LINKING ELECTRONIC MEDICAL RECORD DATA TO NEWT (WWW.NEWBORNWEIGHT.ORG)

INSTRUCTIONS

The publicly available and free to use website, www.newbornweight.org, which houses the Newborn Weight Tool (NEWT), can now be linked to electronic medical records. NEWT is the first tool created that allows pediatric healthcare providers and parents to see how a newborn's weight during the first days following childbirth compares with a large sample of newborns. Using a research sample of birth weights from more than 100,000 breastfed newborns, the tool uses a nomogram to plot a baby's weight percentile at any given time in the first few days following birth compared with the research population. The results can be used for early identification of neonates on a trajectory for greater weight loss and related complications.

Instructions for linking electronic records to the website are below. For Powerchart, an mPage component needs to be created to hold the link to the NEWT tool. Then, the following fields need to be linked:

1. Birth date
2. Birth time
3. Birth Weight
4. Delivery Method (vaginal or C-section)
5. Subsequent weights with accompanying dates and times
6. Feeding method (breastmilk or formula) - *****Please note the following limitation** – Because the graphs generated by the research supporting NEWT involved those *exclusively* breastfeeding or *exclusively* formula feeding, note that if a newborn is fed BOTH breastmilk and formula, their data will chart them as if they were exclusively breastfeeding. This can be manually changed as needed once the chart is produced for an individual.

INSTRUCTIONS

1) The Newt webpage provides a service that graphs the weights of newborns in an easy to read fashion. It works by sending **one large string** of parameters to the site. The syntax of the command is created by appending strings **A**, **B** and **C** as noted below:

   A = **https://www.newbornweight.org/chart/?meas=**

   B = Is a reoccurring string with three variables:

N	= Sequence number (incremented per measurement)
date_measured	= Date weight measured (date/time in seconds from Jan -01 -1970)
measured_weight	= Actual weight in kilograms

These variables need to be formatted as noted below with the following hard-coded text:

[**N**]%255Btimestamp%255D%3D[**date_measured**]%26 [**N**]%255Bweight%255D%3D[**measured_weight**]%26

C = a one-time string of four variables that contains the details of the birth:

date_measured	= Date weight measured (date/time in seconds from Jan -01 -1970)
birth_weight	= Weight in kilograms at birth
deliv_type	= Delivery Type (**vag** = vaginal, **ces** = Cesarean)
feed_method	= Feeding Method (bf = breast fed, ff = formula fed)

These variables need to be formatted as noted below with the following hard-coded text:

&bs=[date_measured]&bw=[birth_weight]&bt=[deliv_type]&fm=[feed_method]

2) Example:

Patient Information:

Patient was born on **3/2/2016 @ 08:29:00am weighing 3.0 kg, delivered Cesarean and is being fed formula**.

The following weights were also measured (include only those within 72 hours of birth):

3/2 8:12pm – 3.1 kg; 3/3 7:04am – 3.2 kg; 3/3 10am – 3.3 kg; 3/3 7:35pm – 3.4 kg and so on….
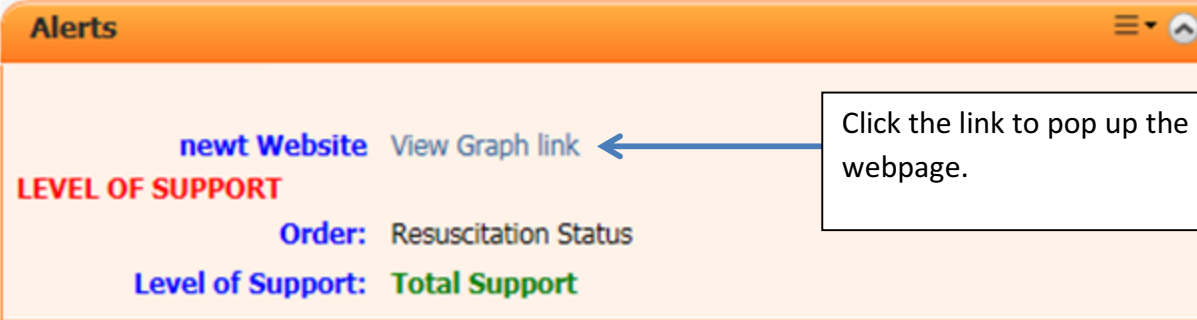
Newt Webpage data generated:

https://www.newbornweight.org/chart/?meas=

0%255Btimestamp%255D%3D*1458827760*%26*0*%255Bweight%255D%3D*3.1*%26

1%255Btimestamp%255D%3D*1458827794*%26*1*%255Bweight%255D%3D*3.2*%26

2%255Btimestamp%255D%3D*1458827892*%26*2*%255Bweight%255D%3D*3.3*%26

3%255Btimestamp%255D%3D*1458826903*%26*3*%255Bweight%255D%3D*3.4*%26

&bs=1458827120&bw=3.0&bt=ces&fm=ff

Notes: This string would be concatenated and have no cr/lf characters in it.

EXAMPLE: Accessing the Newt website from PowerChart at Penn State

We have programmed the link to the website to appear inside of an mPage component on the Views Tab.

To reach the website, users click on View Graph link to open the Newt webpage with pre-populated PowerChart data.

The link will appear if the Baby's birthdate and birthweight are entered into PowerChart.