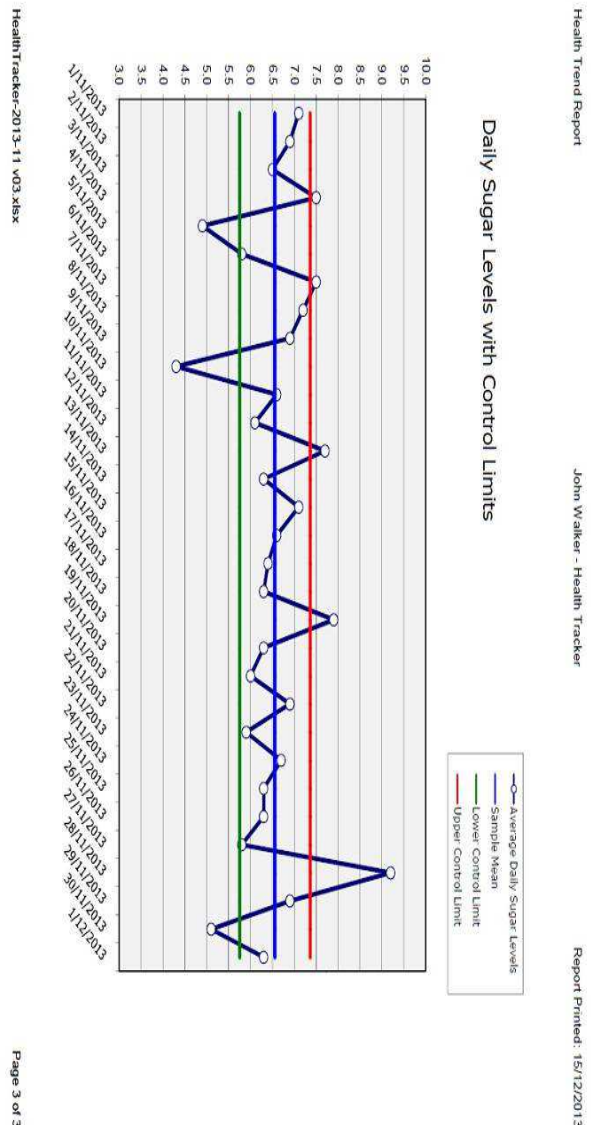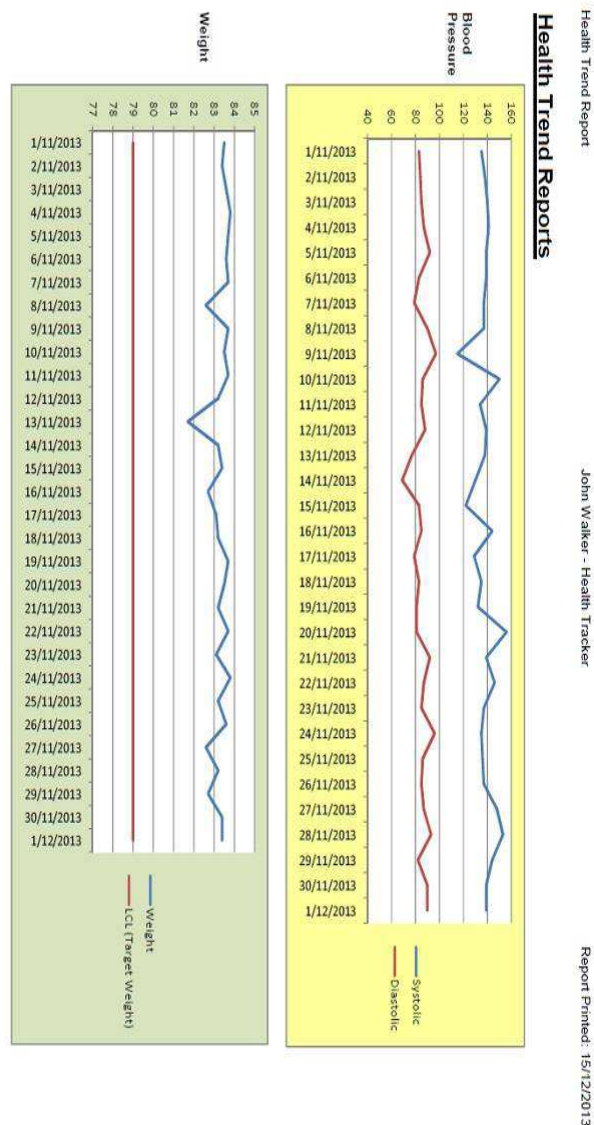## QualityHelp Community Guide

SmartGuide

Health Tracker

(Statistical Process Control for Diabetics)

(Created by the QualityHelp Community at qualityhelp.org)

qh-trn-doc-1018-p

Health Trend Reports

Blood Pressure

	160	140	120	100	80	60	40
1/11/2013
2/11/2013
3/11/2013
4/11/2013
5/11/2013
6/11/2013
7/11/2013
8/11/2013
9/11/2013
10/11/2013
11/11/2013
12/11/2013
13/11/2013
14/11/2013
15/11/2013
16/11/2013
17/11/2013
18/11/2013
19/11/2013
20/11/2013
21/11/2013
22/11/2013
23/11/2013
24/11/2013
25/11/2013
26/11/2013
27/11/2013
28/11/2013
29/11/2013
30/11/2013
1/12/2013

Legend: Diastolic, Systolic

Weight

| 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 |

1/11/2013
2/11/2013
3/11/2013
4/11/2013
5/11/2013
6/11/2013
7/11/2013
8/11/2013
9/11/2013
10/11/2013
11/11/2013
12/11/2013
13/11/2013
14/11/2013
15/11/2013
16/11/2013
17/11/2013
18/11/2013
19/11/2013
20/11/2013
21/11/2013
22/11/2013
23/11/2013
24/11/2013
25/11/2013
26/11/2013
27/11/2013
28/11/2013
29/11/2013
30/11/2013
1/12/2013

Legend: LCL (Target Weight), Weight

John Walker - Health Tracker

HealthTracker-2013-11 v03.xlsx

Report Printed: 15/12/2013

Daily Sugar Levels with Control Limits

| 3.0 | 3.5 | 4.0 | 4.5 | 5.0 | 5.5 | 6.0 | 6.5 | 7.0 | 7.5 | 8.0 | 8.5 | 9.0 | 9.5 | 10.0 |

1/11/2013
2/11/2013
3/11/2013
4/11/2013
5/11/2013
6/11/2013
7/11/2013
8/11/2013
9/11/2013
10/11/2013
11/11/2013
12/11/2013
13/11/2013
14/11/2013
15/11/2013
16/11/2013
17/11/2013
18/11/2013
19/11/2013
20/11/2013
21/11/2013
22/11/2013
23/11/2013
24/11/2013
25/11/2013
26/11/2013
27/11/2013
28/11/2013
29/11/2013
30/11/2013
1/12/2013

Legend:
- Average Daily Sugar Levels
- Sample Mean
- Lower Control Limit
- Upper Control Limit

John Walker - Health Tracker

HealthTracker-2013-11 v03.xlsx

Report Printed: 15/12/2013

SmartGuide – Health Tracker

Health Tracker – Data Table

This Guide gives an overview and instructions for using the Health Tracker Tool (in an MS Excel Template.

The tracker is focused on providing a working model for supporting a Diabetes management plan.

<u>PLEASE NOTE:</u> This is a suggested model for a support tool and should not be used as a replacement for any other medical plans.

Why use Six Sigma?

❑ **Six Sigma is a management philosophy and statistical problem-solving methodology focused on reducing operational variance.**

❑ **Improving overall quality and performance of processes.**

❑ **Dictates that process improvement decisions should be based on data, and statistical process analysis.**

❑ **Obtaining a Six Sigma performance level requires a statistical reduction of defects to under 3.4 defects per million opportunities, or 99.9997% success rate (Critical to Airline, Pharmaceutical and Health Care industries).**

❑ **Uses the 5 phase D-M-A-I-C approach to problem saving and Continuous Improvement.**

The latest Excel template used for the Health Tracker tool may be downloaded from the QualityHelp.org Community Site (under Guides).

The tool was founded on the production control chart template, downloaded from the Microsoft Office template site.

The sample table (on right) shows sample data collected over a month period. See the generated reports overleaf.

This table is particularly useful in showing all the macros for calculating the daily and monthly mean values for blood sugar tests (up to 3 per day), plus the standard deviations, Upper and Lower Control limits (default 1s). The control limits can be manually adjusted (eg. To 2s or 3s) by increasing the percentage value in cell B10.

It is also important to track health, diet, exercise and any variations to medication that would have an impact on undesirable sugar level deviations.
It would take little effort to modify the data table and report charts to personally suit the user.

All feedback and suggestion will be appreciated.

Date (November)	Time	Blood Sugar Sample 1 (Morning)	Sample 2	Sample 3	Mean (Daily Average)	Sample Mean (Average of All Means)	Standard Deviation (since day 1)	Standard Deviation (for month)	Lower Control Limit	Upper Control Limit	Blood Pressure Systolic	Diastolic	Pulse	Weight	Desired Target Weight	Diet	Medication / Exercise
1/11/2013	9:00	7.1	7.1	7.1	7.1	6.56	0.00	0.81	5.75	7.36	135	83	84	83.5	79.0	Fair	3 glimel (2+1) / 4km walk
2/11/2013	7:00	7.1	7.1	7.1	7.1	6.56	0.11	0.81	5.75	7.36	138	84	82	83.4	79.0	Fair	
3/11/2013	6:50	6.5	6.5	6.5	6.5	6.56	0.26	0.81	5.75	7.36	140	85	83	83.6	79.0	Fair	2 glimel (2+0) / no walk
4/11/2013	6:40	6.5	6.9	6.9	6.9	6.56	0.38	0.81	5.75	7.36	141	73	73	83.8	79.0	Fair	5 hrs
5/11/2013	6:30	7.5	7.5	7.5	7.5	6.56	0.93	0.81	5.75	7.36	139	92	82	83.7	79.0	Fair	tea and honey
6/11/2013	7:15	4.9	4.9	4.9	4.9	6.56	0.90	0.81	5.75	7.36	139	82	81	83.6	79.0	Fair	2 glimel (2+0) / no walk
7/11/2013	6:05	5.8	5.8	5.8	5.8	6.56	0.91	0.81	5.75	7.36	137	83	82	83.7	79.0	Fair	
8/11/2013	7:00	7.5	7.5	7.5	7.5	6.56	0.87	0.81	5.75	7.36	137	79	88	82.6	79.0	Fair	
9/11/2013	6:30	7.2	7.2	7.2	7.2	6.56	0.82	0.81	5.75	7.36	115	97	77	83.7	79.0	Fair	2 glimel (2+0)
10/11/2013	6:30	6.9	6.9	6.9	6.9	6.56	1.07	0.81	5.75	7.36	150	86	86	83.5	79.0	Fair	3 glimel (2+1) / 3km walk
11/11/2013	6:00	4.3	4.3	4.3	4.3	6.56	1.02	0.81	5.75	7.36	134	85	79	83.7	79.0	Fair	3 glimel (2+1) / no walk
12/11/2013	7:05	6.6	6.6	6.6	6.6	6.56	0.98	0.81	5.75	7.36	139	88	86	83.2	79.0	Fair	2 glimel (2+1) / no walk
13/11/2013	7:00	6.1	6.1	6.1	6.1	6.56	1.00	0.81	5.75	7.36	138	77	81	81.7	79.0	Excellent	3 glimel (2+1) / 3km walk
14/11/2013	6:30	6.3	6.3	6.3	6.3	6.56	0.96	0.81	5.75	7.36	130	89	83	83.2	79.0	Fair	3 glimel (2+1) / 3km walk
15/11/2013	7:00	7.1	7.1	7.1	7.1	6.56	0.94	0.81	5.75	7.36	122	69	83	83.4	79.0	Fair	1 glimel (1+0) / no walk
16/11/2013	7:20	6.4	6.4	6.6	6.4	6.56	0.91	0.81	5.75	7.36	144	85	71	82.7	79.0	Fair	3 glimel (2+1) / no walk
17/11/2013	5:00	6.3	6.3	6.6	6.4	6.56	0.88	0.81	5.75	7.36	129	78	78	83.2	79.0	Fair	1 glimel (1+0) / no walk
18/11/2013	6:00	6.3	6.3	6.6	6.3	6.56	0.86	0.81	5.75	7.36	135	83	81	83.2	79.0	Fair	1 glimel (1+1) / no walk
19/11/2013	5:30	7.9	7.9	7.9	7.9	6.56	0.89	0.81	5.75	7.36	132	81	84	83.7	79.0	Fair	3 glimel (2+0) / no walk
20/11/2013	6:10	6.3	6.3	6.3	6.3	6.56	0.87	0.81	5.75	7.36	156	81	66	83.5	79.0	Poor	1 glimel (1+1) / 3km walk
21/11/2013	6:30	6.0	6.0	6.0	6.0	6.56	0.86	0.81	5.75	7.36	139	92	77	83.7	79.0	Fair	
22/11/2013	6:30	6.9	6.9	6.9	6.9	6.56	0.84	0.81	5.75	7.36	146	87	78	83.7	79.0	Fair	3 glimel (2+1) / 2km walk
23/11/2013	7:00	5.9	5.9	5.9	5.9	6.56	0.84	0.81	5.75	7.36	137	85	81	83.1	79.0	Fair	2 glimel (1+1) / 5km walk
24/11/2013	5:00	6.7	6.7	6.7	6.7	6.56	0.82	0.81	5.75	7.36	135	96	91	83.8	79.0	Fair	2 glimel (1+1) / 2km walk
25/11/2013	7:00	6.3	6.3	6.3	6.3	6.56	0.80	0.81	5.75	7.36	136	86	98	83.2	79.0	Fair	2 glimel (1+1) / no walk