



# Recent Innovations at RTI International

Karen Davis & David Uglow  
Presented at FedCASIC 2013  
March 19, 2013

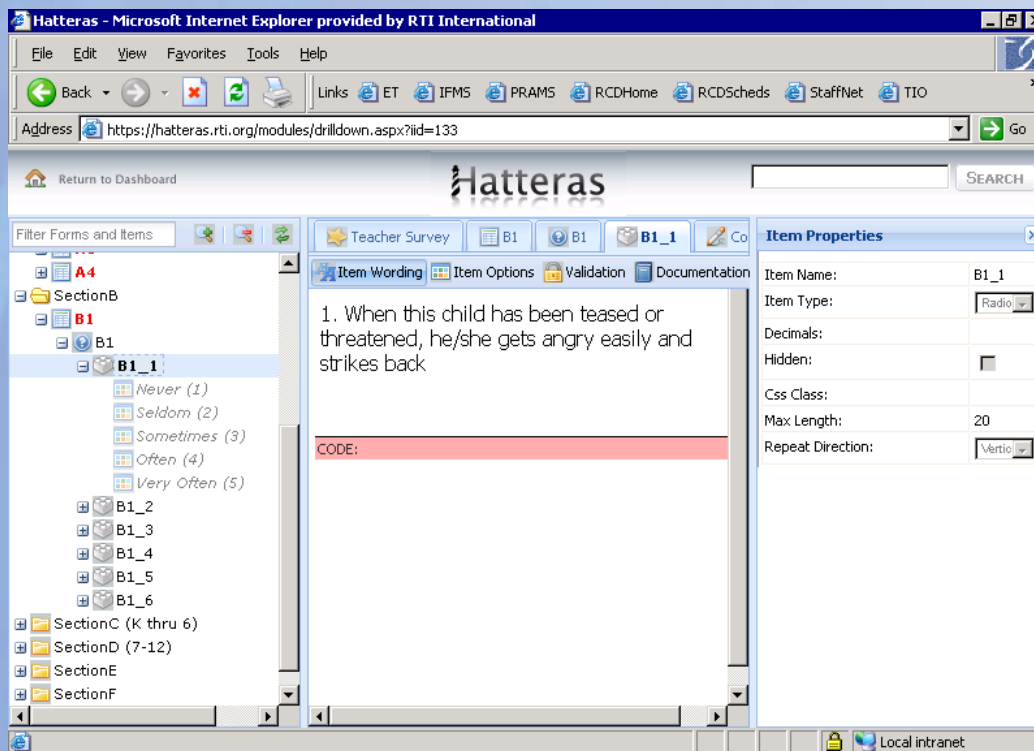


# Development Updates

# Hatteras – Continuing development

## New Survey Editor Features:

Revising Hatteras-survey-editor to generate XML code for Adobe AIR-based handheld software...



... and Blaise source code generation from Hatteras metadata

# Hatteras – Continuing development

New data management functions for survey and multi-site clinical studies that use Hatteras as the data abstraction software

**Event Form: Hospital Patient Accounts** **MEPS** Medical Expenditure Panel Survey  
Medical Provider Component sureshdemo  
Jane Doe  
Event Form 1: February 15, 2009

- Verify total charges
- ER Charges?
- Ancillary charges?
- REIMBURSEMENT TYPE
  - Fee or Capitated
- LUMP SUM PMTS
  - Lump Sum Payment?
  - LSP Recorded?
  - LSP Information
  - Lump payment date
- SOURCES OF PAYMENT
  - Payers and amounts
  - Other Sources of Payment
    - Auto or Accident Insurance
    - CHDP/CHIP
    - Indian Health Service
    - State Public Mental
    - Any more sources?
- VERIFY TOTAL PAYMENTS
- VERIFICATION OF PAYMENT
  - Verify payment=charge
- DIFFERENCE BETWEEN PAYMENTS
  - Adjustments or discounts

BILLING RECORDS/SOURCES OF PAYMENT/C4\_Other Sources of Payment/C4\_OtherLoop

		Other Payers	Amount
<a href="#">edit</a>	<a href="#">delete</a>	Auto or Accident Insurance	200
<a href="#">edit</a>	<a href="#">delete</a>	CHDP/CHIP	4788
<a href="#">edit</a>	<a href="#">delete</a>	Indian Health Service	300
<a href="#">edit</a>	<a href="#">delete</a>	State Public Mental	200

What was that other source? IF "Other", PLEASE SPECIFY

State Public Mental Plan

h. What was the payment amount?

Any more sources?

YES

NO



# Mobile Tools

# ARTEMIS – Messaging for Health Interventions


- Small scale, proof of concept campaign for smoking cessation among Osage Nation women is testing culturally-relevant, evidence-based messages.
- HHS will use ARTEMIS for bilingual messaging in the UCARE4LIFE intervention pilot for HIV-positive youth
  - To support longitudinal data collection, ARTEMIS can send customized compliance reminders based on response patterns and ongoing self-reports




# Using Twitter for Diary Surveys

- Twitter shows strong use by hard-to-reach populations
- Conducting six feasibility studies, capturing diary information on diet, activity or mood.
- Limitations of the Design
  - Small convenience sample
  - Limited ability to compare variables
- Overall Findings
  - Method shows promise
  - Relatively quick response

 **RTISurvey2**  
Feb 24, 6:00pm via HootSuite  
@[NAME1] What were you doing from 3:00PM-4:00PM today? #RTISurvey2

 [NAME1]  
Feb 24, 7:23pm via Twitter for iPhone  
@RTISurvey2 napping #RTISurvey2  
[Show Conversation](#)

 **RTIFoodSurvey**  
Feb 23, 10:35am via HootSuite  
@[NAME] #RTIfoodsurvey starts now! Share what you eat or drink through 03/01. Mention @RTIFoodSurvey & our hashtag, #RTIfoodsurvey  
[Show Conversation](#)

 [NAME2]  
Feb 27, 11:29pm via Web  
@RTIFoodSurvey Cheese sandwich, potato chips, nuts and raisins, pint of vanilla cherry ice cream, and V8 juice. Is that a power dinner ???

 [NAME3]  
Feb 26, 8:41pm via Twitter for Android  
@RTIFoodSurvey had chicken, mashed potatoes, green beans, and salad with fruit punch for dinner #rtifoodsurvey





# SurveyPulse Mobile Panel



- ❖ SurveyPulse and its smartphone and tablet apps enable instant delivery of surveys, and real-time response
- ❖ Feasibility and methodology study for mobile survey panel
- ❖ Significantly reduces panel hardware provision and support.

# Crowdsourcing at RTI







# Other Developments

# SSIMSnet – Web-based Biospecimen Tracking

- ❖ Manages all steps of the biospecimen workflow.
- ❖ Simple wizard-like interface guides the user through each phase of collection and tracking.
- ❖ Creates detailed reports, shipment manifests, and handles electronic inventory management.
- ❖ Easy to customize UI can be configured to match paper forms.



Nulliparous Pregnancy Outcomes Study  
Monitoring Mothers-to-Be



**NuMoM2B Biospecimen Tracking**

Study ID: 9100001K

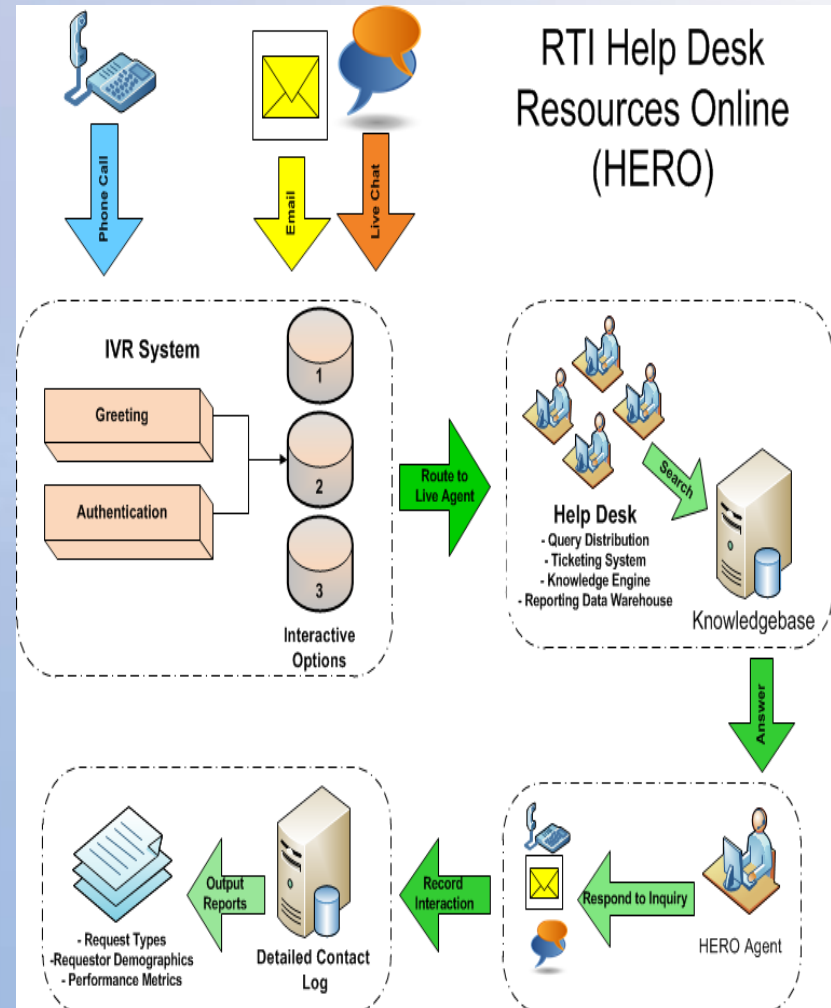
**A. Urine aliquots (2 mL aliquots in 2 mL cryovials)**  Check if not collected

Notes: <div style="border: 1px solid gray; height: 40px; width: 95%;"></div>	Cryovials Placed in Freezer Date & Time: <div style="display: flex; justify-content: space-between;"> <span>01 / 01 / 2010</span> <span>01 : 00</span> </div> <div style="display: flex; justify-content: space-between; font-size: small;"> <span>mm dd yyyy</span> <span>hh mm</span> </div> <div style="text-align: center; font-size: x-small;">(24-hour clock)</div>	Cryovials placed in -70°C freezer within 2 hours of collection? <span style="float: right;">Yes ▾</span>
---	--	--

Specimen collection	Specimen ID	Storage container ID	Delete a Specimen ID
Storage container ID: <input type="text" value="9000409I"/>	9000400D	900005S	Delete a Specimen ID This specimen's data will be deleted. Enter ID to Delete: <input type="text"/> <input type="button" value="Delete ID"/>
Specimen ID: <input ]"="" type="text" value="900005S"/>	9000401B	900005S	
Save: <input type="button" value="Save Vial"/>	9000402W	900005S	
	9000403U	900005S	
	9000404S	900005S	
	9000405Q	900005S	
	9000407M	900005S	
	9000408K	900005S	
	9000406O	900005S	
	9000409I	900005S	

# HERO – RTI Help Desk Resources Online

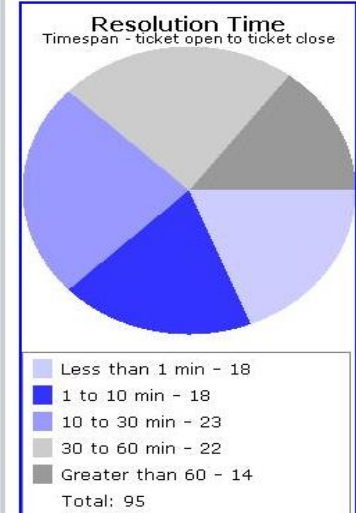
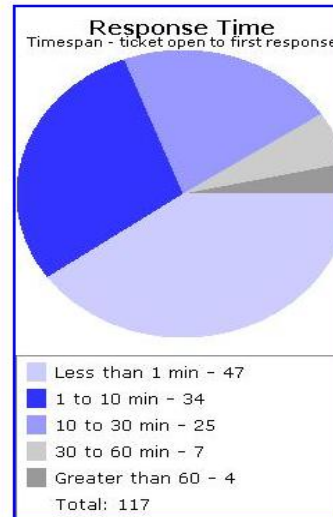
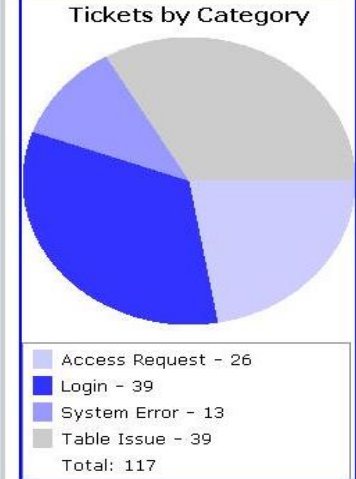
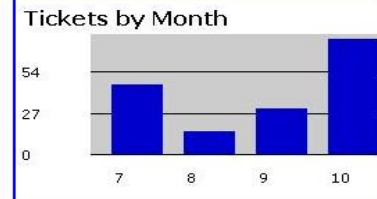
- Intelligent Routing of Phone, e-Mail or Web Chat Inquires
- Integrated Knowledge Base for Quick Response
- Complete Ticket Tracking with Annotations
- Captures and Reports Metrics
  - Volumes
  - Types Of Inquiries
  - Timeliness And Quality Of Response



# HERO Reports

- Dashboard display of project data
  - ticket counts by month and category
  - response and resolution times
- Project details section contains project-specific reports, which are configured when a project is set up and as the need arises.

## Cumulative Statistics



# Communicating Worldwide with Social Media


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Our experienced multidisciplinary team helps local partners to develop their own innovative ICT solutions to challenges in health, education, governance, economic growth, agriculture, and the environment.



Strengthening local capacity and ownership.



Providing better information to decision makers.



Sharing information and managing knowledge.

**NEWS:** Tangerine:Class to Present at UNESCO Mobile Learning Week

**PROJECT HIGHLIGHTS**



**Testing Reading Skills**  
Cutting edge open source technologies enable electronic data collection for large early reading and math diagnostic assessments using the latest handheld tablets.

[READ MORE](#)



**Connecting Citizens**  
Olutindo is designed to improve communications between citizens and their local government. In Uganda local government officials use a tablet application to monitor, manage, and help respond to citizen requests.

[READ MORE](#)



**Disease Surveillance**  
In Zimbabwe, RTI is working with the U.S. Centers for Disease Control and Prevention (CDC) and the Ministry of Health and Child Welfare (MOHCW) to improve disease surveillance using mobile phones.

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RTI International, P.O. Box 12194, 3040 Cornwallis Rd., Research Triangle Park, NC 27709.  
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# Communicating Worldwide with Social Media



**ICT at RTI**  
@ICTatRTI

Helping developing countries use information and communication technology to achieve development results. An official feed of RTI International @RTI\_INTL

RTP, NC, USA, and worldwide · <http://www.ictedge.org/>

130 TWEETS
62 FOLLOWING
143 FOLLOWERS

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**Tweets**



**ICT at RTI** @ICTatRTI Feb 21  
An app to map mobile apps @ #MLW2013! RT @UNESCO Use our mobile app to learn about Mobile Learning Week [ow.ly/hNQDc](http://ow.ly/hNQDc)



**ICT at RTI** @ICTatRTI Feb 21  
#ICT4D Pic of the day features crime reporting tool Seguridad Inalambrica in El Salvador [bit.ly/Z9WVac](http://bit.ly/Z9WVac)



**ICT at RTI** @ICTatRTI Feb 21  
Great @frontlinesms blog post on the explosive growth of #mobile tech & potential in #Kenya [bit.ly/XVhaxV](http://bit.ly/XVhaxV) #ICT4D



**ICT at RTI** @ICTatRTI Feb 20  
#MLW2013 is featuring some fantastic ideas! Have you checked out @TangerineTool yet? [bit.ly/TangerineinPar...](http://bit.ly/TangerineinPar...) cc: @spouez



**ICT at RTI** @ICTatRTI Feb 20  
#ICT4D Pic of the Day features #mobiletech to support #Malaria spraying in 15 African countries. [bit.ly/ZluuP6](http://bit.ly/ZluuP6)



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#ICT4D Pic of the Day features #mobiletech to support #Malaria spraying in 15 African countries. [bit.ly/ZluuP6](http://bit.ly/ZluuP6)



**Int'l Development** @RTI\_INTL\_DEV Feb 19  
You've seen us use the hashtag #EGRA. What is #EGRA, and how is it used to improve #literacy? [VIDEO] #GivingTuesday [ar.gy/3Vle](http://ar.gy/3Vle)  
Retweeted by ICT at RTI



**ICT at RTI** @ICTatRTI Feb 19  
#ICT4D pic of the day is #EGRA @TangerineTool in #Liberia! [bit.ly/VgqGes](http://bit.ly/VgqGes) @WendyGorton, have you seen this picture?



**EGMA**  
By Sarah Pouzevara @spouez  
Liberia Tangerine Field Trial May 2012. Photos by S. Pouzevara

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1:40 p.m. - Feb 19, 2013 · Details
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## Contact Us:

Karen Davis

[kdavis@rti.org](mailto:kdavis@rti.org)

919-485-2799

David Uglow

[duglow@rti.org](mailto:duglow@rti.org)

919-541-7123

[www.rti.org](http://www.rti.org)