
Connectivity Industry Consortium (CIC)

The Universal Standard for Point of Care Connectivity

CIC Technical Meeting Summary

July 27th, 2000 San Francisco, California



This memo summarizes the essential details of the Point of Care Connectivity Industry Consortium (CIC) Technical Meeting, held July 17 at the Palace Hotel in San Francisco. Bayer Diagnostics hosted this third technical working meeting for the CIC. Fifty-seven attendees from 28 CIC member organizations reviewed the CIC's progress toward standards to enable interoperable reporting of patient test results by point-of-care devices. The meeting participants also refined the Consortium's timeline, and drafted plans to extend the standards to support ordering and QA/QC workflows.

1. EXECUTIVE SUMMARY

The Connectivity Industry Consortium held its third major technical meeting on July 27, 2000, in San Francisco. This meeting was sponsored by Bayer Diagnostics, and attended by 57 individuals from 27 CIC member organizations.

The objectives of this meeting were to review the Consortium's technical progress to date and to launch the final round of the development work with face-to-face meetings. The meeting participants reviewed the first Device and EDI message specifications, device connectivity protocols, system compatibility specification, and remaining technical timeline. They also developed detailed work plans for the next 8 weeks.

The Consortium's original goal, to complete work and sunset within 12-15 months, is attainable if the Consortium's workgroups maintain the rate of progress achieved to date. Over the remaining 5-7 months of the Consortium's lifetime, the technical teams will complete specifications to enable core point-of-care device data management interoperability. To ameliorate the effects of the end-of-year holiday season, the CIC aims to complete the majority of the technical specifications by the beginning of November 1999.

In general, attendees of the July 27th meeting responded positively to the technical development reviewed. In summary, the participants found the progress to date to be on-target and on-schedule. When asked to rate how well the Consortium's progress had met their expectations, respondents replied with an average score of 7.89 (on a scale of 1 to 10). No participant indicated that the Consortium's progress had failed to meet his/her expectations.

Issue cards distributed during the meeting captured attendees' comments and feedback. Comments on these cards identified several issues that require further definition:

1. Compatibility

'Vendors must be able to make their systems easily interoperate with other vendors' offerings'

'Non-technical users (customers) must understand how to specify compatible systems from multiple vendors'

2. LIS Participation

'We need stronger LIS participation to ensure implementation success.'

3. Implementation Cost

'We must make sure that there are low-cost means to implement the standards'

A comprehensive plan to address these issues, as well as the other input gathered from the breakout sessions, will be posted on the CIC website (<http://www.poccic.org>) and incorporated into the technical team's work plans.

The Consortium's next technical meeting will be held on September 22 in St. Louis, in conjunction with the HL7 Fall Working Group meeting.

2. PARTICIPANTS

Attendance at the San Francisco CIC Technical Meeting totaled 57 individuals representing 28 organizations from 15 states and 4 countries. The participants and their organizations are summarized below; detailed listings may be found on the CIC website <http://www.poccic.org>.

	PARTICIPANTS	ORGANIZATIONS
IS/IT companies	10	5
POC/IVD companies	34	14
POC customers/users	9	6
Others	4	3
Total	57	28

3. TECHNICAL PROGRESS

Summary

The Consortium achieved all of the technical milestones planned for the San Francisco meeting. These milestones were to:

1. Draft the Simple Test Result message specifications
2. Demonstrate prototypes of the EDI and Device interfaces

In addition to these goals, the Consortium's technical teams accomplished an important supplementary objective: to draft initial definitions for a CIC system compatibility specification.

Organization

For the three months since the end of the Phase 0 period, the Consortium's technical teams have been organized as shown the figure below. This organizational structure will persist through the remainder of the Development Phase, projected to last until the beginning of November.

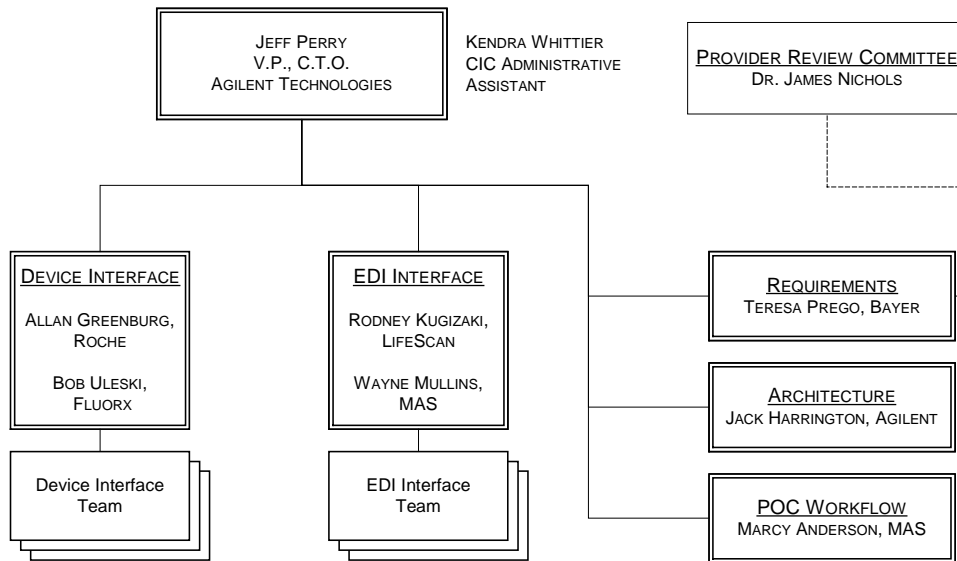


Figure 1: Development Phase Technical Organization

Prototypes

Two member organizations publicly demonstrated prototype implementations of the draft CIC standards in the Consortium’s booth on the AACC exhibit floor. Agilent Technologies demonstrated the CIC Device interface, showing point-of-care applications on several palmtops wirelessly communicating test results via an infrared connection to a simple data manager. Medical Automation Systems exhibited their point-of-care data manager sending CIC-standard test result messages to a simulated LIS system, using HL7’s enhanced acknowledgement protocol.



Figure 2: CIC AACC booth – prototypes on display on tables¹

¹ Thanks to Joan Portwood, BD, for this photo, captured on a Handspring palmtop.

4. REMAINING TIMELINE, MILESTONES

The July 27 San Francisco meeting fell approximately at the mid-point of the Consortium’s 12-15 month lifespan. As of this meeting, the Consortium has met all planned milestones and objectives.

Over the remaining 5-7 months of the Consortium’s lifetime, the technical teams will complete specifications to enable core point-of-care device data management interoperability. To ameliorate the effects of the end-of-year holiday season, the CIC aims to complete the majority of the technical specifications by the beginning of November 1999.



Remaining Meetings

The CIC has only two remaining meetings scheduled. As with all previous meetings, these events will coincide with major industry conferences.

September 15, 2000: HL7 Fall Working Group (St. Louis, MO)

- Review draft message specifications for QA/QC and ordering
- Announce initial sunset work teams

November 21, 2000: Medica (Dusseldorf, Germany)

- Announce publication schedule for CIC standards
- Announce results of/from Pilot studies

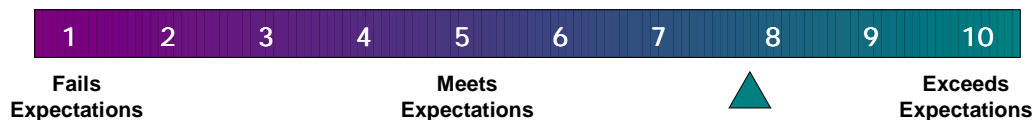
5. EVALUATION AND FEEDBACK

Evaluation

Attendees were asked to evaluate the Consortium's progress. Specifically, participants were asked to answer the following question:

How well is the Consortium doing, relative to your expectations?

Participants responded with a number between one and ten from the following scale:



The 43 evaluation scores were distributed as follows:

High: **11**
Low: **5**
Average: **7.89**

Feedback and Suggestions

The average score of 7.89 is impressive, considering the Consortium's aggressive timeline and unprecedented vision and objectives. As illustrated by this score, participants generally were very pleased with the Consortium's progress.

During the meeting, 'issue cards' were distributed to each attendee to capture comments and observations on the following topics: Device interface, EDI interface, General issues. During the afternoon breakout sessions, the technical teams reviewed the comment cards, and drafted plans and timelines to address the major issues raised. Transcripts of these comments will be made available on the Members Only section of the CIC website.

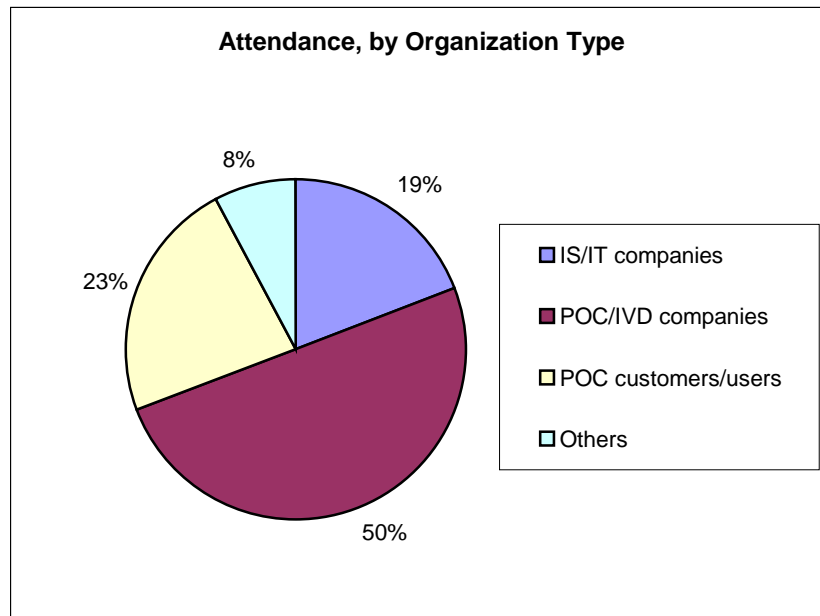
6. JULY 27TH MEETING ATTENDEES

Attendance Summary

Total Attendance: **57 individuals,**
28 organizations

Geographic Distribution: **15 states,**
4 countries

	PARTICIPANTS	ORGANIZATIONS
IS/IT companies	10	5
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Total	57	28



Attendees, By Organization

57 individuals from 28 CIC member organizations attended the San Francisco CIC Technical Meeting.



ABBOTT DIAGNOSTICS

Gary	Ken	Bedford	MA
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AGILENT TECHNOLOGIES

Anders	Bob	Andover	MA
Kellett	Stephen	Andover	MA
Perry	Jeffrey	Palo Alto	CA
Whittier	Kendra	Palo Alto	CA
Boecker	Dirk	Palo Alto	CA
Frey	David	Palo Alto	CA

AVL SCIENTIFIC

Merkle	Horst	Roswell	GA
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AVOCET

Zweig	Steven	San Jose	CA
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BAYER DIAGNOSTICS

Cross	Mark	Franklin Lakes	NJ
Prego	Teresa	Medfield	MA

BD

Portwood	Joan	Research Triangle Park NC	
Powell	Kenneth	Franklin Lakes	NJ

CERNER

Compton	David	Kansas City	MO
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CONNECTIVITY INDUSTRY CONSORTIUM

Uleski	Bob	Carmel	IN
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GE-MARQUETTE MEDICAL SYSTEMS

Nowicki	Dan	Milwaukee	WI
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GEISINGER MEDICAL CENTER

Jones	Jay	Danville	PA
Lebo	Rick	Danville	PA

HEALTH LEVEL SEVEN

Hawker	Charles	St. Louis	MO
Knafel	Andrzej		SWITZERLAND

HEMOCUE

Burgess	Bruce	Mission Viejo	CA
Girvan	Roy	Mission Viejo	CA
Wright	Roy	Mission Viejo	CA

INSTRUMENTATION LABORATORIES

Azer	Anwar	Lexington	MA
Fannon	Bill	Lexington	MA
Lachs	Steve	Lexington	MA
Landry	Dana	Lexington	MA

INTERCOMPONENT WARE

Roesner	Helmut		GERMANY
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I-STAT CORPORATION

Maund	Mark	East Windsor	NJ
Raimo	Tom	East Windsor	NJ

ITC CORP

Gavin	Michael	Edison	NJ
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JOHNS HOPKINS

Nichols	Dr. Jim	Baltimore	MD
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KAISER-PERMANENTE



Greene	Sandra	Pasadena	CA
Lowensohn	Dr. Brent	Pasadena	CA
Vernay	Carol	Pasadena	CA

LIFESCAN

Dunka	Lou	Milpitas	CA
Kugizaki	Rodney	Milpitas	CA
Narsipur	Deepak	Milpitas	CA
Trefil	Imre	Milpitas	CA

MAYO CLINIC

Santrach	Dr. Paula	Rochester	MN
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MEDICAL AUTOMATION SYSTEMS

Anderson	Marcy	Harrisburg	PA
Fetters	Chris	Harrisburg	PA
Keller	Billie	Harrisburg	PA
Mullins	Wayne	Charlottesville	VA
Valorz	Steve	Charlottesville	VA

THE MT. SINAI HOSPITAL

Jacobs	Dr. Ellis	New York	NY
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PHARMACIA & UPJOHN

Bjorkman	Rune		GERMANY
Matsson	Per		GERMANY

POINT-OF-CARE CONSULTANT

Schindler	Charles	Petaluma	CA
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RADIOMETER

Soerensen	Allan		DENMARK
Kjoller	Klaus		DENMARK



ROCHE DIAGNOSTICS

Levy	Ken	Indianapolis	IN
Greenburg	Alan	Indianapolis	IN
Beck	Tim	Indianapolis	IN

TELCOR, INC.

Cederdahl	Mark	Lincoln	NE
Terrano	Jim	Lincoln	NE

UNIVERSITY OF WASHINGTON

Rainey	Dr. Petrie	Seattle	WA
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