Growth Chart Component

PC PAL

The Growth Chart Component is a unique chart drawing module for your medical system

www.GrowthCharts.info

PC PAL's Growth Chart Components are a unique range of software routines specifically developed to construct any graph format and draw superb quality images from population reference data such as WHO and CDC.

These customizable solutions provide the means to fully integrate electronic growth charts into applications for hospitals and EMR systems.

PC PAL's wide ranging chart library can serve the interests of endocrinologists, general pediatricians and well baby clinics such as WIC clinics in the US.

The Growth Chart Components record auxological measurements including height, weight, head circumference, sitting height, arm span, foot length and waist line.

Percentiles and Standard Deviations are calculated based on population references and premature references. Other calculations are performed such as BMI, height velocity, target height.

Whether your need is auxology and anthropometry research oriented or disease oriented, PC PAL can supply a tailored solution with custom layout and integrated functionality.

Advantages

PC PAL's computerized growth charts offer significant advantages compared to paper based systems. They provide an exact automatic positioning of the entered values which avoids plotting errors and saves staff time; with the data stored electronically the process of finding and retrieving the record is very quick.

Since a single paper master record is no longer required, the charts always contain the most recent observations and can easily be viewed or printed by professionals from other departments or in different locations.

The potential for all the patient's carers to access patient information on demand, contributes significantly to both patient safety and efficient management.

" Auxology is such a fascinating science and with the introduction of computerized growth charts we hope we can generate some further interest in the auxological follow up of children of all ages".

– Dr Lars Hagenäs, Karolinska Hospital

Some nations wish to preserve visual continuity with existing paper charts and also mandate a population reference set to use for all children. In these cases, a country specific component is available for these countries. When disease specific charts have been mandated, they are also included.

Integration

PC PAL's Growth Chart Components can be integrated into various systems including web solutions. During the integration process, developers can add their own interactive features such as hints and callbacks.

Our charts have been integrated into:

- Electronic Medical Records
- Clinical Trial Systems
- Outcome Surveys & Patient Registries
- Web applications for parents
- Country specific Growth Charts

Country specific Growth Charts

We make computerized growth charts for many different countries and the list is growing:

- USA
- WHO
- Sweden
- Denmark
- Norway
- Iceland
- France
- United Kingdom

- Germany
- Netherlands
- Belgium
- Switzerland
- Canada
- Romania
- Colombia

Customized Growth Charts

Drawing from our extensive reference library, PC PAL can incorporate any population or specific disease reference set and implement different calculation methodologies. Alternatively, customers can supply their own dataset, design layout and description of additional features crucial to fulfilling their specific needs. We have worked with a number of institutions in this way and would be delighted to discuss your individual requirements.

Disease specific versions

Using disease specific growth references the Growth Chart Component can draw the graph using an existing chart format or be structured to match your specification for example simultaneously displaying the normal population range as a shadow curve. Charts have previously been added for chondrodystrophies, Prader-Willi, Downs, Noonan and Turner Syndrome.

Features

IMAGE PROCESSING

Our own image-processing algorithm is used to produce sharp screen images.

ENTER MEASUREMENTS

Auxological variables such as height, weight and puberty descriptors are fed directly to the component and are plotted in the chart automatically.

INTERACTIVITY

The charts can be manipulated actively. Zoom the graph directly by selecting an area using the mouse. Right click in the chart to open a menu selection to zoom, copy the graph to the clipboard or print. Move the cursor over data point markers to see the exact values in a hint. These hints can also display alternative information assigned by the programmer during the integration process.

SAVE CHART AS

When exporting charts to other programs the user can select from the commonly used file formats of JPEG, GIF, PNG, or EMF.

REFERENCE LIBRARY

PC PAL's growth charts are created using our extensive internal library of population data sets. This means that any of these references can quickly be added to the growth chart templates you have selected.

GROWTH CHARTS

Each version of the component is supplied with the most often used charts, typically height, weight, BMI, head circumference, height velocity, and premature birth. Population and disease specific varieties are available.

AUTOMATIC CALCULATIONS

Included with the charting component is a calculation engine for deriving both plain values and population referenced transforms. These include SD (z) scores, target height by different methods, BMI and height velocity. All calculated variables can be viewed in clear tables.

HIGH QUALITY PRINTOUTS

All charts can be printed in a quality standard matching official paper versions.

EXPORT CHARTS

Charts can be copied to the clipboard and pasted into other programs such as MS PowerPoint and Word for articles and presentations.

EASY INTEGRATION

The chart component is an ActiveX control and has been integrated into applications written in C#, Java, VB.NET, VB, Delphi and others. It has also been integrated into web applications.

PC PAL

www.pcpal.eu

PC PAL has more than 25 years experience in developing software and databases for growth data, growth charts and growth related calculations.

PC PAL's Growth Charts are often included in electronic medical record software from other suppliers and are available to more than 100 000 users worldwide.

■ **SWEDEN**
+46 8 724 44 00

■ **FRANCE**
+33 1 69 53 46 20

■ **USA/CANADA**
Toll-free: +1 877 469 7272

SWEDEN: Kaplansbacken 3, SE-112 24 Stockholm, Sweden
FRANCE: 3 Avenue Jeanne Garnerin, FR-91320 Wissous, France