanism (ICM) in the field of antimicrobial resistance established and functional**																								
1.1	"zero" assess of implementation of EU recommendations on Antimicrobial Resistance Control																								
1.2	Study visit to the Netherlands																								
1.3	Proposal for structure and mandate of the ICM																								
1.4	Conference on control of antimicrobial resistance, presentation of **DRAFT** design structure and discussion																								
1.5	Presentation of the proposal to the MHSW, legal instruments for backing up the ICM																								
1.6	Outline document on policy development: topics and set-up of the document																								
1.7	Round table discussions with prospective members of the ICM on policy development																								
1.8	Draft policy and circulation among relevant stakeholders																								
1.9	Presentation **OUTLINE OF** policy during conference																								
1.10	Final version of policy and presentation to MHSW																								
1.11	Develop budgets for surveillance activities																								
1.12	Formulate financing proposals to relevant institutions																								
1.13	Develop growth scenarios based on available funding																								
	Dr. Jaap Koot																								
	Dr. Martin Rusnak (partly combined with result 3)																								
	Prof. Krcmery (partly combined with result 3)																								
	Prof. Van der Meer (partly combined with result 3)																								
	SWAB																								

Postponed until 4th quarter 2006

	Antimicrobial Resistance Surveillance in Human Medicine	**Matra Project MAT05/HR/9/2**																							
	Gantt Chart and consultants contributions		**2006**												**2007**										
			J	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
	Inception phase																								
2.	**Surveillance system for antimicrobial resistance and use of antibiotics established, based on national policy that is in line with the EU strategy for antimicrobial resistance**																								
2.1	Inventory of automation in laboratories, information and communication																								
2.2	Study visit to the Netherlands																								
2.3	Plan for Improving ICT in Reference centre and labs																								
2.4	Improving ICT in Reference centre																								
2.6	Presentation of ICT strategy during national conference																								
2.7	Implementing new communication system between labs																								
2.8	Testing of new communication system labs																								
2.9	Evaluation of new communication system																								
2.10	Final report National Surveillance System																								
	Consultants input to result 2																								
	Dr. Jaap Koot (combines with other results)																								
	Dr. Martin Rusnak (combines with other results)																								
	RIVM																								
	SWAB																								

Conference not the right audience for technical explanation

	Antimicrobial Resistance Surveillance in Human Medicine	**Matra Project MAT05/HR/9/2**
	Gantt Chart and consultants contribution	**2006** J F M A M J J A S O N D **2007** J F M A M J J A S O N D
	Inception phase	
3	**guidelines for sound use of antibiotics in the human sector formulated and implemented**	
3.1	Study visit to the Netherlands, discuss guideline development with NHG, SWAB	
3.2	Inventory of existing clinical practice guidelines and protocols available in Croatia	
3.3	Testing guidelines with AGREE instrument, workshop during conference, selection of priority guidelines	
3.4	Workshop on guideline development with working groups, that will formulate guidelines	
3.5	Development of pilot guidelines	
3.6	Feed back on pilot guidelines from various stakeholders	
3.7	Formulating of final versions of guidelines	
3.8	Publication of guidelines and implementation tools	
3.9	MRSA reduction strategy in collaboration with national nosocomial infection committee	
3.10	Introduction of MRSA reduction measures and quality control in selected hospital	
3.11	Evaluation of MRSA reduction strategy	
	Dr. Jaap Koot	
	Dr. Maja Vucetic	
	Dr. Martin Rusnak (partly combined with result 1)	
	Dr. Health Houlihan	
	SWAB	
	Dr. Gyssens	

	Programme activity of several weeks/months
	Single event planned during project
	Implementation according to plan
	Postponed (with explanation)
	Mission by consultant (mostly 5 days)

Annex 3 Report workshops 23 September 2006

Workshop evaluation Croatian Clinical Guidelines with the AGREE instrument

1. **Therapy and Prevention of Urogenital Infections**

a. No GPs were included, other professions are.
b. It is not clear if there was patients' involvement. No info on pilot testing.
c. It is not clear if national evidence was used. No previous external review. No procedure on updating guidelines was explicitly specified.
d. Recommendations are hard to recognize
e. Applicability is dubious.
f. Overall assessment: Recommended (with provisions or alterations)

	Urogenital Infections	
Standardized Domain Score	Scope and Purpose	100.0
	Stakeholder Involvement	41.7
	Rigour of Development	66.7
	Clarity and Presentation	83.3
	Applicability	77.8
	Editorial Independence	66.7
	Median Score	72.2

OVERALL ASSESSMENT

	App 1	App 2	App 3	App 4
Strongly Recommended				
Recommended	X			
Would not Recommend				
Unsure				

2. Acute Bacterial Sinusitis

a. None
b. Stakeholder involvement was low,
c. Methodology poor,
d. None
e. None
f. Independence was not declared.
g. NOT RECOMMENDED (The purpose of the guidelines was missed)

	Acute Bacterial Sinusitis	
Standardized Domain Score	Scope and Purpose	88.9
	Stakeholder Involvement	8.3
	Rigour of Development	17.5
	Clarity and Presentation	17.5
	Applicability	0.0

	Editorial Independence	0.0
	Median Score	12.9

OVERALL ASSESSMENT

	App 1	App 2	App 3	App 4
Strongly Recommended				
Recommended				
Would not Recommend	**X**	**X**	**X**	
Unsure				

3. SORE THROAT 2-PLIVA

a. Objectives are only partly described. Clinical questions are not touched.
b. Stakeholders involvement was minimal; Patients preferences were not taken into account. No info on piloting.
c. Methodology is not described.
d. Clarity-unclear, no tools for application.
e. Applicability questionable.
f. Independence-dubious since it was published by PLIVA
g. Summary: NOT RECOMMENDED

	SORETHROAT 2-PLIVA	
Standardized Domain Score	Scope and Purpose	47.2
	Stakeholder Involvement	10.4
	Rigour of Development	27.4
	Clarity and Presentation	16.7
	Applicability	11.1
	Editorial Independence	0.0
	Median Score	13.9

OVERALL ASSESSMENT

	App 1	App 2	App 3	App 4
Strongly Recommended				
Recommended				
Would not Recommend	**X**	**X**	**X**	**X**
Unsure				

4. Otitis Media

a. all is OK
b. Stakeholders-GPs were not included. Target users were not defined. Piloted, not clear
c. Sources of literature were mentioned, but no systematic approach no updating,
d. Not adequately defined, but most questions answered
e. No organizational / costs mentioned
f. Conflicts of interest were not mentioned.
g. Summary: RECOMMENDED BUT WILL HAVE TO BE IMPROVED

Otitis Media		
Standardized Domain Score	Scope and Purpose	88.9
	Stakeholder Involvement	0.0
	Rigour of Development	9.5
	Clarity and Presentation	58.3
	Applicability	0.0
	Editorial Independence	0.0
	Median Score	4.8

OVERALL ASSESSMENT

	App 1	App 2	App 3	App 4
Strongly Recommended				
Recommended	X	X	X	X
Would not Recommend				
Unsure				

5. **Surgical Treatment of Tonsillar Disease**

a. Definition of the disease was not well stated.
b. No GPs and pediatricians involved.
c. Literature is too old, not graded.
d. Clarity is unacceptable. Target audience is not clear.
e. Applicability is zero
f. NOT RECOMMENDED

Surgical Treatment of Tonsillar Disease		
Standardized Domain Score	Scope and Purpose	22.2
	Stakeholder Involvement	0.0
	Rigour of Development	1.6
	Clarity and Presentation	22.2
	Applicability	-7.4
	Editorial Independence	88.9
	Median Score	11.9

OVERALL ASSESSMENT

	App 1	App 2	App 3	App 4
Strongly Recommended				
Recommended				
Would not Recommend	X	X	X	
Unsure				

6. Sore Throat II

7.

a. This is not guidelines-only one study was used. It was a proposal from the year 2000.
b. Objectives are not defined, Stakeholders not included.
c. Aims are not defined. References missing.
d. Recommendations are too general.
e. No studies were performed.

f. Interests ware not declared.
g. Summary: Not recommended.

	Sore Throat II	
Standardized Domain Score	Scope and Purpose	52.8
	Stakeholder Involvement	22.9
	Rigour of Development	19.0
	Clarity and Presentation	52.1
	Applicability	33.3
	Editorial Independence	50.0
	Median Score	41.7

OVERALL ASSESSMENT

	App 1	App 2	App 3	App 4
Strongly Recommended				
Recommended				
Would not Recommend	X	X	X	X
Unsure				

8. Acute Resp. Infections-PLIVA

a. One person wrote it. No stakeholders.
b. No methodology applied or described.
c. Clarity no specific ATB mentioned.
d. Key recommendations described. No org. barriers described.
e. Info on independence missing.
f. Summary: Not recommended (good for education)
g. General: It was difficult to evaluate.

	Acute Resp. Infections	
Standardized Domain Score	Scope and Purpose	33.3
	Stakeholder Involvement	8.3
	Rigour of Development	4.8
	Clarity and Presentation	33.3
	Applicability	22.2
	Editorial Independence	0.0
	Median Score	15.3

OVERALL ASSESSMENT

	App 1	App 2	App 3	App 4
Strongly Recommended				
Recommended	X	X		
Would not Recommend				
Unsure				

9. Summary of scores for all guidelines

	Guideline	GUIDELINE: Urogenital Infections	Acute Bacterial Sinusitis	Sore Throat (PLIVA)	Acute Otitis Media	Surgical Treatment of Tonsillar Disease	Sore Throat II	Acute Respiratory Infections for Outpatient Treatment	Median Score
Standardized Domain Score	**Scope and Purpose**	100,0	88,9	47,2	88,9	22,2	52,8	33,3	52,8
	Stakeholder Involvement	41,7	8,3	10,4	0,0	0,0	22,9	8,3	8,3
	Rigour of Development	66,7	17,5	27,4	9,5	1,6	19,0	4,8	17,5
	Clarity and Presentation	83,3	17,5	16,7	58,3	22,2	52,1	33,3	33,3
	Applicability	77,8	0,0	11,1	0,0	-7,4	33,3	22,2	11,1
	Editorial Independence	66,7	0,0	0,0	-16,7	88,9	50,0	0,0	0,0
	Median Score	72,2	12,9	13,9	4,8	11,9	41,7	15,3	13,9

10. Discussion

New guidelines in Croatia should adhere to AGREE principles. All guidelines have been developed by small groups so far. There has not been sufficient input from relevant stakeholders.
According to Dr. Prins the should be more emphasis on the rigorous methodology application.
The question is how to motivate busy practitioners to contribute to the guideline development.
The MoH motivated people to produce guidelines in the year 2000, in the context of a quality assurance project, but the process was not finished.
Dr.Tambic summarises the conclusions: Croatia needs guidelines, and they should become recognized. Presently, there is a lack of motivation to get involved. Stakeholders involvement has to be explicitly addressed by ISKRA. Who should be involved? Suggestion is to involve clinical microbiologists, pharmacologists, GPs, intensivists and the patients and consumers association.
Medical societies will be requested to appoint people in working groups for guideline development.
Funding of the activity should be requested from the MHSW. There is a need for a facilitator in collection of information, possibly a librarian..
Guidelines to start with in the working groups:
Tonsillopharyngitis, Urinary Tract Infections, Surgical Prophylaxis, Otitis media, MRSA (without treatment)

Workshop on MRSA

Introductions were given by Dr. Vos (the Netherlands) , Prof. Dr. French (UK) and Dr. Payern-Pal (Croatia)
After discussion the consensus was reached to select several pilot hospitals for MRSA reduction trial, Split, Rieka, Zagreb, Belovar, Zadar & Dubrovnik.

Dr. Tambic summarises conclusions of the MRSA workshop:

There is a need for a timely and systematic local surveillance. More data are needed on actual prevalence of MRSA. condition is an access to IT, screening, National policy should define an outbreak detection. Strengthening the role of Infection Control team, Infectious Disease doctor in particular. Further activities will address auditing, surveillance, better collaboration with clinicians. Education. There is a need for obtaining support of the Hospital management and to strengthen the role of health insurance. National guidelines should be developed.