[0126] [4] A. Gani, A. V. Gribok, S. Rajaraman, W. K. Ward, and J. Reifman, "Predicting Subcutaneous Glucose Concentration in Humans: Data-Driven Glucose Modeling," *IEEE Trans. Biomed. Eng.*, vol. 56, pp. 246-254, 2009.

1-15. (canceled)

16. A system for predicting at least one future glucose level of an individual, said system including:

a glucose measuring device, the glucose measuring device generates a series of glucose signals representing glucose levels obtained from the individual at fixed time intervals; and

an analyzer having a glucose prediction function that is portable between individuals irrespective of health of individuals, said glucose prediction function including a plurality of model coefficients that are invariant between individuals, said glucose prediction function outputs the at least one future glucose level by weighing the current and a plurality of previous series of glucose signals obtained from the individual by said model coefficients, said glucose prediction function outputs a series of future glucose levels by omitting the oldest predicted or actual glucose level used in the last iteration of said glucose prediction function, multiplying a most recent predicted future glucose level by a first model coefficient, and multiplying a next most recent predicted or actual glucose level by a next model coefficient.

17-27. (canceled)

28. A method, including:

receiving a time horizon as an input or retrieving the time horizon from memory;

receiving series of glucose signals from a glucose measuring device, the series of glucose signals representing glucose levels obtained from an individual at fixed time intervals;

predicting at least one future glucose level of the individual by weighing the series of glucose signals by a plurality of model coefficients of a glucose prediction function that is portable between individuals irrespective of health of individuals, said plurality of model coefficients are invariant between individuals, said weighing of the series of glucose signals by said plurality of model coefficients of said glucose prediction function includes omitting a least recent predicted or actual glucose level from said glucose prediction function, multiplying a most recent predicted future glucose level by a first model coefficient, and multiplying a next most recent predicted or actual glucose level by a next model coefficient, and said predicting being performed with a processor having code to perform calculations of said glucose prediction function; and

repeating said predicting for the number of required samples to reach the time horizon with each new prediction being one sampling time period later.

29. The method according to claim **28**, wherein the health of the individual includes a diabetes type of the individual.

30. The method according to claim **28**, wherein the health of the individual includes an age of the individual.

31. The method according to claim **30**, wherein the health of the individual includes whether the individual is hospitalized.

32. The method according to claim **28**, wherein said plurality of model coefficients are invariant between individuals irrespective of a type of said glucose measuring device utilized to measure the series of glucose signals.

33. The method according to claim **28**, wherein said plurality of model coefficients number 30 and include a first coefficient having a value between 0.80 and 0.83, a second coefficient having a value between 0.50 and 0.52, a third coefficient having a value between 0.23 and 0.24, a fourth coefficient having a value between −0.01 and 0.02, a fifth coefficient having a value between −0.17 and −0.14, a sixth coefficient having a value between −0.25 and −0.23, a seventh coefficient having a value between −0.25 and −0.23, a eight coefficient having a value between −0.20 and −0.28, a ninth coefficient having a value between −0.12 and −0.11, a tenth coefficient having a value between −0.04 and −0.01, a eleventh coefficient having a value between 0.05 and 0.07, a twelveth coefficient having a value between 0.10 and 0.13, a thirteenth coefficient having a value between 0.13 and 0.15, a fourteenth coefficient having a value between 0.13 and 0.14, a fifteenth coefficient having a value between 0.10 and 0.11, a sixteenth coefficient having a value between 0.05 and 0.07, a seventeenth coefficient having a value between −0.01 and 0.01, a eighteenth coefficient having a value between −0.05 and −0.03, a nineteenth coefficient having a value between −0.08 and −0.06, a twentieth coefficient having a value between −0.09 and −0.07, a twenty-first coefficient having a value between −0.08 and −0.07, a twenty-second coefficient having a value between −0.06 and −0.05, a twenty-third coefficient having a value between −0.03 and −0.01, a twenty-fourth coefficient having a value between 0.00 and 0.02, a twenty-fifth coefficient having a value between 0.03 and 0.05, a twenty-sixth coefficient having a value between 0.04 and 0.06, a twenty-seventh coefficient having a value between 0.04 and 0.05, a twenty-eighth coefficient having a value between 0.02 and 0.03, a twenty-ninth coefficient having a value between −0.01 and 0.00, and a thirtieth coefficient having a value between −0.05 and −0.03.

34. The method according to claim **28**, further including generating an alert when the at least one future glucose level of the individual at least one of exceeds an upper glucose threshold and falls below a lower glucose threshold.

35. The method according to claim **28**, wherein said weighing of the series of glucose signals by said plurality of model coefficients reduces a time lag of the at least one future glucose level.

36. The method according to claim **28**, further including displaying the at least one future glucose level on a display connected to said processor.

37. The method according to claim **28**, further including storing the series of glucose signals in a memory.

38. The method according to claim **28**, wherein said glucose prediction function is a universal autoregressive model.

39. The method according to claim **28**, further including converting the series of glucose signals via said processor into numerical values representing the glucose levels obtained from the individual.

40-46. (canceled)

47. A method, including:

receiving series of glucose signals from a glucose measuring device, the series of glucose signals representing glucose levels obtained from an individual at fixed time intervals;

predicting at least one future glucose level of the individual by weighing the series of glucose signals by model coefficients of a glucose prediction function that is portable