CLAIMS

~~What is claimed is:~~

~~1. A tibial insert for an implantable knee prosthesis, comprising a tibial insert that is 1, 2, 3, 4, 5, 6, 7, 8, 9, or, 10 mm thicker on a medial side of the implant, as compared to a lateral side of the implant.~~

~~2. A tibial insert for an implantable knee prosthesis, comprising a tibial insert that is 1, 2, 3, 4, 5, 6, 7, 8, 9, or, 10 mm thicker on the lateral side of the implant, as compared to a medial side of the implant.~~

~~3. A tibial insert for an implantable knee prosthesis, comprising a tibial insert that is 1, 2, 3, 4, 5, 6, 7, 8, 9, or, 10 mm thicker on an anterior side of the implant, as compared to a posterior side of the implant.~~

~~4. A tibial insert for an implantable knee prosthesis, comprising a tibial insert that is 1, 2, 3, 4, 5, 6, 7, 8, 9, or, 10 mm thicker on a posterior side of the implant, as compared to an anterior side of the implant.~~

~~5. A tibial insert or articular spacer for an implantable knee prosthesis, comprising a tibial insert that is 1, 2, 3, 4, 5, 6, 7, 8, 9, or, 10 mm thicker on one of a medial, lateral, anterior and/or posterior side of the implant compared to a corresponding side of the implant, where medial and lateral are corresponding sides and anterior and posterior are corresponding sides.~~

~~6. The tibial insert according to any one of claims 1-5, wherein said tibial insert is composed of polyethylene, or polyetheretherketone (PEEK).~~

~~7. The tibial insert according to any one of claims 1-6 wherein said tibial insert is customized to a patient.~~

~~8. The tibial insert according to any one of claims 1 to 7 wherein said insert is manufactured by 3-D printing, or, by molding.~~

~~9~~1. An implantable medical device, comprising:

a circuit configured to be fixedly attached to an implantable prosthetic device;

a power component; and

a device configured to uncouple the circuit from the power component.

~~10~~2. An implantable medical device, comprising:

a circuit configured to be fixedly attached to an implantable prosthetic device;

a battery; and

a fuse coupled between the circuit and the battery.

~~11~~3. A method, comprising electrically opening a fuse that is disposed between a circuit and a battery, at least the fuse and the circuit being disposed on an implanted prosthetic device.

~~12. An implantable medical device, comprising:~~

~~at least one sensor configured to generate a sensor signal; and~~

~~a control circuit configured to cause the at least one sensor to generate the sensor signal at a frequency that is related to a telemedicine code.~~

~~13. An implantable medical device, comprising:~~

~~at least one sensor configured to generate a sensor signal; and~~

~~a control circuit configured to cause the at least one sensor to generate the sensor signal at a frequency that allows a doctor to qualify for payment under a telemedicine insurance code.~~

~~14. An implantable medical device, comprising:~~

~~at least one sensor configured to generate a sensor signal; and~~

~~a control circuit configured to cause the at least one sensor to generate the sensor signal at a frequency that allows a doctor to qualify for full payment under a telemedicine insurance code.~~

~~15. A method, comprising, generating a sensor signal that is related to an implanted medical device at a frequency that allows a doctor to qualify for payment available under a telemedicine insurance code.~~

~~16. A method, comprising, generating a sensor signal that is related to an implanted medical device at a frequency that allows a doctor to qualify for full payment available under a telemedicine insurance code.~~

~~17. An implantable prosthesis, comprising:~~

~~a housing; and~~

~~an implantable circuit disposed in the housing and configured~~

~~to generate at least one first signal representative of a movement;~~

~~to determine whether the signal meets at least one first criterion; and~~

~~to send the signal to a remote location in response to determining that the signal meets the at least one first criterion.~~

~~18. A base station, comprising:~~

~~a housing; and~~

~~a base-station circuit disposed in the housing and configured~~

~~to receive, from an implantable prosthesis, at least first signal representative of a movement;~~

~~to send the at least one first signal to a destination;~~

~~to receive at least one second signal from a source; and~~

~~to send the at least one second signal to the implantable prosthesis.~~

~~194~~. A method, comprising opening a fuse disposed on an implantable prosthesis between a power source and an implantable circuit in response to a current through the fuse exceeding an overcurrent threshold.

~~205~~. A method, comprising opening a fuse disposed on an implantable prosthesis between a power source and an implantable circuit in response to a current through the fuse exceeding an overcurrent threshold for at least a threshold time.

~~216~~. A method, comprising opening a fuse disposed on an implantable prosthesis between a power source and an implantable circuit in response to a voltage across the fuse exceeding an overvoltage threshold.

~~227~~. A method, comprising opening a fuse disposed on an implantable prosthesis between a power source and an implantable circuit in response to a voltage across the fuse exceeding an overvoltage threshold for at least a threshold time.

~~238~~. A method, comprising opening a fuse disposed on an implantable prosthesis between a power source and an implantable circuit in response to a temperature exceeds an overtemperature threshold.

~~249~~. A method, comprising opening a fuse disposed on an implantable prosthesis between a power source and an implantable circuit in response to a temperature exceeding an overtemperature threshold for at least a threshold length of time.

~~25. A method, comprising:~~

~~generating a sensor signal in response to a movement of a subject in which a prosthesis is implanted; and~~

~~transmitting the sensor signal to a remote location.~~

~~26. A method, comprising:~~

~~generating a sensor signal in response to a movement of a subject in which a prosthesis is implanted;~~

~~sampling the sensor signal; and~~

~~transmitting the samples to a remote location.~~

~~27. A method, comprising:~~

~~generating a sensor signal in response to a movement of a subject in which a prosthesis is implanted;~~

~~determining whether the sensor signal represents a qualified event; and~~

~~transmitting the signal to a remote location in response to determining that the sensor signal represents a qualified event.~~

~~28. A method, comprising:~~

~~generating a sensor signal in response to a movement of a subject in which a prosthesis is implanted;~~

~~receiving a polling signal from a remote location; and~~

~~transmitting the sensor signal to the remote location in response to the polling signal.~~

~~29. A method, comprising:~~

~~generating a sensor signal in response to a movement of a subject in which a prosthesis is implanted;~~

~~generating a message that includes the sensor signal or data representative of the sensor signal; and~~

~~transmitting the message to a remote location.~~

~~30. A method, comprising:~~

~~generating a sensor signal in response to a movement of a subject in which a prosthesis is implanted;~~

~~generating a data packet that includes the sensor signal or data representative of the sensor signal; and~~

~~transmitting the data packet to a remote location.~~

~~31. A method, comprising:~~

~~generating a sensor signal in response to a movement of a subject in which a prosthesis is implanted;~~

~~encrypting at least a portion of the sensor signal or data representative of the sensor signal; and~~

~~transmitting the encrypted sensor signal to a remote location.~~

~~32. A method, comprising:~~

~~generating a sensor signal in response to a movement of a subject in which a prosthesis is implanted;~~

~~encoding at least a portion of the sensor signal or data representative of the sensor signal; and~~

~~transmitting the encoded sensor signal to a remote location.~~

~~33. A method, comprising:~~

~~generating a sensor signal in response to a movement of a subject in which a prosthesis is implanted;~~

~~transmitting the sensor signal to a remote location; and~~

~~entering an implantable circuit associated with the prosthesis into a lower-power mode after transmitting the sensor signal.~~

~~34. A method, comprising:~~

~~generating a first sensor signal in response to a movement of a subject in which a prosthesis is implanted;~~

~~transmitting the first sensor signal to a remote location;~~

~~entering at least one component of an implantable circuit associated with the prosthesis into a lower-power mode after transmitting the sensor signal; and~~

~~generating a second sensor signal in response to a movement of the subject after an elapse of a low-power-mode time for which the implantable circuit is configured.~~

~~35. A method, comprising:~~

~~receiving a sensor signal from a prosthesis implanted in a subject; and~~

~~transmitting the received sensor signal to a destination.~~

~~36. A method, comprising:~~

~~sending an inquiry to a prosthesis implanted in a subject~~

~~receiving a sensor signal from a prosthesis after sending the inquiry; and~~

~~transmitting the received sensor signal to a destination.~~

~~37. A method, comprising:~~

~~receiving a sensor signal and at least one identifier from a prosthesis implanted in a subject;~~

~~determining whether the identifier is correct; and~~

~~transmitting the received sensor signal to a destination in response to determining that the identifier is correct.~~

~~38. A method, comprising:~~

~~receiving a message including a sensor signal from a prosthesis implanted in a subject;~~

~~decrypting at least a portion of the message; and~~

~~transmitting the decrypted message to a destination.~~

~~39. A method, comprising:~~

~~receiving a message including a sensor signal from a prosthesis implanted in a subject;~~

~~decoding at least a portion of the message; and~~

~~transmitting the decoded message to a destination.~~

~~40. A method, comprising:~~

~~receiving a message including a sensor signal from a prosthesis implanted in a subject;~~

~~encoding at least a portion of the message; and~~

~~transmitting the encoded message to a destination.~~

~~41. A method, comprising:~~

~~receiving a message including a sensor signal from a prosthesis implanted in a subject;~~

~~encrypting at least a portion of the message; and~~

~~transmitting the encrypted message to a destination.~~

~~42. A method, comprising:~~

~~receiving a data packet including a sensor signal from a prosthesis implanted in a subject;~~

~~decrypting at least a portion of the data packet; and~~

~~transmitting the decrypted data packet to a destination.~~

~~43. A method, comprising:~~

~~receiving a data packet including a sensor signal from a prosthesis implanted in a subject;~~

~~decoding at least a portion of the data packet; and~~

~~transmitting the decoded data packet to a destination.~~

~~44. A method, comprising:~~

~~receiving a data packet including a sensor signal from a prosthesis implanted in a subject;~~

~~encoding at least a portion of the data packet; and~~

~~transmitting the encoded data packet to a destination.~~

~~45. A method, comprising:~~

~~receiving a data packet including a sensor signal from a prosthesis implanted in a subject;~~

~~encrypting at least a portion of the data packet; and~~

~~transmitting the encrypted data packet to a destination.~~

~~46. A method, comprising:~~

~~receiving a sensor signal from a prosthesis implanted in a subject;~~

~~decrypting at least a portion of the sensor signal; and~~

~~transmitting the decrypted sensor signal to a destination.~~

~~47. A method, comprising:~~

~~receiving a sensor signal from a prosthesis implanted in a subject;~~

~~decoding at least a portion of the sensor signal; and~~

~~transmitting the decoded sensor signal to a destination.~~

~~48. A method, comprising:~~

~~receiving a sensor signal from a prosthesis implanted in a subject;~~

~~encoding at least a portion of the sensor signal; and~~

~~transmitting the encoded sensor signal to a destination.~~

~~49. A method, comprising:~~

~~receiving a sensor signal from a prosthesis implanted in a subject;~~

~~encrypting at least a portion of the sensor signal; and~~

~~transmitting the encrypted sensor signal to a destination.~~

~~50. An implantable circuit for an implantable prosthesis.~~

~~51. An implantable prosthesis including an implantable circuit.~~

~~52~~10. An implantable prosthesis including a fuse.

53. A base station for communication with an implantable prosthesis.

54. A monitoring-session-data collection, analysis, and status-reporting system implemented as a component of one or more computer systems, each computer system having one or more processors, one or more memories, one or more network connections, and access to one or more mass-storage devices, the one or more the monitoring-session-data collection, data-analysis, and status-reporting system comprising:

a monitoring-session-data-receiving component that receives monitoring-session-data, including acceleration data generated by sensors within or proximal to a prosthesis attached or implanted within a patient, from an external monitoring-session-data source and that stores the received monitoring-session-data in one or more of the one or more memories and one or more mass-storage devices;

a monitoring-session-data-processing component that

prepares the monitoring-session-data for processing,

determines component trajectories representing motion modes and additional metric values from the monitoring-session-data; and

a monitoring-session-data-analysis component that

determines a prosthesis status and a patient status from the motion modes and additional metric values,

distributes the determined prosthesis status and patient status to target computer systems through the network connections, and

when indicated by the determined prosthesis status and patient status, distributes one or more alarms and events to target computer systems through the network connections.

55. The monitoring-session-data collection, analysis, and status-reporting system of claim 54 wherein the monitoring-session-data includes:

a patient identifier;

a device identifier;

a timestamp;

device-configuration data; and

an ordered set of data .

56. The monitoring-session-data collection, analysis, and status-reporting system of claim 55 wherein the ordered set of data comprises one of:

a time sequence of data vectors, each data vector including numerical values related to linear accelerations with respect to three coordinate axes of an internal device coordinate system; and

~~a time sequence of data vectors, each data vector including numerical values related to linear-accelerations with respect to three coordinate axes of a first internal device coordinate system and including numerical values related to angular velocities, numerical values related to angular velocities relative to the first internal device coordinate system or to a second internal device coordinate system.~~

~~57. The monitoring-session-data collection, analysis, and status-reporting system of claim 54 wherein the monitoring-session-data-processing component prepares the monitoring-session-data for processing by:~~

~~receiving a time sequence of data vectors, each data vector including three numerical values related to linear-accelerations in the directions of three coordinate axes of a first internal device coordinate system and including three numerical values related to angular velocities about each axis of the first or a second internal device coordinate system;~~

~~when rescaling of the data-vector sequence is needed, rescaling the numerical values of the data vectors;~~

~~when normalization of the data-vector sequence is needed, normalizing the numerical values of the data vectors;~~

~~when transformation of one or more of the numerical values related to linear-acceleration and the numerical values related to angular velocities is needed to relate the numerical values related to linear-acceleration and the numerical values related to angular velocities to a common internal coordinate system, transforming one or more of the numerical values related to linear-acceleration and the numerical values related to angular velocities to relate to the common internal coordinate system; and~~

~~when the time sequence of data vectors needs to be synchronized with respect to a fixed-interval time sequence, synchronizing the data vectors with respect to a fixed-interval time sequence.~~

~~58. The monitoring-session-data collection, analysis, and status-reporting system of claim 54 wherein the monitoring-session-data-processing component determines component trajectories representing motion modes and additional metric values from the monitoring-session-data by:~~

~~orienting the prepared monitoring-session-data, comprising data vectors, each data vector including three numerical values related to linear-accelerations in the directions of three coordinate axes of an internal device coordinate system and including three numerical values related to angular velocities about each axis of the internal device coordinate system, with respect to a natural coordinate system;~~

bandpass filtering the oriented data vectors to obtain a set of data vectors for each of multiple frequencies, including a normal-motion frequency;

determining, from the data vectors for each of the non-normal-motion frequencies, a spatial amplitude in each of the coordinate-axis directions of the natural coordinate system;

determining, from a basis trajectory for the patient and the data vectors for the normal-motion frequency, a spatial amplitude in each of the coordinate-axis directions of the natural coordinate system; and

determining, from the basis trajectory for the patient and the data vectors for the normal-motion frequency, current normal-motion characteristics.

59. The monitoring-session-data collection, analysis, and status-reporting system of claim 58 wherein determining, from the data vectors for a frequency, a spatial amplitude in each of the coordinate-axis directions of the natural coordinate system further comprises:

generating a spatial trajectory from the data vectors;

projecting the spatial frequency onto each of the coordinate axes; and

determining the lengths of the protections of the spatial frequency onto each of the coordinate axes.

60. The monitoring-session-data collection, analysis, and status-reporting system of claim 54 wherein the monitoring-session-data-analysis component determines a prosthesis status and a patient status from the motion modes and additional metric values by:

submitting the motion modes and additional metric values to a decision tree that generates a diagnosis-and-suggestions report; and

packaging the diagnosis-and-suggestions report together with amplitudes generated for the motion modes, metrics generated from a normal-motion-frequency trajectory and a base trajectory, and additional metric values to generate one or both of an output report and output data values that characterize the prosthesis status and the patient status.

61. The monitoring-session-data collection, analysis, and status-reporting system of claim 54 wherein the monitoring-session-data-analysis component wherein the one or more alarms and events distributed to target computer systems include:

an alarm that notifies a medical practitioner or medical facility of the need, by the patient, of immediate assistance or intervention; and

an event that indicates additional services and/or equipment needed by the patient that may be handled by various external computer systems to automatically provide the additional services and/or equipment to the patient or inform the patient of the additional services and/or

equipment and provide the patient with information regarding procurement of the additional services and/or equipment.

62. A method, carried out by a monitoring-session-data collection, analysis, and status-reporting system implemented as a component of one or more computer systems, each computer system having one or more processors, one or more memories, one or more network connections, and access to one or more mass-storage devices, the method comprising:

receiving monitoring-session-data, including acceleration data generated by sensors within or proximal to a prosthesis attached or implanted within a patient, from an external monitoring-session-data source;

storing the received monitoring-session-data in one or more of the one or more memories and one or more mass-storage devices;

determining a prosthesis status and a patient status from the motion modes and additional metric values,

distributing the determined prosthesis status and patient status to target computer systems through the network connections, and

when indicated by the determined prosthesis status and patient status, distributing one or more alarms and events to target computer systems through the network connections.

63. The method of claim 62 wherein determining a prosthesis status and a patient status from the motion modes and additional metric values further comprises:

preparing the monitoring-session-data for processing,

determines component trajectories representing motion modes and additional metric values from the monitoring-session-data;

submitting the motion modes and additional metric values to a decision tree that generates a diagnosis-and-suggestions report; and

packaging the diagnosis-and-suggestions report together with amplitudes generated for the motion modes, metrics generated from a normal-motion-frequency trajectory and a base trajectory, and additional metric values to generate one or both of an output report and output data values that characterize the prosthesis status and the patient status.

64. The method of claim 62 wherein preparing the monitoring-session-data for processing further comprises

receiving a time sequence of data vectors, each data vector including three numerical values related to linear accelerations in the directions of three coordinate axes of a first internal device coordinate system and including three numerical values related to angular velocities about each axis of the first or a second internal device coordinate system;

~~when rescaling of the data-vector sequence is needed, rescaling the numerical values of the data vectors;~~

~~when normalization of the data-vector sequence is needed, normalizing the numerical values of the data vectors;~~

~~when transformation of one or more of the numerical values related to linear-acceleration and the numerical values related to angular velocities is needed to relate the numerical values related to linear-acceleration and the numerical values related to angular velocities to a common internal coordinate system, transforming one or more of the numerical values related to linear-acceleration and the numerical values related to angular velocities to relate to the common internal coordinate system; and~~

~~when the time sequence of data vectors needs to be synchronized with respect to a fixed-interval time sequence, synchronizing the data vectors with respect to a fixed-interval time sequence.~~

~~65. The method of claim 62 wherein determining component trajectories representing motion modes and additional metric values from the monitoring-session-data by:~~

~~orienting the prepared monitoring-session-data, comprising data vectors, each data vector including three numerical values related to linear-accelerations in the directions of three coordinate axes of an internal device coordinate system and including three numerical values related to angular velocities about each axis of the internal device coordinate system, with respect to a natural coordinate system;~~

~~bandpass filtering the oriented data vectors to obtain a set of data vectors for each of multiple frequencies, including a normal-motion frequency;~~

~~determining, from the data vectors for each of the non-normal-motion frequencies, a spatial amplitude in each of the coordinate-axis directions of the natural coordinate system;~~

~~determining, from a basis trajectory for the patient and the data vectors for the normal-motion frequency, a spatial amplitude in each of the coordinate-axis directions of the natural coordinate system; and~~

~~determining, from the basis trajectory for the patient and the data vectors for the normal-motion frequency, current normal-motion characteristics.~~

~~66. The method of claim 54 wherein determining, from the data vectors for a frequency, a spatial amplitude in each of the coordinate-axis directions of the natural coordinate system further comprises:~~

~~generating a spatial trajectory from the data vectors;~~

~~projecting the spatial frequency onto each of the coordinate axes; and~~

determining the lengths of the protections of the spatial frequency onto each of the coordinate axes.

67. The method of claim 54 wherein determining a prosthesis status and a patient status from the motion modes and additional metric values further comprises:

submitting the motion modes and additional metric values to a decision tree that generates a diagnosis-and-suggestions report; and

packaging the diagnosis-and-suggestions report together with amplitudes generated for the motion modes, metrics generated from a normal-motion-frequency trajectory and a base trajectory, and additional metric values to generate one or both of an output report and output data values that characterize the prosthesis status and the patient status.

68. The method of claim 54 wherein the one or more alarms and events distributed to target computer systems include:

an alarm that notifies a medical practitioner or medical facility of the need, by the patient, of immediate assistance or intervention; and

an event that indicates additional services and/or equipment needed by the patient that may be handled by various external computer systems to automatically provide the additional services and/or equipment to the patient or inform the patient of the additional services and/or equipment and provide the patient with information regarding procurement of the additional services and/or equipment.

69. A physical data-storage device encoded with computer instructions that, when executed by one or more processors within one or more computer systems of a monitoring-session-data collection, analysis, and status-reporting system, each computer system having one or more processors, one or more memories, one or more network connections, and access to one or more mass-storage devices, control the monitoring-session-data collection, analysis, and status-reporting system to:

receive monitoring-session-data, including acceleration data generated by sensors within or proximal to a prosthesis attached or implanted within a patient, from an external monitoring-session-data source.

70. A method for determining joint loosening in a patient having an implanted artificial joint, comprising a) analyzing movement of an implanted artificial joint, and b) comparing said movement vs. previous / standardized norms.

71. A method for determining loosening of an implanted prosthesis in a patient having the implanted prosthesis, comprising:

a) obtaining a standardized norm of movement by analyzing movement of an implanted prosthesis during one or more first monitoring sessions;

b) obtaining a current description of movement by analyzing movement of an implanted prosthesis during one or more second monitoring sessions that occur subsequent to the one or more first monitoring sessions; and

c) comparing said current description of movement to said standardized norm of movement, to thereby identify loosening of an implanted prosthesis in a patient having the implanted prosthesis.

72. A method for identifying a clinical or subclinical condition associated with an implant in a patient, the method comprising:

a. monitoring a first motion of the implant during a first monitoring session using a sensor which is directly coupled to the implant, to provide a first monitoring-session data for the first motion;

b. monitoring a second motion of the implant during a second monitoring session using the sensor, to provide a second monitoring-session-data for the second motion; and

c. comparing the first monitoring-session data or a product thereof to the second monitoring-session-data or a product thereof, to provide a comparison that is indicative of a clinical or subclinical condition associated with the implant.

73. The method of claim 72 wherein the clinical or subclinical condition is a loosening of the implant, optionally due to periprosthetic lucency or periprosthetic osteolysis.

74. The method of claim 72 wherein the clinical or subclinical condition is a malalignment or a realignment of the implant.

75. The method of claim 72 wherein the clinical or subclinical condition is deformation of the implant.

76. The method of claim 72 wherein the patient is asymptomatic for the condition, and the comparison of the first and second data or products thereof indicate that the condition has occurred between the first and second monitoring sessions.

77. The method of claim 72 wherein the patient is asymptomatic for loosening of the implant, and the comparison of the first and second data or products thereof indicate that the implant has loosened between the first and second monitoring sessions.

78. The method of claim 72 wherein the patient is asymptomatic for realignment of the implant, and comparison of the first and second data or products thereof indicate that the implant has changed alignment between the first and second monitoring sessions.

~~79. The method of claim 72 wherein the patient is asymptomatic for deformation of the implant, and comparison of the first and second data or products thereof indicate that the implant has deformed between the first and second monitoring sessions.~~

~~80. A method for treating a clinical or subclinical condition associated with an implant in a patient, comprising:~~

~~a. identifying an implant in a patient, where the implant has a clinical or subclinical condition; and~~

~~b. attaching corrective external bracing to patient to restore proper alignment and/or enhanced stability to the implant.~~

~~81. The method of claim 80 wherein the corrective external bracing has been specifically tailored to the patient and the subclinical condition.~~

~~82. A method for treating a clinical or subclinical condition associated with an implant in a patient, comprising:~~

~~a. identifying an implant in a patient, where the implant has a clinical or subclinical condition; and~~

~~b. contacting the implant with a fixation system to retard progression of the subclinical condition.~~

~~83. The method of claim 82 wherein the fixation system comprises hardware selected from a K-wire, pin, screw, plate and intramedullary device.~~

~~84. The method of claim 82 wherein a screw is located through a bone that holds the implant, where a terminus of the screw pushes against a surface of the implant to retard movement of the implant, where a screw is selected from one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen and twenty screws.~~

~~85. The method of claim 82 wherein the fixation system comprises bone cement.~~

~~86. A method for treating a clinical or subclinical condition associated with an implant in a patient, comprising:~~

~~a. identifying an implant in a patient, where the implant has a clinical or subclinical condition; and~~

~~b. contacting the implant with a tamp, where the contacting changes a location of the implant within the patient.~~

~~87. The method of claim 86 wherein the subclinical condition is a realignment of the implant.~~

~~88. A method for treating a clinical or subclinical condition associated with an implant in a patient, comprising:~~

~~a. identifying an implant in a patient, where the implant has a clinical or subclinical condition; and~~

~~b. implanting an insert adjacent to a component of the implant, where the insert modifies forces acting on the component of the implant.~~

~~89. The method of claim 88 wherein the insert is a tibial insert.~~

~~90. The method of claim 88 wherein the insert is a tibial insert having (i) a lateral side with a minimum thickness and (ii) a medial side with a minimum thickness that is non-identical to the minimum thickness of the lateral side.~~

~~91. A method for treating a clinical or subclinical condition associated with an implant in a patient, comprising:~~

~~a. identifying an implant in a patient, where the implant has a clinical or subclinical condition; and~~

~~b. delivering a pro-osteointegration agent to a location surrounding the implant.~~

~~92. The method of claim 91 wherein the pro-osteointegration agent is selected from autologous bone graft, xenograph bone graft, synthetic bone graft, bone pastes, bone growth factor, and growth factor.~~

~~93. A method for treating a clinical or subclinical condition associated with an implant in a patient, comprising:~~

~~a. identifying an implant in a patient, where the implant has a clinical or subclinical condition; and~~

~~b. delivering an anti-bacterial agent to a location surrounding the implant.~~

~~94. The method of claim 93 wherein the anti-bacterial agent is compounded in a sustained release form.~~

~~95. The method of any of claims 72-94 wherein the implant is an intelligent implant.~~

~~96. The method of claims 72-94 wherein the implant is selected from a knee implant, a hip implant and a shoulder implant.~~

~~97. The method of any of claims 72-94 wherein the product of the monitoring session data comprises a motion mode.~~

~~98. The method of any of claims 72-94 wherein the product of the monitoring-session data comprises a motion mode, and a status of the implant is determined from the motion mode.~~

~~99. The method of any of claims 72-94 wherein the product of the monitoring-session data comprises a motion mode, and a status of the patient is determined from the motion mode.~~

~~100. The method of claims 72-94 wherein the implant has been located within the patient for at least 10 weeks prior to the first monitoring session.~~

~~101. The method of claims 72-94 wherein the implant has changed alignment over a period of at least 2 weeks.~~

~~102. The method of claims 72-94 wherein the implant has loosened over a period of at least two weeks.~~

~~103. The method of claims 72-94 wherein the implant has deformed over a period of at least two weeks.~~

~~104. The method of claims 72-94 wherein the implant comprises a control circuit configured to cause the sensor to generate a sensor signal at a frequency that is related to a telemedicine code for the clinical or subclinical condition, and the sensor signal is generated at the frequency.~~

~~105. The method of claims 72-94 wherein the implant comprises a control circuit configured to cause the sensor to generate a sensor signal at a frequency that allows a doctor to qualify for payment under a telemedicine insurance code, and the sensor signal is generated at the frequency.~~

~~106. The method of claims 72-94 wherein the implant comprises a control circuit configured to cause the sensor to generate a sensor signal at a frequency that allows a doctor to qualify for full payment under a telemedicine insurance code, and the sensor signal is generated at the frequency.~~

~~107. The method of claims 72-94 further comprising generating a sensor signal that is related to the implant at a frequency that allows (i) a doctor to qualify for full payment available under a telemedicine insurance code, or (ii) a doctor to qualify for payment available under a telemedicine insurance code.~~

~~108. A method comprising:~~

~~a. providing an intelligent prosthesis implanted in a bone adjacent to a joint of a patient, where an accelerometer is contained within the intelligent prosthesis, and where the accelerometer is positioned within the bone;~~

~~b. moving the implanted intelligent prosthesis relative to an external environment wherein the patient is located, where the implanted intelligent prosthesis is moved during a first monitoring session;~~

~~c. making first measurements with the accelerometer during the first monitoring session, where the first measurements provide first monitoring session data or a~~

product thereof which identifies a status of the implanted intelligent prosthesis at a time of the first measurements.

109. The method of claim 108 wherein the accelerometer is a plurality of accelerometers.

110. The method of claim 108 wherein the accelerometer is selected from a 1-axis accelerometer, a 2-axis accelerometer and a 3-axis accelerometer.

111. The method of claim 108 wherein the accelerometer operates in a broadband mode.

112. The method of claim 108 wherein the bone is a tibia.

113. The method of claim 108 wherein the accelerometer is located in a tibial extension of the intelligent prosthesis.

114. The method of claim 108 wherein the implanted intelligent prosthesis is moved relative to the external environment without an impact force being applied to the patient or the intelligent prosthesis during the first monitoring session.

115. The method of claim 108 wherein the external environment comprises a residence of the patient.

116. The method of claim 108 wherein the external environment comprises an operating room wherein the intelligent prosthesis has been implanted into the patient.

117. The method of claim 108 wherein the status of the implanted intelligent prosthesis is a characterization of the looseness of the implanted intelligent prosthesis within the bone.

118. The method of claim 108 wherein the status of the implanted intelligent prosthesis is a characterization of the alignment of the implanted intelligent prosthesis within the bone.

119. The method of claim 108 wherein the status of the implanted intelligent prosthesis is a characterization of the wear of the implanted intelligent prosthesis.

120. The method of claim 108 wherein the status of the implanted intelligent prosthesis is a characterization of bacterial infection of a region within the bone adjacent to the implanted intelligent prosthesis.

121. The method of claim 108 wherein the status of the implanted intelligent prosthesis indicates a subclinical condition.

122. The method of claim 108 wherein step b) is repeated after a waiting period, where the repeat of step b) comprises moving the implanted intelligent prosthesis relative to an external environment wherein the patient is located, where the implanted intelligent prosthesis is moved during a second monitoring session, and wherein second measurements are made with the accelerometer during the second monitoring session, where the second measurements provide second monitoring session data or a product thereof which identifies a status of the implanted of the implanted intelligent prosthesis at the time of the second measurements.

~~123. The method of claim 108 wherein step b) is repeated a plurality of times, the plurality of times separated from one another by identical or non-identical waiting periods, where the repeating of step b) comprises moving the implanted intelligent prosthesis relative to an external environment wherein the patient is located, where the implanted intelligent prosthesis is moved during a plurality of monitoring sessions, and wherein measurements are made with the accelerometer during each of the plurality of monitoring sessions, where the measurements provide a plurality of monitoring-session-data or products thereof, each of which identifies a status of the implanted of the implanted intelligent prosthesis at the time of the measurements.~~

~~124. The method of claim 108 wherein step b) is repeated a plurality of times, the plurality of times separated from one another by identical or non-identical waiting periods, where the repeating of step b) comprises moving the implanted intelligent prosthesis relative to an external environment wherein the patient is located, where the implanted intelligent prosthesis is moved during a plurality of monitoring sessions, and wherein measurements are made with the accelerometer during each of the plurality of monitoring sessions, where the measurements provide a plurality of monitoring-session-data or products thereof, each of which identifies a status of the implanted of the implanted intelligent prosthesis at the time of the measurements; wherein the plurality is optionally selected from 2 to 20 monitoring sessions, and where the plurality of monitoring-session data taken together indicate a change in the status of the implanted intelligent prosthesis during the time when the plurality of monitoring sessions occurred.~~

~~125. The method of claim 124 wherein the change in the status is indicative of a healing of the tissue surrounding the implanted intelligent prosthesis.~~

~~126. The method of claim 124 wherein the change in the status is indicative of an infection of the tissue surrounding the implanted prosthesis.~~

~~127. The method of claim 124 wherein the change in the status is indicative of a loosening of the implanted intelligent prothesis within the bone.~~

~~128. The method of claim 124 wherein the change in status is indicative of wear of the implanted intelligent prosthesis.~~

~~129. The method of claim 124 wherein the change in status is indicative of malalignment of the implanted intelligent prosthesis.~~

~~130.~~73. ~~The method of claim 124 wherein the change in status is indicative of a change in alignment of the implanted intelligent prosthesis.~~