



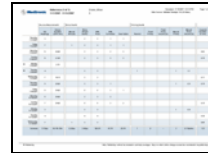
Report Reference Guide

CareLink[®] Pro
THERAPY MANAGEMENT SOFTWARE FOR DIABETES

How to use this guide

Each type of CareLink™ Pro report and its components are described in the following sections. Report data used to generate the sample reports was from a fictitious patient.

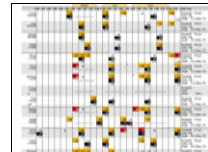
This guide shows samples of the reports. Your reports may look slightly different.



p.2 Adherence Report This report presents patient behavior data for a selected period. It provides a review of a patient's adherence according to the indices of glucose measurements, bolus events, and insulin pump activities.



p.4 Sensor and Meter Overview Report This report summarizes meter glucose (and sensor glucose, if applicable), carbohydrate, and insulin data for a selected period. It provides an overview of a patient's glycemic control (daily, overnight, and at meal times) and comprehensive statistical data.



p.12 Logbook Report This report presents meter glucose, carbohydrate, and insulin data for each hour of a selected period. It provides a diary of events recorded hourly, as well as daily averages and totals.



p.15 Device Settings Report This report presents the settings of a patient's insulin pump or Guardian monitor at the time of a selected upload. It can be used to help interpret other reports or simply to document a patient's device settings.



p.17 Daily Detail Report This report presents glucose, carbohydrate, and insulin data for a selected day. It provides the details of a patient's glycemic control, bolus events, basal activity, and comprehensive statistical data.

Adherence Report



Adherence (1 of 1)
11/1/2007 - 11/14/2007

Drake, Ethan
0

Generated: 11/15/2007 1:38:19 PM Page 1 of 1
Data Sources: MiniMed Paradigm 722 (E.Drake)

	Glucose Measurements		Bolus Events					Priming Events					Suspend Duration (h:mm)	
	BG Readings	Sensor Duration (d:hh:mm)	Manual Boluses	Bolus Wizard Events	With Food	With Correction	Overridden	Rewind	Fixed Primes	Fixed Prime Volume (U)	Manual Primes	Manual Prime Volume (U)		
Thursday 11/1/2007	3			3	3	1	1							
Friday 11/2/2007	7		1	3	3	1	1							
Saturday 11/3/2007	6	24:00		3	3	3	3							0:02
Sunday 11/4/2007	6	21:05		3	3	3	3							0:15
Monday 11/5/2007		0:15												
Tuesday 11/6/2007	4			3	3			1			1	3.1		
Wednesday 11/7/2007	7	19:15		3	3									0:11
Thursday 11/8/2007	5	24:00		3	3	1					1	0.5		0:15
Friday 11/9/2007	8	24:00		5	5	3	1							
Saturday 11/10/2007	5	24:00		3	3	2								
Sunday 11/11/2007	7	24:00		5	5	3	2							0:15
Monday 11/12/2007	3			3	3						1	0.9		
Tuesday 11/13/2007	4			4	4									0:30
Wednesday 11/14/2007	7		1	3	3									0:05
Summary	5.7/day	6d 16h 35m	0.2/day	3.4/day	100.0%	41.5%	26.8%	1	0	--	3	0.7U/prime		1:33

● Partial day

Note: Partial days will not be included in summary averages. Days on which a time change occurred are considered to be partial days.

Adherence Report at a glance

The Adherence Report presents data from a patient’s insulin pump, blood glucose meter(s), and glucose sensor (if used). It can provide insight into the patient’s glucose management behavior. The Adherence Report summarizes up to 2 weeks of data. The sections of the report are described below.

Date column

The Partial Day symbol may appear in this column to indicate that only partial data for the day was obtained. This can occur when a time change was made on the pump or Guardian.

Glucose measurements

The Glucose Measurements section contains columns for the number of meter readings and the duration of glucose sensor use.

Bolus events

The Bolus Events section consists of 5 columns that present total numbers for the following: (1) manual boluses, (2) Bolus Wizard events, (3) Bolus Wizard boluses with a food component, (4) Bolus Wizard boluses with a correction component, and (5) Bolus Wizard calculator overrides.

Priming events (fill events)



The Priming Events (or, Fill Events) section includes columns for events related to priming (or filling) the pump cannula and tubing, including the number of events that occurred, and the volume of insulin used. The terminology in this section of the report differs depending on the pump model.

Pump suspends

The last column in the table shows the duration (hours and minutes) for which the insulin pump was suspended.

Summary row

The totals or daily averages are listed at the bottom of each column.

Symbol	Meaning
	Partial data: Day contains partial data. This data is shown in graphs and totals, but is not in daily averages or standard deviations.
	Low Suspend: Pump-initiated suspension of all insulin delivery.

partial day of data

Medtronic Adherence (1 of 1) Drake, Ethan
11/11/2007 - 11/14/2007
Generated: 11/15/2007 1:38:19 PM Page 1 of 1
Data Sources: MedMed Paradigm 722 (E Drake)

	Glucose Measurements		Bolus Events					Priming Events					Suspend Duration (h:mm)	
	EQ Readings	Sensor Duration (d:h:mm)	Manual Boluses	Bolus Wizard Events	With Food	With Correction	Overrides	Revised	Fixed Primes	Fixed Prime Volume (U)	Manual Primes	Manual Prime Volume (U)		
Thursday 11/1/2007	3			3	3	1	1							
Friday 11/2/2007	7		1	3	3	1	1							
Saturday 11/3/2007	6	24:00		3	3	3	3							0:02
Sunday 11/4/2007	6	21:05		3	3	3	3							0:15
Monday 11/5/2007		0:16												
Partial Day Tuesday 11/6/2007	4			3	3			1			1	3.1		
Wednesday 11/7/2007	7	19:15		3	3									0:11
Thursday 11/8/2007	5	24:00		3	3	1					1	0.5		0:15
Friday 11/9/2007	8	24:00		6	6	3	1							
Saturday 11/10/2007	5	24:00		3	3	2								
Sunday 11/11/2007	7	24:00		5	5	3	2							0:15
Monday 11/12/2007	3			3	3						1	0.9		
Tuesday 11/13/2007	4			4	4									0:08
Wednesday 11/14/2007	7		1	3	3									0:05
Summary	5.74day	6d 10h 35m	0.24day	3.44day	100.0%	41.5%	20.8%	1	0	--	3	0.7U/prime	1:33	

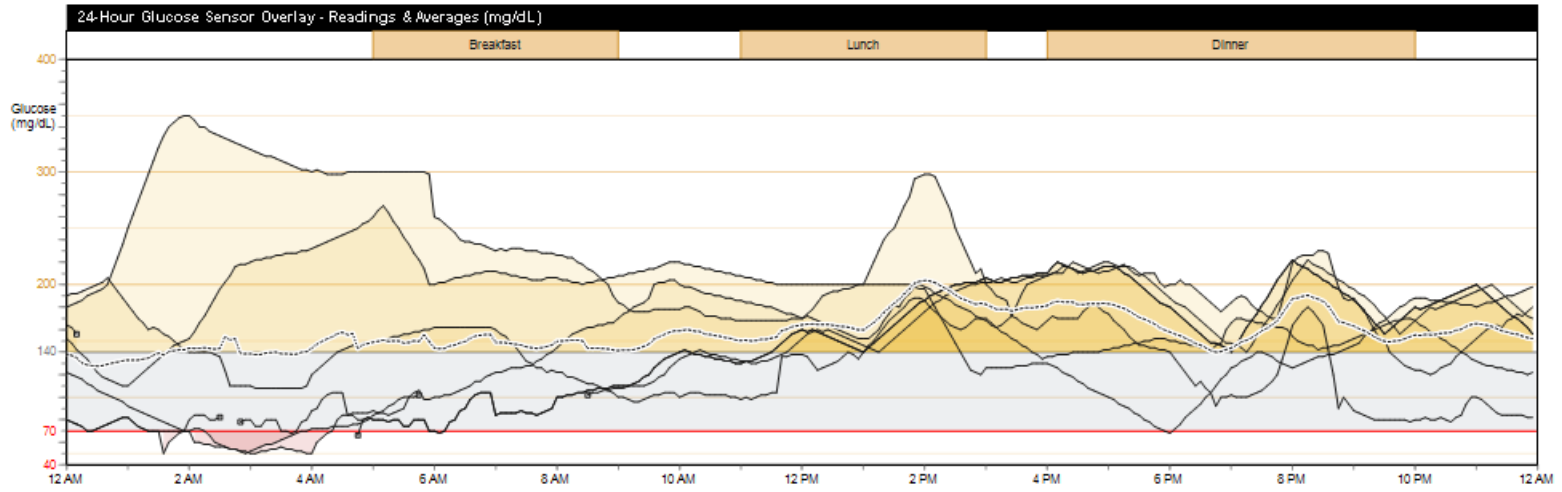
Partial day Note: Partial days will not be included in summary averages. Days on which a time change occurred are considered to be partial days.

Sensor and Meter Overview Report



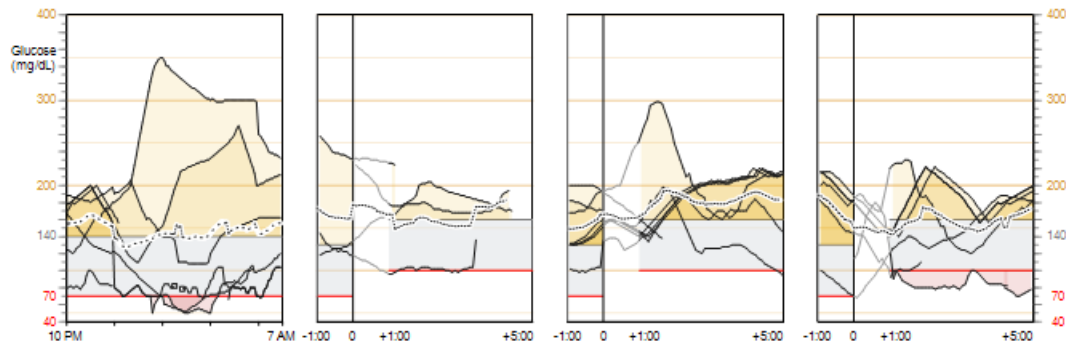
Sensor & Meter Overview (1 of 3) Drake, Ethan
12/6/2007 - 12/19/2007 0

Generated: 12/20/2007 9:36:44 AM Page 1 of 3
Data Sources: MiniMed Paradigm 722 (E.Drake)



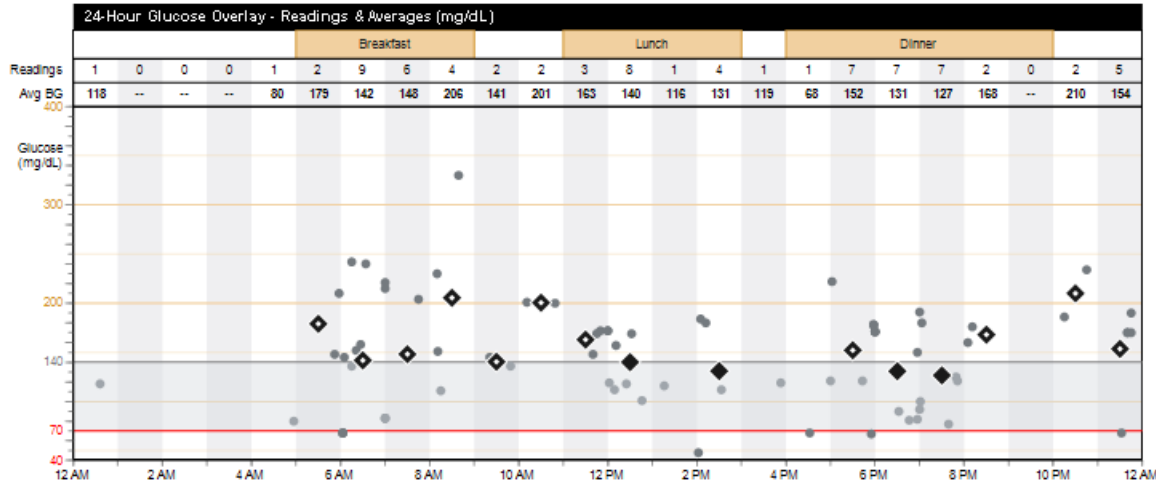
Glucose Sensor Overlay Bedtime to Wake-Up and Meal Periods - Readings & Averages (mg/dL)

Bedtime to Wake-up	Breakfast: 5:00 AM - 9:00 AM	Lunch: 11:00 AM - 3:00 PM	Dinner: 4:00 PM - 10:00 PM
Bedtime: 10:00 PM - 12:00 AM	Meals Analyzed: 4	Meals Analyzed: 7	Meals Analyzed: 8
Wake-up: 5:00 AM - 7:00 AM	Avg Carbs: 75g	Avg Carbs: 112g	Avg Carbs: 131g
	Avg Insulin: 4.5U	Avg Insulin: 6.0U	Avg Insulin: 7.0U
	Avg Carbs/Insulin: 17g/U	Avg Carbs/Insulin: 19g/U	Avg Carbs/Insulin: 19g/U



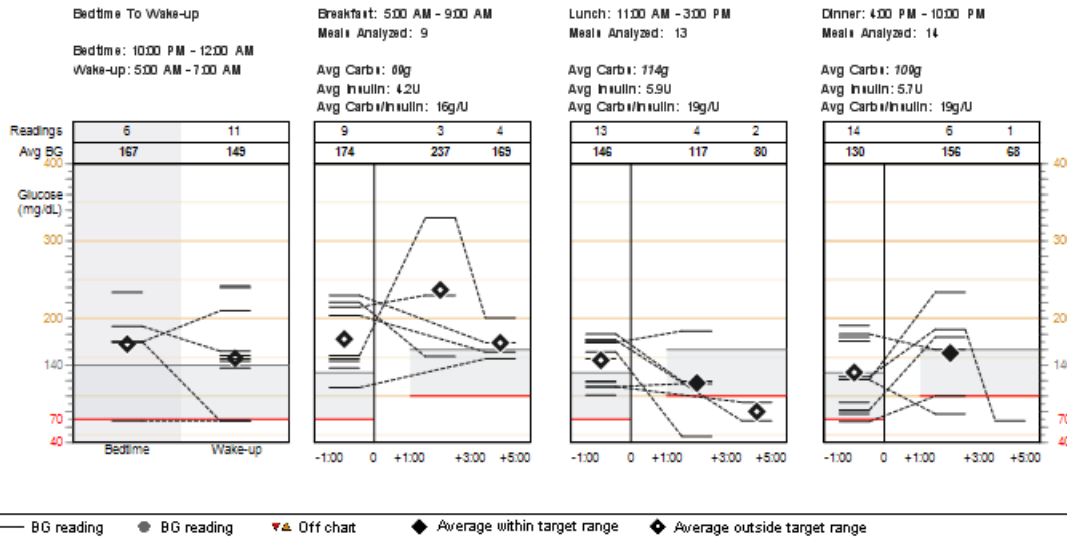
— Sensor trace — Interrupted - - - Average

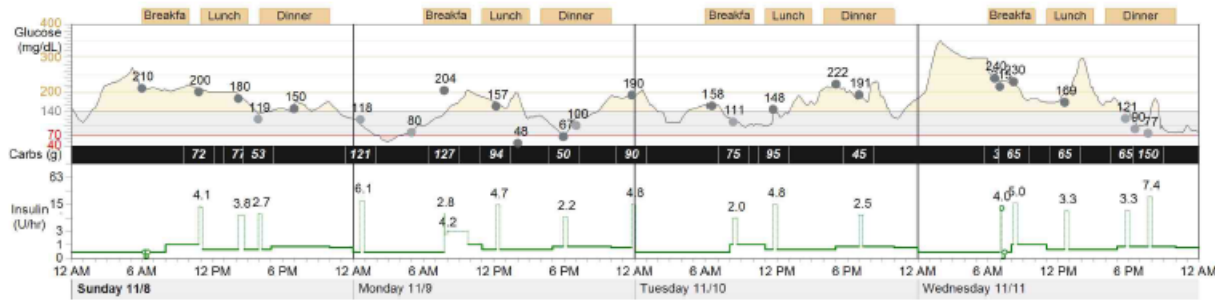
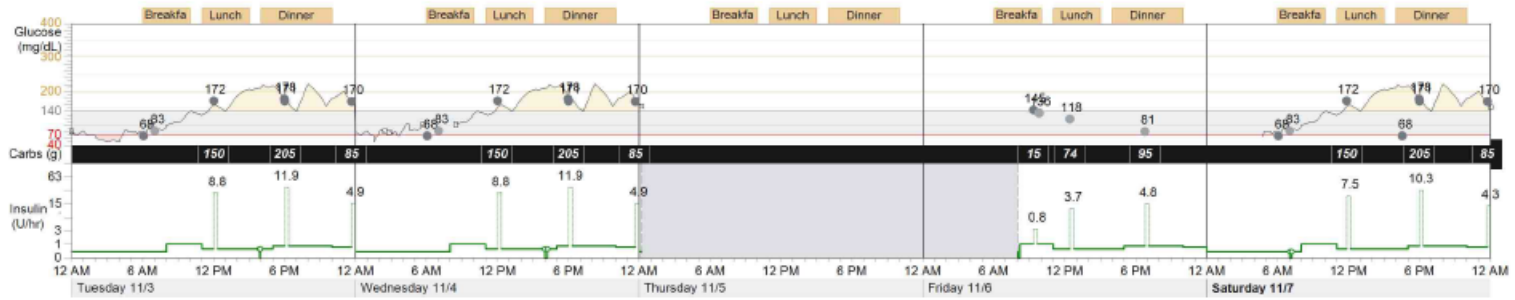
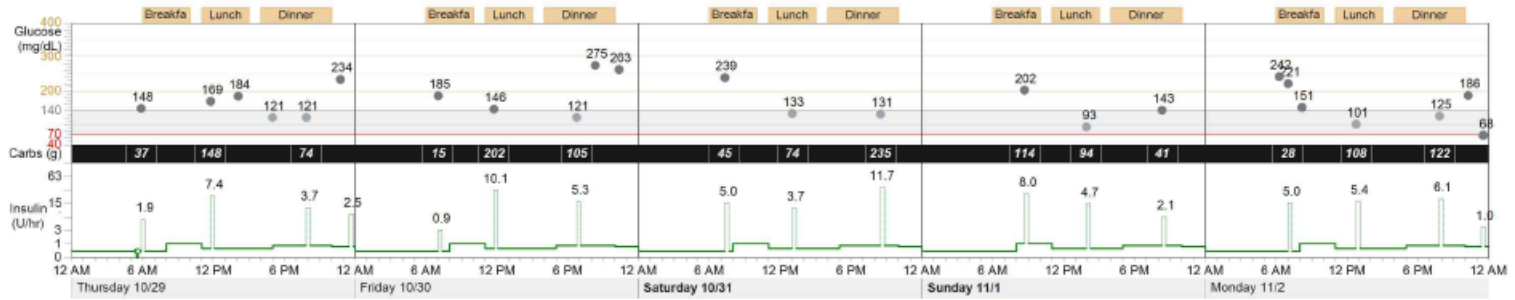
NOTE: This page displays only when you have sensor data.



Statistics	12/6 - 12/19
Avg BG (mg/dL)	147 ± 54
BG Readings	75 5.9/day
Readings Above Target	43 57%
Readings Below Target	7 9%
Sensor Avg (mg/dL)	158 ± 55
Avg AUC > 140 (mg/dL)	32.5 6d 17h
Avg AUC < 70 (mg/dL)	0.3 6d 17h
Avg Daily Carbs (g)	338 ± 104
Carbs/Bolus Insulin (g/U)	18
Avg Total Daily Insulin (U)	36.7 ± 6.3
Avg Daily Basal (U)	17.7 48%
Avg Daily Bolus (U)	18.9 52%

Glucose Overlay Bedtime to Wake-Up and Meal Periods - Readings & Averages (mg/dL)





— Sensor trace ● BG reading — Basal --- Bolus ⊏ Suspend ⌚ Time change ❤ Exercise
⋯ Interrupted ▼ Off chart ⋯ Temp basal ■ Injected insulin (U) ■ Other

Sensor and Meter Overview Report at a glance

The Sensor and Meter Overview Report presents data from a patient's insulin pump, glucose meter(s), and glucose sensor. It highlights areas of interest for further investigation. This report can span multiple pages.

The report provides data to help you determine the level and quality of control your patient has over their diabetes. By viewing the different charts and graphs, you can identify where the quality of control varies within a typical day and across the reporting period.

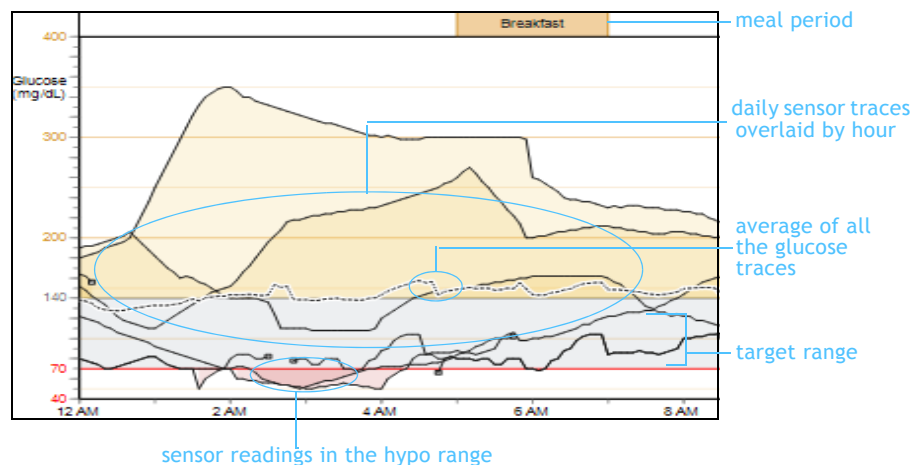
Symbol	Meaning
— or ●	BG reading: Glucose values reported by the pump or meter
▼▲	Off chart: Meter glucose value >400mg/dL (22.22 mmol/L) or <40mg/dL (2.22 mmol/L)
◆	Average within target range: The average of all glucose values falls within the patient's target range
◆	Average outside target range: The average of all glucose values falls above or below the patient's target range
~	Sensor trace: Continuous trace recorded by a glucose sensor
~	Interrupted: Interrupted communication between the sensor transmitter and the insulin pump
••••	Average: Average of all sensor glucose traces
—	Basal: Continuous insulin delivery by insulin pump
.....	Temp Basal: Temporary change in the rate of basal insulin delivery
----	Bolus: Insulin delivery by the pump used to prevent or treat high glucose
🔒	Suspend: User-initiated suspension of all insulin delivery from the pump
🕒	Time change: A time change occurred on the insulin pump or Guardian clock
💉	Injected Insulin (U): A reported insulin injection
🔒	Low Suspend: Pump-initiated suspension of all insulin delivery.
❤️	Exercise: A user-entered event marker, indicating physical activity.
📌	Other: A user-defined event marker, indicating such things as taking medications, feeling ill, stress, and so on.

Sensor Overlay Charts and Graphs

NOTE: Sensor overlay charts and graphs display only when you have sensor data.

24-Hour Glucose Sensor Overlay—Readings and Averages

This graph combines the sensor glucose traces from each day on which a glucose sensor was worn. Time frames corresponding to the patient’s meal periods are noted in yellow blocks above the graph. The patient’s glucose target range is shaded gray. When the sensor glucose trace is above the target, the area between the trace and the target range is shaded pale yellow. When the sensor glucose trace is below the target, the area between the trace and the target is shaded pale red. The intensity of shading on this graph corresponds to the number of high or low excursions that occurred in this time period. The dotted line shows the average of sensor glucose traces.



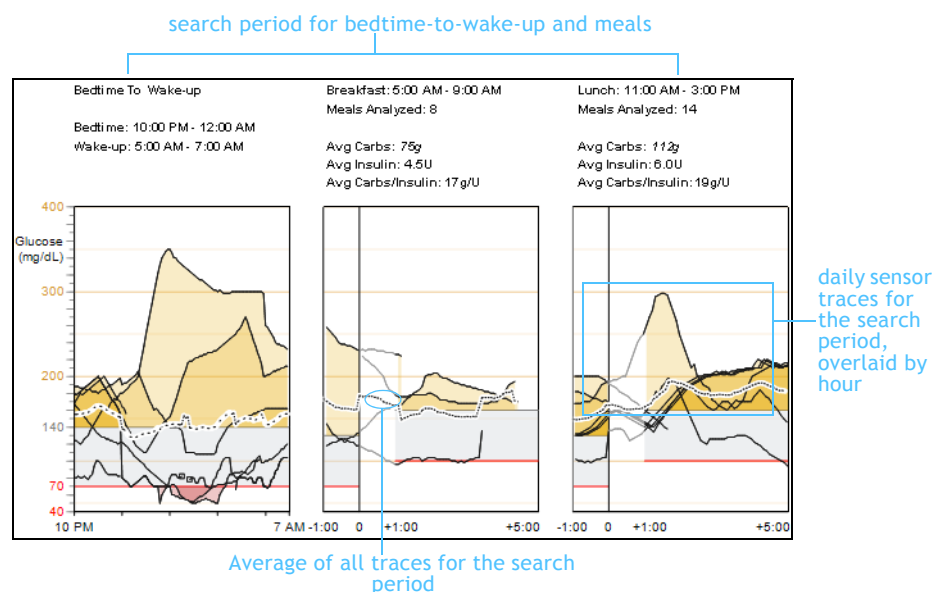
Glucose Sensor Overlay—Bedtime-to-Wake-up and Meal Periods—Readings and Averages

Bedtime-to-Wake-Up

This graph combines the sensor glucose trace recorded between bedtime and wake-up from each day on which a glucose sensor was worn during the reporting period. Bedtime and wake-up times are customized to the patient and listed above the graph. The patient’s glucose target range is shaded gray. When the sensor glucose trace is above the target, the area between the trace and the target range is shaded pale yellow. When the sensor glucose trace is below the target, the area between the trace and the target is shaded pale red. The intensity of shading on this graph corresponds to the number of high or low excursions that occurred in this time period. The dotted line signifies the average of sensor glucose traces.

Meal Periods

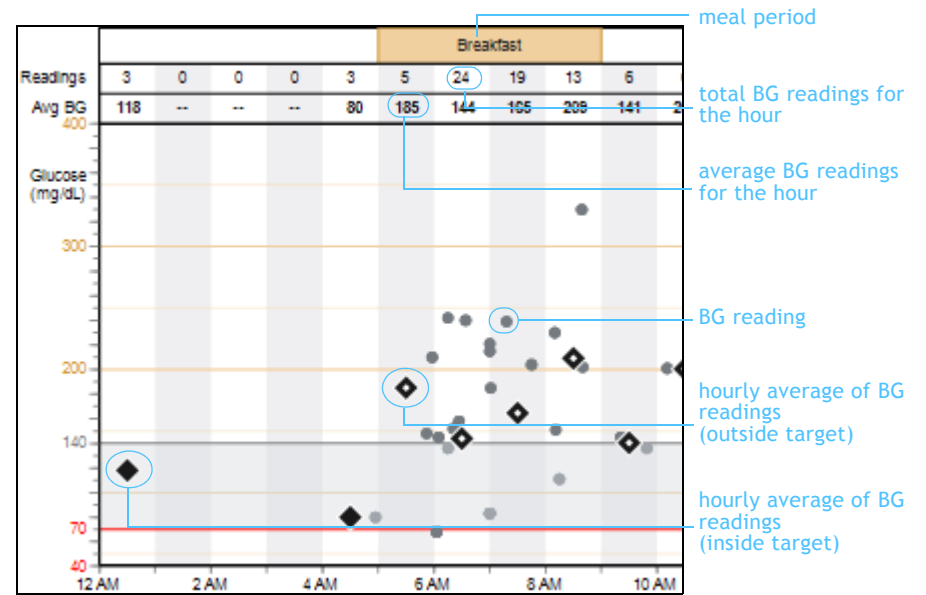
These graphs combine premeal and postmeal sensor glucose traces. The time frame, number of meals analyzed, carbohydrate intake, insulin averages, and average carbohydrate per unit of bolus insulin for each meal are listed above the graphs. The patient’s glucose target range is shaded gray. When the sensor glucose trace is above the target, the area between the trace and the target range is shaded pale yellow. When the sensor glucose trace is below the target, the area between the trace and the target is shaded pale red. The intensity of shading on this graph corresponds to the number of high or low excursions that occurred in this time period. The dotted line signifies the average of sensor glucose traces for the meal period.



Meter Overlay Charts and Graphs

24-Hour Glucose Overlay—Readings and Averages

This graph displays hourly meter glucose values recorded during the reporting period. The pooled data helps to identify daily patterns in a patient’s glucose management. The band at the top of the graph reports the number of blood glucose readings taken each hour and the average blood glucose reading. The blood glucose data is plotted below the band.



Statistics

The statistics table provides a summary of the measures described below.

Definitions

Avg BG (mg/dL): Average of all meter glucose values obtained and the standard deviation

BG Readings: Number of meter glucose values (total and daily average)

Readings Above Target: Number of meter glucose values above target (total and daily average)

Readings Below Target: Number of meter glucose values below target (total and daily average)

Sensor Avg (mg/dL or mmol/l): Average of all sensor glucose values obtained and the standard deviation

Avg AUC > 140 (mg/dL) or Avg AUC > 7.77 (mmol/L): Average exposure to hyperglycemia, with the high target shown based on patient's settings

Avg AUC < 70 (mg/dL) or Avg AUC < 3.88 (mmol/L): Average exposure to hypoglycemia, with the low target shown based on patient's settings

Avg Daily Carbs (g): Average daily carbohydrate intake and the standard deviation

Carbs/Bolus Insulin (g/U): Average carbohydrate intake per Unit of bolus insulin delivered

Avg Total Daily Insulin (U): Average basal and bolus insulin and the standard deviation

Avg Daily Basal (U): Average daily basal insulin (U and percentage of total)

Avg Daily Bolus (U): Average daily bolus insulin (U and percentage of total)

NOTE: Daily averages and standard deviations only reflect days containing 24 hours of continuous and complete device data. Days where time change events occurred or days containing partial data will be excluded from these calculations but will still be shown in graphs and totals.

Statistics	11/5	12/18
Avg BG (mg/dL)	150 ± 55	
BG Readings	222	5.5/day
Readings Above Target	127	57%
Readings Below Target	18	8%
Sensor Avg (mg/dL)	160 ± 55	
Avg AUC > 140 (mg/dL)	33.4	18d 5h
Avg AUC < 70 (mg/dL)	0.3	18d 5h
Avg Daily Carbs (g)	332 ± 95	
Carbs/Bolus Insulin (g/U)	18	
Avg Total Daily Insulin (U)	36.4 ± 5.9	
Avg Daily Basal (U)	18.0	49%
Avg Daily Bolus (U)	18.4	51%

average and standard deviation

amount per day

total

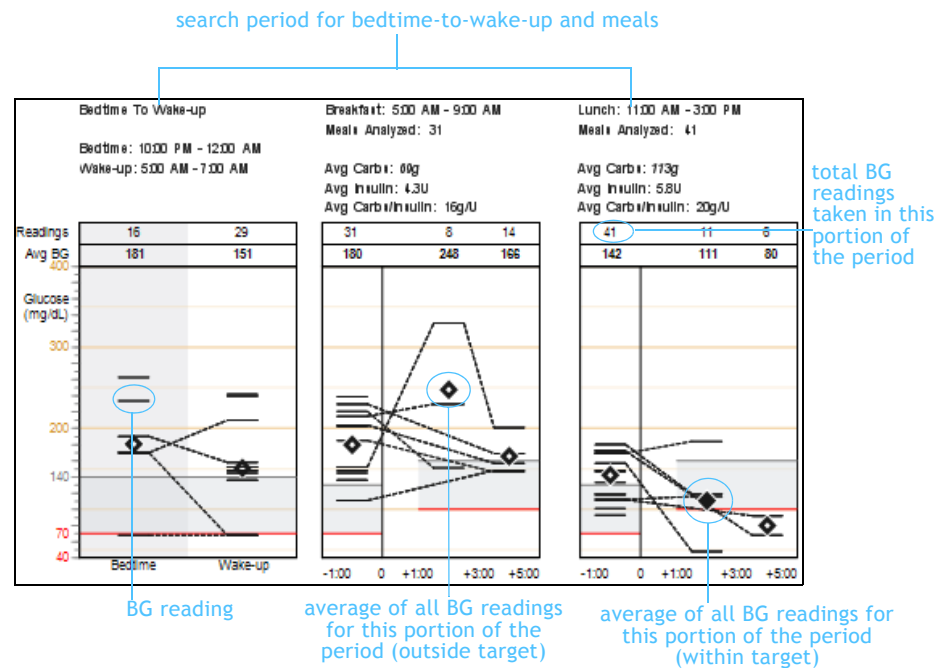
percentage

Glucose Overlay Bedtime-to-Wake-up and Meal Periods—Readings and Averages

The Bedtime-to-Wake-up Glucose Readings and Averages graph displays the last meter glucose value recorded during the defined Bedtime period and the first meter glucose value recorded during the defined Wake-up period from each day within the reporting period. Corresponding bedtime-to-wake-up glucose values are connected by a dotted line.

The Meal Period graphs (Breakfast, Lunch, and Dinner) combines pre-meal and post-meal meter glucose values from each day of the reporting period. The meter glucose values shown on these graphs are associated with a meal bolus.

If more than a 1 meter glucose value was obtained in a given period, the graph is generated using the meter glucose value that was most proximate to the bolus event. The graphs help to identify daily patterns in a patient's pre and post meal glucose values from up to 2 hours before and up to 5 hours after a meal.

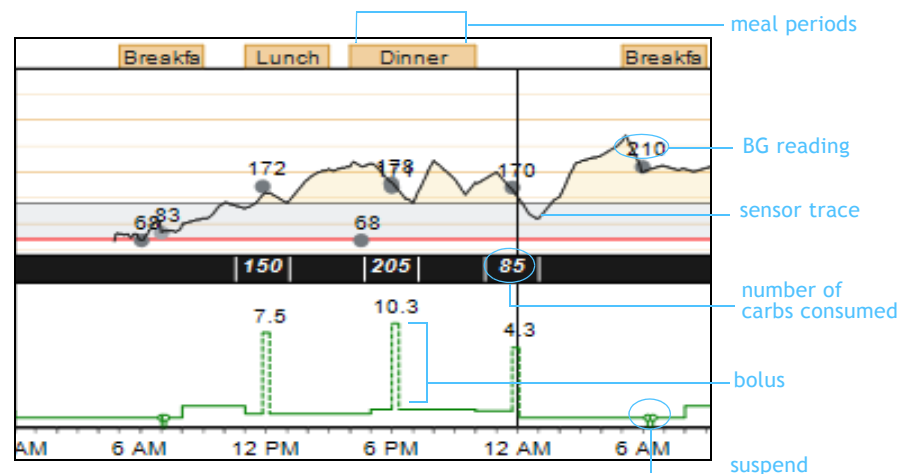


Glucose, Carbohydrates, Insulin

This graph includes sensor glucose values, meter glucose values recorded for calibration and as confirmatory fingersticks, carbohydrate intake recorded in the Bolus Wizard® calculator, basal and bolus insulin delivered, and injected insulin.

The patient's meal time periods are noted above the graph. When the sensor glucose trace is above the target, the area between the trace and the target range is shaded pale yellow. When the sensor glucose trace is below the target, the area between the trace and the target is shaded pale red.

If there are more than 14 days of data for the reporting period, this graph will span multiple pages.



Logbook Report



Logbook (1 of 1)
10/29/2009 - 11/11/2009

Drake, Ethan
0

Generated: 11/12/2009 2:56:13 PM Page 5 of 20
Data Sources: MiniMed Paradigm 722 (E.Drake)

	Breakfast			Lunch			Dinner			Daily Totals																
	12 AM	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM		
Thursday 10/29/2009						148 37 1.90						169 148 7.40			184				121		121 74 3.70		234 2.50	Average (6): 163mg/dL Carbs: 259g Insulin: 33.1U Bolus: 47%		
Friday 10/30/2009								185 15 0.90					145 202 10.10								121 105 5.30		275	263	Average (5): 198mg/dL Carbs: 322g Insulin: 36.5U Bolus: 45%	
Saturday 10/31/2009								239 45 5.00							133 74 3.70								131 235 11.70		Average (3): 168mg/dL Carbs: 354g Insulin: 36.5U Bolus: 63%	
Sunday 11/1/2009											202 114 6.00				93 94 4.70								143 41 2.10		Average (3): 146mg/dL Carbs: 249g Insulin: 31.1U Bolus: 48%	
Monday 11/2/2009							242 221 151 28 5.00							101 108 5.40								125 122 6.10		186 68 1.00	Average (7): 156mg/dL Carbs: 258g Insulin: 32.5U Bolus: 54%	
Tuesday 11/3/2009							68 83							172 150 8.80						178 171 11.90					170 85 4.90	Average (6): 140mg/dL Carbs: 440g Insulin: 41.3U Bolus: 62%
Wednesday 11/4/2009							68 83							172 150 8.80						178 171 11.90					170 85 4.90	Average (6): 140mg/dL Carbs: 440g Insulin: 41.3U Bolus: 62%
Thursday 11/5/2009																										Average (0): -- Carbs: -- Insulin: -- Bolus: --
Friday 11/6/2009											145 15 0.80			118 74 3.70								81 95 4.80			Average (4): 120mg/dL Carbs: 184g Insulin: 23.2U Bolus: 40%	
Saturday 11/7/2009							68 83						172 150 7.50						68 178 171 205 10.30					170 85 4.30	Average (7): 130mg/dL Carbs: 440g Insulin: 41.3U Bolus: 54%	
Sunday 11/8/2009						210						200 72 4.10				180 119 77 53 3.80 2.70							150		Average (5): 172mg/dL Carbs: 202g Insulin: 28.7U Bolus: 37%	
Monday 11/9/2009	118 121 6.10				80			204 127 7.00					157 94 4.70			48				67 50 2.20		100		190 90 4.80	Average (8): 121mg/dL Carbs: 482g Insulin: 44.3U Bolus: 58%	
Tuesday 11/10/2009						158			111 75 2.00			148 95 4.80									222		191 45 2.50		Average (5): 166mg/dL Carbs: 215g Insulin: 28.8U Bolus: 33%	
Wednesday 11/11/2009							240 215 230 32 65 4.00 5.00						169 65 3.30								121 90 65 150 3.30 7.40		77		Average (7): 163mg/dL Carbs: 377g Insulin: 39.9U Bolus: 58%	

■ > 140mg/dL
 00* Multiple readings (most extreme shown)
 ⏏ Suspend
 ♥ Exercise
 ⦿ Partial day
 ⌚ Time change
■ < 70mg/dL
○ Manual bolus or bolus with correction
■ Other
⏮ Pump rewind
~~~~~ Skipped meal

## Logbook Report at a glance

The Logbook Report presents two weeks of data from a patient’s insulin pump and blood glucose meter(s) in a tabular format. The table shows the reported days in rows and each hour in columns, creating data cells. There is no sensor data provided in this report.

### Data cells

Each data cell in the reporting period corresponds to an hour within a day, and can contain up to three values: (1) meter, (2) grams of carbohydrates, and (3) units of insulin delivered as a bolus. Time frames that correspond to meals are highlighted at the top of the report. The next sections describe each data cell element.














### Glucose values

Blood glucose values show in the top portion of a data cell. Glucose values above or below the patient’s target range are highlighted. If multiple values were obtained for a single hour, it is indicated with a dot in the upper right corner of the glucose value, and the value considered most extreme is shown based on these priorities:

- The lowest of any values below the patient’s target is shown.
- If there are no lows, but there are values above the patient’s target, the highest of these is shown.
- If there are no lows or highs, the value farthest from the center of the patient’s target range is shown.

### Meals

Meal time frames correspond to the patient’s specified meal periods and are called out at the top of the report. Carbohydrate values recorded from Bolus Wizard calculations are totaled for each hour in a meal period and are shown in a black box in the middle portion of the data cell. If there are no carbohydrate values recorded for an hour within a meal period, the Skipped meal symbol is shown.

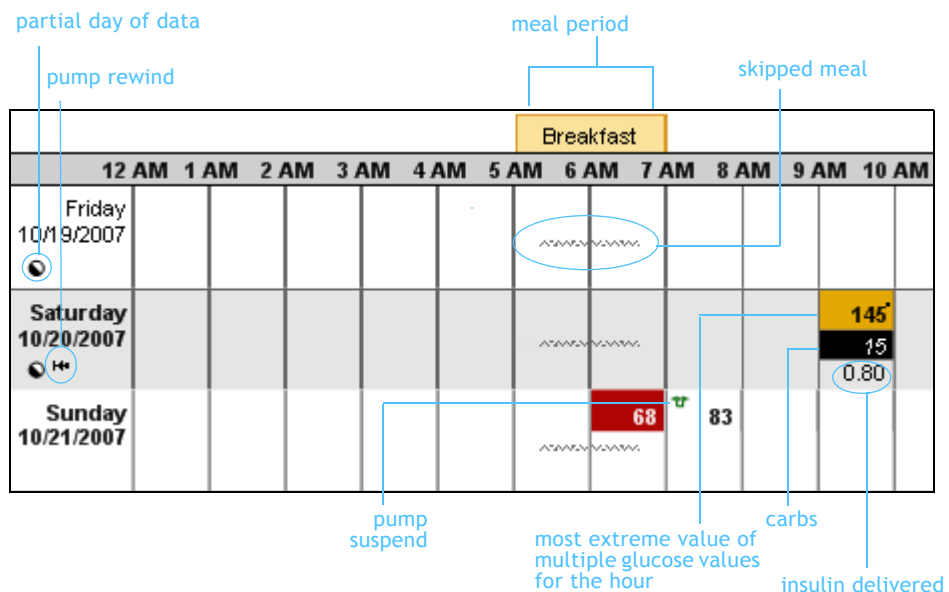
| Symbol                                                                                | Meaning                                                                                                                                                                              |
|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | Glucose <70 mg/dL (<3.88 mmol/L): Glucose value is below the patient’s target low                                                                                                    |
|    | Glucose >140 mg/dL (>7.77 mmol/L): Glucose value is above the patient’s target high                                                                                                  |
|    | Carbohydrate value: Total carbohydrate value; value shown is the total carbs consumed within the given hour on a given day                                                           |
|    | Multiple readings: The most extreme value if multiple glucose values are obtained within an hour; priority is given to hypoglycemic values                                           |
|    | Pump rewind: Insulin pump rewind occurred (usually for a reservoir change, but also to fix occlusions)                                                                               |
|    | Suspend: User-initiated suspension of all insulin delivery by the insulin pump                                                                                                       |
|    | Manual bolus or bolus with correction: Delivered manual bolus or bolus calculated with the Bolus Wizard feature when the glucose meter reading is outside the patient’s target range |
|    | Skipped meal: No carbohydrates recorded during a meal time frame                                                                                                                     |
|    | Time change: A time occurred on the insulin pump clock                                                                                                                               |
|  | Partial data: Day contains partial data. This data is shown in graphs and totals, but is not in daily averages or standard deviations                                                |
|  | Low Suspend: Pump-initiated suspension of all insulin delivery.                                                                                                                      |
|  | Exercise: A user-entered event marker, indicating physical activity.                                                                                                                 |
|  | Other: A user-defined event marker, indicating such things as taking medications, feeling ill, stress, and so on.                                                                    |

## Bolus

Boluses programmed within an hour are shown in the bottom portion of a data cell. If the bolus insulin value is from a manual bolus or Bolus Wizard correction, the value is circled.

## Suspends and time changes

If the patient's insulin pump was suspended, or a time change occurred on the pump clock, the corresponding symbol is shown in the upper left portion of each data cell for the hour(s) in which the event was recorded.



## Daily Totals column

The Daily Totals column summarizes information from each day of the reporting period. The first line reports the daily meter glucose average and total meter readings taken. Total daily carbohydrate intake, based on the Bolus Wizard carbohydrate component, is listed on the second line. Finally, the total amount of insulin delivered, as well as that portion of the amount of insulin delivered as a bolus is expressed as a percentage on the third line.

| Daily Totals |                  |
|--------------|------------------|
| Average (7): | 156mg/dL         |
| Carbs:       | 258g             |
| Insulin:     | 32.5U Bolus: 54% |
| Average (6): | 140mg/dL         |
| Carbs:       | 440g             |
| Insulin:     | 41.3U Bolus: 62% |

# Device Settings Snapshot



Device Settings Snapshot  
Thursday 11/5/2009 12:11 AM

Drake, Ethan  
0

Generated: 11/12/2009 2:58:13 PM Page 6 of 20  
Data Source: MiniMed Paradigm 722 (E.Drake)

| Basal              |                     |
|--------------------|---------------------|
| Maximum Basal Rate | 35.00 U/hr          |
| Temp Basal Type    | Insulin Rate (U/hr) |

| Standard (active) |         | Pattern A     |         | Pattern B     |          |
|-------------------|---------|---------------|---------|---------------|----------|
| 24-Hour Total     | 15.70 U | 24-Hour Total | 66.80 U | 24-Hour Total | 187.20 U |

| TIME  | U/hr | TIME  | U/hr | TIME  | U/hr  |
|-------|------|-------|------|-------|-------|
| 0:00  | 0.40 | 0:00  | 1.85 | 0:00  | 8.50  |
| 8:00  | 1.05 | 5:30  | 3.05 | 11:30 | 6.80  |
| 11:00 | 0.60 | 12:00 | 3.25 | 17:30 | 10.20 |
| 17:00 | 0.85 | 18:00 | 3.30 | 22:30 | 5.10  |
| 22:00 | 0.75 | 22:00 | 2.05 |       |       |
|       |      |       |      |       |       |
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| Bolus                  |        |  |
|------------------------|--------|--|
| Maximum Bolus          | 25.0 U |  |
| Dual/Square (Variable) | On     |  |
| Blood Glucose Reminder | Off    |  |

|                    |        |
|--------------------|--------|
| Easy (Audio) Bolus | On     |
| Entry (Step)       | 0.50 U |

|                            |          |
|----------------------------|----------|
| Bolus Wizard               | On       |
| Units                      | g, mg/dL |
| Active Insulin Time (h:mm) | 8:00     |
| Insulin Concentration      | --       |

| Missed Bolus Reminder |            |
|-----------------------|------------|
| Start (h:mm)          | End (h:mm) |
| --                    | --         |

### Carbohydrate Ratio (g/U)

| TIME | Ratio |
|------|-------|
| 0:00 | 20.0  |
|      |       |
|      |       |
|      |       |
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|      |       |

### Insulin Sensitivity (mg/dL per U)

| TIME | Sensitivity |
|------|-------------|
| 0:00 | 40          |
|      |             |
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|      |             |

### Blood Glucose Target (mg/dL)

| TIME | Low | High |
|------|-----|------|
| 0:00 | 80  | 180  |
|      |     |      |
|      |     |      |
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**Notes**

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| Sensor         |         |
|----------------|---------|
| Sensor         | On      |
| Transmitter ID | 1234567 |
| BG Units       | mg/dL   |

| Glucose Alerts |      |             |              |
|----------------|------|-------------|--------------|
|                | TIME | Low (mg/dL) | High (mg/dL) |
|                | 0:00 | 80          | 140          |
|                |      |             |              |
|                |      |             |              |
|                |      |             |              |
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|                |      |             |              |
|                |      |             |              |
|                |      |             |              |
|                |      |             |              |
| Alert Repeat   | 0:05 |             | 0:05         |

|                   |         |
|-------------------|---------|
| Predictive Alert  | --      |
| Low   High (mins) | --   -- |

|                                     |         |
|-------------------------------------|---------|
| Rate Alert: Fall   Rise (mg/dL/min) | --   -- |
|-------------------------------------|---------|

|                                |      |    |
|--------------------------------|------|----|
| AUC Limit: Low   High (mg/dL)  | --   | -- |
| Missed Data/Weak Signal (h:mm) | 0:05 |    |
| Graph Timeout (h:mm)           | --   |    |

|                                   |      |
|-----------------------------------|------|
| Auto Calibration                  | --   |
| Calibration Reminder (h:mm)       | Off  |
| Calibration (Alert) Repeat (h:mm) | 0:05 |

| Utilities             |            |
|-----------------------|------------|
| Alert Type            | Beep Short |
|                       | --         |
| Low Reservoir Warning | Time       |
| Amount                | 22:00      |



# Device Settings Snapshot at a glance

The Device Settings Snapshot report presents the customized settings of a patient's insulin pump or Guardian monitor that were active on the date and time when the patient's device was read.

The report presents tables of settings that correspond to the main menus on the device: Basal, Bolus, Sensor, and Utilities.

**Device Settings Snapshot**  
Thursday 11/5/2009 12:11 AM

Drake, Ethan  
0

Generated: 11/12/2009 2:56:13 PM Page 6 of 29  
Data Source: Minimed Paragon T22 (E-Dash)

| Basal               |                     |
|---------------------|---------------------|
| Maximum Basal Rate: | 30.00 U/hr          |
| Temp Basal Type:    | Insulin Rate (U/hr) |

| Standard (active)      | Pattern A              | Pattern B               |
|------------------------|------------------------|-------------------------|
| 24 Hour Total: 15.70 U | 24 Hour Total: 68.82 U | 24 Hour Total: 197.20 U |

| TIME  | U/hr | TIME  | U/hr | TIME  | U/hr  |
|-------|------|-------|------|-------|-------|
| 0:00  | 0.40 | 0:00  | 1.58 | 0:00  | 8.80  |
| 8:00  | 1.08 | 8:30  | 3.08 | 11:30 | 6.80  |
| 11:00 | 0.60 | 12:00 | 3.25 | 17:30 | 10.20 |
| 17:00 | 0.65 | 18:00 | 3.30 | 22:30 | 5.10  |
| 22:00 | 0.78 | 22:00 | 3.08 |       |       |

| Bolus                   |        |
|-------------------------|--------|
| Maximum Bolus:          | 20.0 U |
| DualSquare (Variable):  | On     |
| Blood Glucose Reminder: | Off    |

|                            |          |                        |            |
|----------------------------|----------|------------------------|------------|
| Easy (Quick) Bolus:        | On       | Missed Bolus Reminder: | -          |
| Entry (Steps):             | 0.50 U   | Start (h:mm)           | End (h:mm) |
| Bolus Wizard:              | On       |                        |            |
| Units:                     | g. mg/dL |                        |            |
| Active Insulin Time (h:mm) | 8:00     |                        |            |
| Insulin Concentration:     | -        |                        |            |

| Carbohydrate Ratio (pU) | Insulin Sensitivity (mg/dL per U) | Blood Glucose Target (mg/dL) |
|-------------------------|-----------------------------------|------------------------------|
| TIME Ratio              | TIME Sensitivity                  | TIME Low High                |
| 0:00 20.0               | 0:00 40                           | 0:00 80 180                  |

| Sensor          |         |
|-----------------|---------|
| Sensor:         | On      |
| Transmitter ID: | 1254567 |
| BG Units:       | mg/dL   |

| Glucose Alerts | Low (mg/dL) | High (mg/dL) |
|----------------|-------------|--------------|
| TIME           | 80          | 140          |
| 0:00           |             |              |

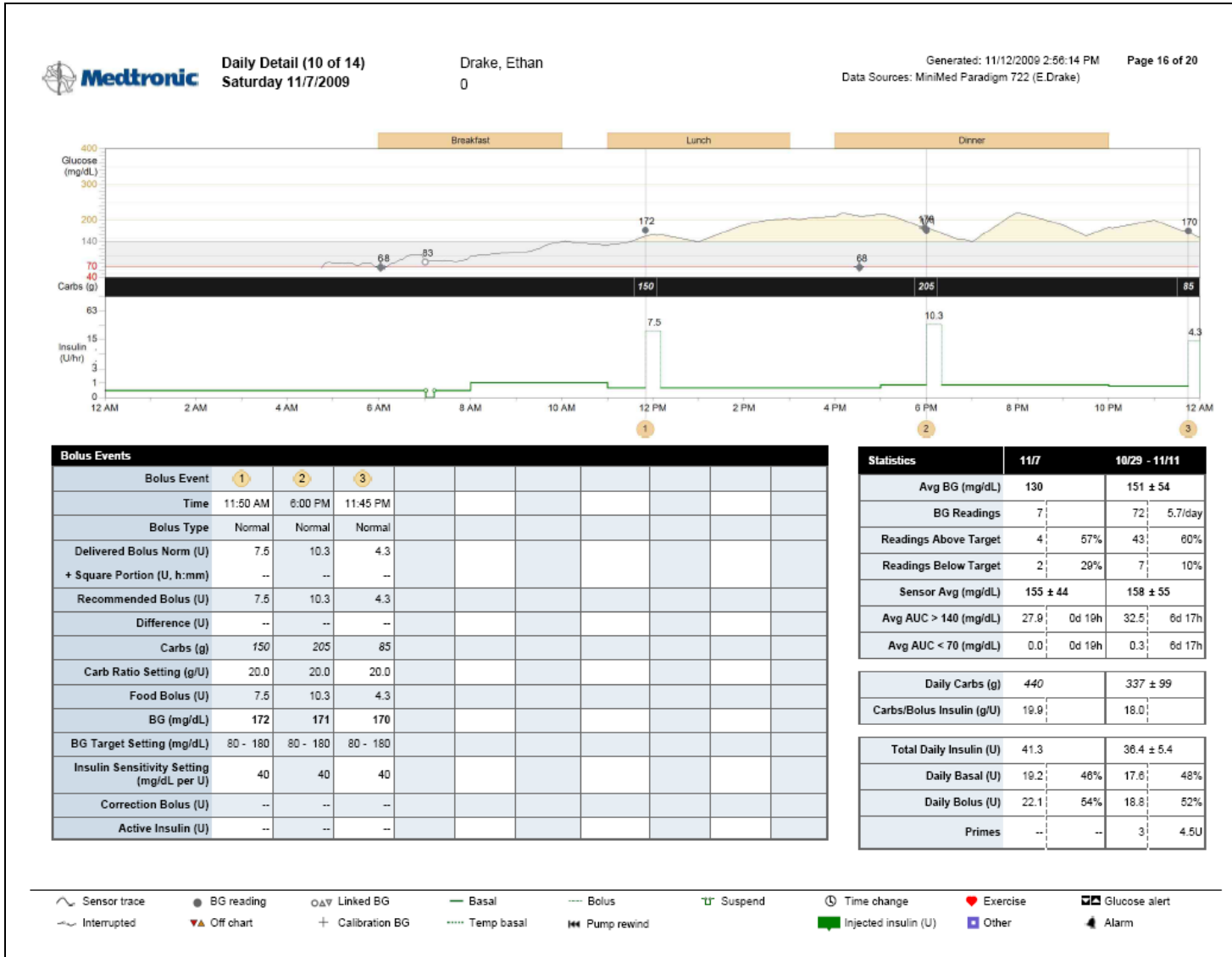
|                                     |      |      |
|-------------------------------------|------|------|
| Alert Repeat:                       | 0:05 | 0:05 |
| Predictive Alert:                   | -    | -    |
| Low   High (mins)                   | -    | -    |
| Rate Alert: Fall   Rise (mg/dL/min) | -    | -    |
| AUC Limit: Low   High (mg/dL)       | -    | -    |
| Missed Data/Weak Signal (h:mm)      | 0:05 |      |
| Graph Timeout (h:mm)                | -    |      |
| Auto Calibration:                   | -    |      |
| Calibration Reminder (h:mm)         | Off  |      |
| Calibration (Alert) Repeat (h:mm)   | 0:05 |      |

| Utilities              |            |
|------------------------|------------|
| Alert Type:            | Beep Short |
| Low Reservoir Warning: | Time       |
| Amount:                | 20:00      |

**Notes**


















# Daily Detail Report



|              |            |                |            |             |                      |             |          |               |
|--------------|------------|----------------|------------|-------------|----------------------|-------------|----------|---------------|
| Sensor trace | BG reading | Linked BG      | Basal      | Bolus       | Suspend              | Time change | Exercise | Glucose alert |
| Interrupted  | Off chart  | Calibration BG | Temp basal | Pump rewind | Injected insulin (U) | Other       | Alarm    |               |

## Daily Detail Report at a glance

The Daily Detail Report presents data from a patient’s insulin pump, blood glucose meter(s), and glucose sensor (if used) to provide insight into a patient’s control, including response to carbohydrate intake and insulin use. This report covers one day of data and is divided into the three areas described in the next sections.

| Symbol                                                                                | Meaning                                                                                                                                                                                                 |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | Sensor trace: Continuous trace recorded by a glucose sensor                                                                                                                                             |
|    | Interrupted: Interrupted communication between the sensor transmitter and the insulin pump                                                                                                              |
|    | BG reading: Glucose value recorded by a meter                                                                                                                                                           |
|    | Off chart: Meter glucose value >400 mg/dL (22.22 mmol/L) or <40 mg/dL (2.22 mmol/dL)                                                                                                                    |
|    | Linked BG: Meter BG values automatically sent to the insulin pump from a wireless link meter                                                                                                            |
|    | Calibration BG: Meter glucose value used to calibrate a sensor                                                                                                                                          |
|    | Basal: Continuous insulin delivery by insulin pump                                                                                                                                                      |
|    | Temp Basal: Temporary change in the rate of basal insulin delivery                                                                                                                                      |
|    | Bolus: Insulin delivery by the pump used to prevent or treat high glucose level                                                                                                                         |
|    | Suspend: User-initiated suspension of all insulin delivery from the insulin pump                                                                                                                        |
|    | Time change: A time change occurred on the insulin pump or Guardian clock                                                                                                                               |
|  | Sensor alarm: Condition related to sensor functionality caused an alarm to be recorded on the pump. Sensor alarms appear in the glucose band of the chart while pump alarms appear in the insulin band. |
|  | Injected Insulin (U): Patient reported an insulin injection                                                                                                                                             |
|  | Glucose Alert: High or rising glucose alert reported. Low or falling glucose alert reported. Predictive alerts are also reported.                                                                       |
|  | Low Suspend: Pump-initiated suspension of all insulin delivery.                                                                                                                                         |
|  | Exercise: A user-entered event marker, indicating physical activity.                                                                                                                                    |
|  | Other: A user-defined event marker, indicating such things as taking medications, feeling ill, stress, and so on.                                                                                       |

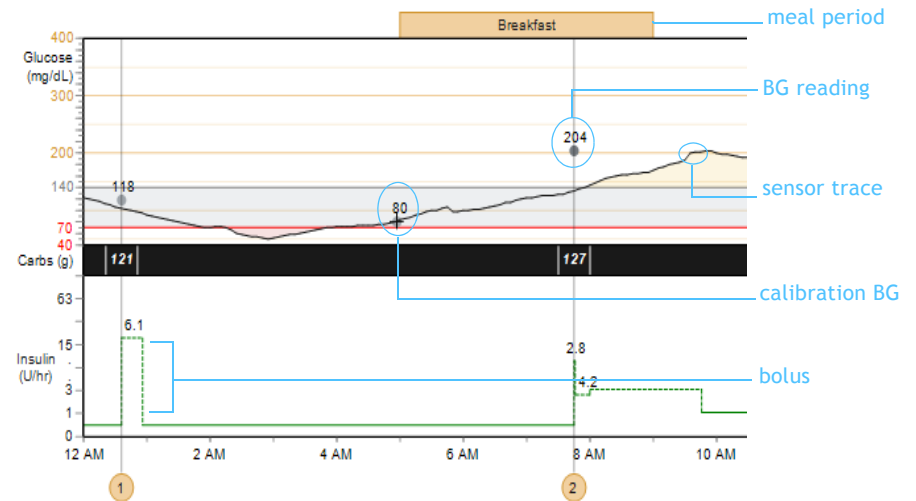
## Glucose, Carbohydrates, and Insulin

This graph provides a review of the patient's glucose levels, carbohydrate intake, and insulin use during the selected day. The graph includes meter glucose values, sensor glucose values (if a sensor is used), carbohydrate intake (or meal markers from the Guardian) recorded in the Bolus Wizard calculator, basal and bolus insulin delivered, and injected insulin. Customized time frames that correspond to the patient's meal periods are noted in yellow blocks above the graph.

Circled numbers at the bottom of the graph correspond to entries in the Bolus Events table (located at the bottom of the report). The patient's glucose target range is shaded gray. When the sensor glucose trace is above the target, the area between the trace and the target range is shaded pale yellow. When the sensor glucose trace is below the target, the area between the trace and the target is shaded pale red.

Blood glucose meter readings are represented by dots with corresponding numerical values. Carbohydrate intake is shown in the black band below the glucose readings. The green trace at the bottom of the graph outlines insulin delivery from the pump, including basal and temporary basal rates, boluses, and suspends.

**NOTE:** Insulin delivery is shown in units per hour on a logarithmic scale. This allows basal delivery changes, which are relatively small, to be visible so they can be shown in context with any boluses that were delivered.



## Bolus Events Data

The Bolus Events data table shows a summary of measures and Bolus Wizard calculator settings for each bolus event. Bolus events numbered at the top of the data table correspond to the circled numbers along the X-axis of the Glucose, Carbohydrates, and Insulin graph at the top of the report. The table items are described below.

**Bolus Event:** Cross-reference to the Glucose, Carbohydrates, Insulin graph

**Time:** The time that the bolus event occurred

**Delivered Bolus Norm (U) + Square Portion:** Actual delivered bolus broken down into normal and square amounts

**Recommended Bolus (U):** Bolus recommended by the Bolus Wizard calculator

**Difference (U):** Difference between the Delivered Bolus and the Recommended Bolus

**Carbs (g):** Carbohydrate intake

**Carb Ratio Setting (g/U):** Displays the setting used to calculate the food portion of the recommended bolus

**Food Bolus (U):** Insulin used to cover carbohydrate intake (Food Bolus + Correction Bolus = Recommended Bolus)

**BG (mg/dL or mmol/L):** Meter glucose value associated with the bolus event

**BG Target Setting (mg/dL or mmol/L):** Glucose target range (based on patient's settings)

**Insulin Sensitivity Setting (mg/dL/U or mmol/L/U):** The decrease in glucose caused by 1 Unit of insulin (based on patient's settings)

**Correction Bolus (U):** Insulin used to correct a high glucose level (Food Bolus + Correction Bolus = Recommended Bolus)

**Active Insulin (U):** Delivered bolus insulin that has not yet been absorbed

| Bolus Events                          |          |
|---------------------------------------|----------|
| Bolus Event                           | 1        |
| Time                                  | 5:52 AM  |
| Bolus Type                            | Normal   |
| Delivered Bolus Norm (U)              | 1.9      |
| + Square Portion (U, h:mm)            | --       |
| Recommended Bolus (U)                 | 1.9      |
| Difference (U)                        | --       |
| Carbs (g)                             | 37       |
| Carb Ratio Setting (g/U)              | 20       |
| Food Bolus (U)                        | 1.9      |
| BG (mg/dL)                            | 148      |
| BG Target Setting (mg/dL)             | 80 - 180 |
| Insulin Sensitivity Setting (mg/dL/U) | 40       |
| Correction Bolus (U)                  | --       |
| Active Insulin (U)                    | --       |

## Statistics

The Statistics table information, combined with the other report items, provides a way to compare patient performance across different reporting periods and detect areas warranting further investigation.

The first two columns provide detailed statistics and averages for the specified day. The last 2 columns provide details for the entire reporting period.

The Statistics table outlines the data described below.

**Avg BG (mg/dL or mmol/L):** Average of all meter glucose values obtained

**BG Readings:** Total number of meter glucose values

**Readings Above Target:** Total number of meter glucose values above target

**Readings Below Target:** Total number of meter glucose values below target

**Avg Sensor Gluc. (mg/dL or mmol/L):** Average of all sensor glucose values and the standard deviation

**Avg. AUC > 140 (mg/dL) or Avg AUC > 7.77 (mmol/L):** Average exposure to hyperglycemia (value based on patient's target range)

**Avg. AUC < 70 (mg/dL) or Avg AUC < 3.88 (mmol/L):** Average exposure to hypoglycemia (value based on patient's target range)

**Daily Carbs (g):** Total daily carbohydrate intake

**Carbs/Bolus Insulin (g/U):** Average carbohydrate intake per unit of bolus insulin

**Total Daily Insulin (U):** Average of total basal and bolus insulin use

**Daily Basal:** Average of daily basal insulin (U and percentage of Total Daily Insulin)

**Daily Bolus:** Average of daily bolus insulin (U and percentage of Total Daily Insulin)

**Primes (or Fills):** Number of pump prime events (or, fill events) and units of insulin used. The terminology that is shown here differs depending on the pump model.

| Statistics                | 11/15 |     | 11/15      | 12/12   |
|---------------------------|-------|-----|------------|---------|
| Avg BG (mg/dL)            | 163   |     | 152 ± 54   |         |
| BG Readings               | 6     |     | 138        | 5.4/day |
| Readings Above Target     | 4     | 67% | 82         | 59%     |
| Readings Below Target     | —     | 0%  | 12         | 9%      |
| Sensor Avg (mg/dL)        | --    |     | 157 ± 53   |         |
| Avg AUC > 140 (mg/dL)     | —     | —   | 31.4       | 10d9l   |
| Avg AUC < 70 (mg/dL)      | —     | —   | 0.4        | 10d9l   |
| Daily Carbs (g)           | 259   |     | 331 ± 92   |         |
| Carbs/Bolus Insulin (g/U) | 17    |     | 18         |         |
| Total Daily Insulin (U)   | 33.1  |     | 36.3 ± 5.4 |         |
| Daily Basal (U)           | 17.6  | 53% | 17.6       | 49%     |
| Daily Bolus (U)           | 15.5  | 47% | 18.6       | 51%     |
| Primes                    | —     | —   | 7          | 9.9U    |

**NOTE:** If a Bolus Wizard feature event occurred, but the resulting bolus was cancelled before delivery, this table will reflect the Bolus Wizard event but not the bolus.



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