Annotated ELR-R2 Message

Below in Section 1 is a maximally populated ELR-R2 message for BLOOD LEAD. It does not feature the fields for Parent-Child messaging. In Section 2, the message has been expanded to show the individual field in order to highlight and comment upon differences ELR Release 2 when compared to ELR Release 1.

User note: In order to preserve the Markup changes in this Word doument, “Protect Document” is enabled. If you wish to make changed you will need to turn this off.

# Section 1

Test narrative:

A male child of age 3 is taken by his aunt, who is his legal guardian, to be seen by a physician. The child has his blood tested for blood lead. A blood sample is taken from his left finger, using a capillary collection method on a filter paper card. The specimen collection date is 6/15/2012; date of result is 6/17/2012. Both his medical record ID and SSN are included in the patient information along with name, DOB, race/ethnicity, current and home address, and his aunt's business, home and mobile phone number and email address. The lab result is a blood lead level by electrothermal atomic absorption spectrophotometry (AAS) of 9.2 ug/dL and the jurisdiction threshold is 5.0 (reference range of 0.0-5.0). This results in an abnormal flag of “High”. University Hospital has an on-site lab and results blood level tests under the performing lab name of “University Hospital Chem Lab”. These results are sent to the local public health agency.

MSH|^~\&|NIST Test Lab App^2.16.840.1.113883.3.72.5.20^ISO|NIST Test Lab Fac^2.16.840.1.113883.3.72.5.21^ISO|NIST Test PHA App^2.16.840.1.113883.3.72.5.22^ISO|NIST Test PHA Fac^2.16.840.1.113883.3.72.5.23^ISO|20140122120815-0800||ORU^R01^ORU\_R01|NIST-ELRR2-TC-XXX.XX|T|2.5.1|||AL|NE|||||LRI\_GU\_RU\_Profile^ELR R2\_LRI Base^2.16.840.1.113883.9.17^ISO~LRI\_PH\_Component^ELR R2\_PH Profile^2.16.840.1.113883.9.63^ISO

SFT|NIST Lab, Inc.^^^^^NIST&2.16.840.1.113883.3.987.1&ISO^XX^^^123544|3.6.23|A-1 Lab System|6742873-12

PID|1||18547545^^^NIST MPI&2.16.840.1.113883.3.72.5.30.2&ISO^MR~111111111^^^SSN&2.16.840.1.113883.4.1&ISO^SS||Lerr^Todd^G.^Jr^^^L~Gwinn^Theodore^F^Jr^^^B|Doolittle^Ramona^G.^Jr^^^M|20090607|M||2106-3^White^HL70005^W^White^L^^^White|123 North 102nd Street^Apt 4D^Harrisburg^PA^17102^USA^H^^42043~111 South^Apt 14^Harrisburg^PA^17102^USA^C^^42043||^^PH^^^555^7259890^4^call before 8PM~^^Internet^smithb@yahoo.com^^^^^home|^^PH^^^555^7259890^4^call before 8PM||||||||N^Not Hispanic or Latino^HL70189^NH^Non hispanic^L^^^Non hispanic||||||||N|||201206170000-0500|University H^2.16.840.1.113883.3.0^ISO|337915000^Homo sapiens (organism)^SCT^human^human^L^^^human

NTE|1|P|Patient is English speaker.|RE^Remark^HL70364^C^Comment^L^^^Comment

NK1|1|Smith^Bea^G.^Jr^^^L|GRD^Guardian^HL70063^LG^Legal Guardian^L^^^Legal Guardian|123 North 102nd Street^Apt 4D^Harrisburg^PA^17102^USA^H^^42043|^^PH^^^555^7259890^4^call before 8PM~^^Internet^smithb@yahoo.com^^^^^home||N^Next-of-Kin^HL70131^NOK^Next of Kin^L^^^Next of Kin

PV1|1|O||C||||||||||||||||||||||||||||||||||||||||201206151200|201206151600

ORC|RE|TEST000123A^NIST\_Placer \_App^2.16.840.1.113883.3.72.5.24^ISO|system generated^NIST\_Sending\_App^2.16.840.1.113883.3.72.5.24^ISO|system generated^NIST\_Sending\_App^2.16.840.1.113883.3.72.5.24^ISO||||||||4444444445^Bloodraw^Leonard^T^JR^DR^^^NPI&2.16.840.1.113883.4.6&ISO^L^^^NPI||^^PH^^^555^7771234^11^Hospital Line~^^PH^^^555^2271234^4^Office Phone|||||||University Hospital^^^^^NIST sending app&2.16.840.1.113883.3.72.5.21&ISO^XX^^^111|Firstcare Way^Building 1^Harrisburg^PA^17111^USA^L^^42043|^^PH^^^555^7771234^11^Call 9AM to 5PM|Firstcare Way^Building 1^Harrisburg^PA^17111^USA^B^^42043

# OBR|1|TEST000123A^NIST\_Placer \_App^2.16.840.1.113883.3.72.5.24^ISO|system generated^NIST\_Sending\_App^2.16.840.1.113883.3.72.5.24^ISO|5671-3^Lead [Mass/volume] in Blood^LN^PB^lead blood^L^^^lead blood|||201206151200|201206151200|||||FNA^Fasting not asked of the patient at time of procedure.^HL70916^NA^Not Asked^L^^^Not asked|||4444444445^Bloodraw^Leonard^T^JR^DR^^^NPI&2.16.840.1.113883.4.6&ISO^L^^^NPI|^^PH^^^555^7771234^11^Hospital Line~^^PH^^^555^2271234^4^Office Phone|||||20120617000000-0500|||F|||1009210018^Hamlin^Pafford^M^Sr.^Dr.^^^NPI&2.16.840.1.113883.4.6&ISO^L^^^NPI|||V1586^HX-contact/exposure lead^I9CDX^LEAD^Lead exposure^L^^^Lead exposure|111&Varma&Raja&Rami&JR&DR&PHD&&NIST\_Sending\_App&2.16.840.1.113883.3.72.5.21&ISO|||||||||||||||||CC^Copies Requested^HL70507^CC^Copy to^L^^^Copy to

# TQ1|1||||||2012061710|2012061810

# OBX|1|SN|5671-3^Lead [Mass/volume] in Blood^LN^PB^lead blood^L^^^lead blood|1|=^9.2|ug/dL^microgram per deciliter^UCUM^ug/dl^microgram per deciliter^L^^^microgram per deciliter|0.0 - 5.0|H^Above High Normal^HL70078^H^High^L^^^High|||F|||201206151200|||0263^Atomic Absorption Spectrophotometry^OBSMETHOD^ETAAS^Electrothermal Atomic Absorption Spectrophotometry^L^^^Electrothermal Atomic Absorption Spectrophotometry||201206171200||||University Hospital Chem Lab^^^^^CLIA&2.16.840.1.113883.4.7&ISO^XX^^^01D1111111|Firstcare Way^Building 2^Harrisburg^PA^17111^USA^L^^42043|1790019875^House^Gregory^F^III^Dr^^^NPI&2.16.840.1.113883.4.6&ISO^L^^^NPI||||RSLT

# SPM|1|SPEC-123&Placer\_EHR&2.16.840.1.113883.3.72.5.45&ISO^SP004X10987&Filler\_LIS&2.16.840.1.113883.3.72.5.21&ISO||440500007^Capillary Blood Specimen^SCT^CAPF^Capillary, filter paper card^L^^^Capillary, filter paper card|73775008^Morning (qualifier value)^SCT^AM^Capillary, filter paper card^L^^^Capillary, filter paper card|NONE^none^HL70371^NA^Capillary, filter paper card^L^^^Capillary, filter paper card|1048003^Capillary Specimen Collection (procedure)^SCT^CAPF^Capillary, filter paper card^L^^^Capillary, filter paper card|7569003^Finger structure (body structure)^SCT^FIL^Finger, Left^L^^^Finger, Left|7771000^Left (qualifier value)^SCT^FIL^Finger, Left^L^^^Finger, Left||||||||201206151200^201206151200|20120617100038

# OBX|1|SN|35659-2^Age at Specimen Collection^LN^AGE^AGE^L||=^3|a^Year^UCUM^Y^Years^L|||||F|||201206151200|||||20120617||||University Hospital Chem Lab^^^^^CLIA&2.16.840.1.113883.4.7&ISO^XX^^^01D1111111|Firstcare Way^Building 2^Harrisburg^PA^17111^USA^L^^42043|1790019875^House^Gregory^F^III^Dr^^^NPI&2.16.840.1.113883.4.6&ISO^L^^^NPI||||SCI

# Section 2

MSH

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3 NIST Test Lab App^2.16.840.1.113883.3.72.5.20^ISO

4 NIST Test Lab Fac^2.16.840.1.113883.3.72.5.21^ISO

5 NIST Test PHA App^2.16.840.1.113883.3.72.5.22^ISO

6 NIST Test PHA Fac^2.16.840.1.113883.3.72.5.23^ISO

7 20140122120815-0800

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9 ORU^R01^ORU\_R01

10 NIST-ELRR2-TC-XXX.XX

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12 2.5.1

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21 LRI\_GU\_RU\_Profile^ELR R2\_LRI Base^2.16.840.1.113883.9.17^ISO~LRI\_PH\_Component^ELR R2\_PH Profile^2.16.840.1.113883.9.63^ISO

SFT

1 NIST Lab, Inc.^^^^^NIST&2.16.840.1.113883.3.987.1&ISO^XX^^^123544

2 3.6.23

3 A-1 Lab System

4 6742873-12

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PID

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3 18547545^^^NIST MPI&2.16.840.1.113883.3.72.5.30.2&ISO^MR^&&&~111111111^^^SSN&2.16.840.1.113883.4.1&ISO^SS

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5 Lerr^Todd^G.^Jr^^^L^^^^^^^~Gwinn^Theodore^F^Jr^^^B

6 Doolittle^Ramona^G.^Jr^^^M

7 20090607

8 M

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10 2106-3^White^HL70005^W^White^L^^^White

11 123 North 102nd Street^Apt 4D^Harrisburg^PA^17102^USA^H^^42043~111 South^Apt 14^Harrisburg^PA^17102^USA^C^^42043

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13 ^^PH^^^555^7259890^4^call before 8PM~^^Internet^smithb@yahoo.com^^^^^home

14 ^^PH^^^555^7259890^4^call before 8PM

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22 N^Not Hispanic or Latino^HL70189^NH^Non hispanic^L^^^Non hispanic

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33 201206170000-0500

34 University H^2.16.840.1.113883.3.0^ISO

35 337915000^Homo sapiens (organism)^SCT^human^human^L^^^human

NTE

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2 P

3 Patient is English speaker.

4 RE^Remark^HL70364^C^Comment^L^^^Comment

NK1

1 1

2 Smith^Bea^G.^Jr^^^L

3 GRD^Guardian^HL70063^LG^Legal Guardian^L^^^Legal Guardian

4 123 North 102nd Street^Apt 4D^Harrisburg^PA^17102^USA^H^^42043

5 ^^PH^^^555^7259890^4^call before 8PM~^^Internet^smithb@yahoo.com^^^^^home

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7 N^Next-of-Kin^HL70131^NOK^Next of Kin^L^^^Next of Kin

PV1

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ORC

1 RE

2 TEST000123A^NIST\_Placer \_App^2.16.840.1.113883.3.72.5.24^ISO

3 system generated^NIST\_Sending\_App^2.16.840.1.113883.3.72.5.24^ISO

4 system generated^NIST\_Sending\_App^2.16.840.1.113883.3.72.5.24^ISO

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12 4444444445^Bloodraw^Leonard^T^JR^DR^^^NPI&2.16.840.1.113883.4.6&ISO^L^^^NPI^

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14 ^^PH^^^555^7771234^11^Hospital Line~^^PH^^^555^2271234^4^Office Phone

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21 University Hospital^^^^^NIST sending app&2.16.840.1.113883.3.72.5.21&ISO^XX^^^111

22 Firstcare Way^Building 1^Harrisburg^PA^17111^USA^L^^42043

23 ^^PH^^^555^7771234^11^Call 9AM to 5PM

24 Firstcare Way^Building 1^Harrisburg^PA^17111^USA^B^^42043

OBR

1 1

2 TEST000123A^NIST\_Placer \_App^2.16.840.1.113883.3.72.5.24^ISO

3 system generated^NIST\_Sending\_App^2.16.840.1.113883.3.72.5.24^ISO

4 5671-3^Lead [Mass/volume] in Blood^LN^PB^lead blood^L^^^lead blood

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7 201206151200

8 201206151200

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13 FNA^Fasting not asked of the patient at time of procedure.^HL70916^NA^Not Asked^L^^^Not asked

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16 4444444445^Bloodraw^Leonard^T^JR^DR^^^NPI&2.16.840.1.113883.4.6&ISO^L^^^NPI

17 ^^PH^^^555^7771234^11^Hospital Line~^^PH^^^555^2271234^4^Office Phone

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28 1009210018^Hamlin^Pafford^M^Sr.^Dr.^^^NPI&2.16.840.1.113883.4.6&ISO^L^^^NPI

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31 V1586^HX-contact/exposure lead^I9CDX^LEAD^Lead exposure^L^^^Lead exposure

32 111&Varma&Raja&Rami&JR&DR&PHD&&NIST\_Sending\_App&2.16.840.1.113883.3.72.5.21&ISO

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49 CC^Copies Requested^HL70507^CC^Copy to^L^^^Copy to

TQ1

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OBX

1 1

2 SN

3 5671-3^Lead [Mass/volume] in Blood^LN^PB^lead blood^L^^^lead blood

4 1

5 =^9.2

6 ug/dL^microgram per deciliter^UCUM^ug/dl^microgram per deciliter^L^^^microgram per deciliter

7 0.0 - 5.0

8 H^Above High Normal^HL70078^H^High^L^^^High

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11 F

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17 0263^Atomic Absorption Spectrophotometry^OBSMETHOD^ETAAS^Electrothermal Atomic Absorption Spectrophotometry^L^^^Electrothermal Atomic Absorption Spectrophotometry

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23 University Hospital Chem Lab^^^^^CLIA&2.16.840.1.113883.4.7&ISO^XX^^^01D1111111

24 Firstcare Way^Building 2^Harrisburg^PA^17111^USA^L^^42043

25 1790019875^House^Gregory^F^III^Dr^^^NPI&2.16.840.1.113883.4.6&ISO^L^^^NPI

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29 RSLT

SPM

1 1

2 SPEC-123&Placer\_EHR&2.16.840.1.113883.3.72.5.45&ISO^SP004X10987&Filler\_LIS&2.16.840.1.113883.3.72.5.21&ISO

3

4 440500007^Capillary Blood Specimen^SCT^CAPF^Capillary, filter paper card^L^^^Capillary, filter paper card

5 73775008^Morning (qualifier value)^SCT^AM^Capillary, filter paper card^L^^^Capillary, filter paper card

6 NONE^none^HL70371^NA^Capillary, filter paper card^L^^^Capillary, filter paper card

7 1048003^Capillary Specimen Collection (procedure)^SCT^CAPF^Capillary, filter paper card^L^^^Capillary, filter paper card

8 7569003^Finger structure (body structure)^SCT^FIL^Finger, Left^L^^^Finger, Left

9 7771000^Left (qualifier value)^SCT^FIL^Finger, Left^L^^^Finger, Left

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17 201206151200^201206151200

18 20120617100038

OBX

1 1

2 SN

3 35659-2^Age at Specimen Collection^LN^AGE^AGE^L

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5 =^3

6 a^Year^UCUM^Y^Years^L

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23 University Hospital Chem Lab^^^^^CLIA&2.16.840.1.113883.4.7&ISO^XX^^^01D1111111

24 Firstcare Way^Building 2^Harrisburg^PA^17111^USA^L^^42043

25 1790019875^House^Gregory^F^III^Dr^^^NPI&2.16.840.1.113883.4.6&ISO^L^^^NPI

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