**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO
Judge Robert E. Blackburn**

Civil Action No. 12-cv-03229-REB-MJW

HEALTHTRIO, LLC, a Colorado limited liability company,

      Plaintiff,

vs.

AETNA, INC., a Pennsylvania corporation,
ACTIVEHEALTH MANAGEMENT, INC., a Delaware corporation, and
MEDICITY, INC., a Delaware corporation,

      Defendants.

ORDER CONSTRUING DISPUTED PATENT CLAIMS

Blackburn, J.

This matter is before me on the parties' **Joint Claim Construction Statement**

[#52],[1] filed July 5, 2013. The parties have submitted their respective briefs supporting

their proposed constructions of certain disputed claim terms in the patents-in-suit. I

heard oral argument on claim construction on October 25, 2013. I now construe the

disputed claim terms of the patents-in-suit.

I. JURISDICTION

I have jurisdiction over this patent infringement action under 28 U.S.C. § 1338(a).

II. LEGAL STANDARDS

Claim construction is a matter of law for the court. ***Markman v. Westview***

Instruments, Inc., 517 U.S. 370, 384-91, 116 S.Ct. 1384, 1393-96,134 L.Ed.2d 577

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[1]"[#52]" is an example of the convention I use to identify the docket number assigned to a specific paper by the court's case management and electronic case filing system (CM/ECF). I use this convention throughout this order.

(1996). "The construction of claims is simply a way of elaborating the normally terse claim language in order to understand and explain, but not to change, the scope of the claims." *Embrex, Inc. v. Service Engineering Corp.*, 216 F.3d 1343, 1347 (Fed. Cir. 2000) (citation and internal quotation marks omitted). Claims construction proceeds along a well-defined, hierarchical path, beginning with the claim language itself, proceeding to the other intrinsic evidence of record, including the specification and prosecution history, and finally to consideration of any extrinsic evidence, such as expert testimony. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)

"It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp*., 415 F.3d 1303, 1312 (Fed. Cir. 2005), *cert. denied*, 126 S.Ct. 1332 (2006) (citation and internal quotation marks omitted). There is a "heavy presumption" that claim terms carry the ordinary and customary meaning that would be given to them by one skilled in the relevant art. *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1202 (Fed. Cir. 2002), *cert. denied*, 123 S.Ct. 2230 (2003). The perspective of one skilled in the art establishes a baseline for claim interpretation and "is based on the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art." *Phillips*, 415 F.3d at 1313. Nevertheless, where the ordinary meaning of the claim language is apparent even to a lay judge, there is no need for interpretation. *Id.* at 1314. Ultimately, "[t]he construction that stays true to the claim language and most

naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Id.* at 1316 (citation and internal quotation marks omitted).

Of equal importance in construing the claims is the specification "of which [the claims] are a part." *Id.* at 1315 (citation and internal quotation marks omitted). The specification "is the single best guide to the meaning of a disputed term." *Vitronics Corp.*, 90 F.3d at 1582. Thus, when the specification explicitly defines a term used in the claims of the patent, that definition will be controlling. *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998). In addition, if the specification contains an express disclaimer as to the scope of the claims, "th[e] court interprets the claim more narrowly than it otherwise would to give effect to the inventor's intent to disavow a broader claim scope." *Ventana Medical Systems, Inc. v. Biogenex Laboratories, Inc.*, 473 F.3d 1173, 1181 (Fed. Cir. 2006). Absent either of these circumstances, the court may not read a limitation into a claim based on the specification. *Renishaw PLC*, 158 F.3d at 1248.

III. ANALYSIS

This lawsuit involves the alleged infringement of ten patents, all of which relate, in broad terms, to a system for creating a patient-centric electronic healthcare record, or personal health record ("PHR"). The PHR is a comprehensive, unified medical record incorporating an individual patient's health-related information from diverse sources.[2] The innovation that underlies the patents-in-suit is that the health-related data is gleaned

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[2] The PHR is distinguished from a provider-centric electronic medical record ("EMR"), which includes computerized records and data entered by and relevant to the care provided by a single medical provider.

initially from claims submission records sent to and maintained by entities that pay for healthcare, *e.g.*, health insurance providers. The patents-in-suit describe a computer system and/or a method for extracting data from computer systems maintained by these payors, "normalizing" that information, and creating an integrated and comprehensive patient record that can be accessed by various persons and entities involved in the provision of healthcare to the patient. This field of endeavor – which incorporates aspects of medicine, computer science, and information theory – is known as "healthcare informatics."

At issue currently are seven disputed claim terms.[3] These terms have been broadly grouped into two categories: (1) those related to the extraction of health-related information from claims records; and (2) those related to the use of health-related information after it has been extracted. I examine each of the implicated terms under those two broader rubrics.

A. EXTRACTION-RELATED TERMS

1. <u>Payor Claims Data</u>

The term "payor claims data" is used pervasively throughout the patents-in-suit. The parties agree that the term "payor" means "health insurance plans and/or governmental bodies that pay for health-related services and/or pharmacy benefits managers." They further agree that, however construed, the terms "payor claims data" and "claims data" are to be construed identically.

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[3] Prior to the hearing, the parties stipulated to the construction of two other previously disputed terms – "health care data" and "participants." In addition, the parties previously agreed to the construction of certain other terms as well.

The term "payor claims data" derives from the following portion of the specification:

> The term "payor claims data" is intended to be broadly interpreted to include any patient related data associated with the payment of health related services. Typically, payor claims data 220 may be available from (or sent to) payor(s). . . . For example, the payor claims data 220 may include, but are not limited to International Classification of Diseases ("ICD") codes, Current Procedural Terminology ("CPT") codes, National Drug Code ("NDC") codes, treating physicians, treatment dates, manually entered data, or other data formats. A wide variety of information may be obtained through the payor claims data 220.

(**Plf. Cl. Constr. Br. App.**, Exh. 1(B) at col. 11, l. 50-64.) The parties differ on two primary points: (1) whether the listed examples should be included in the definition, plaintiff's preferred construction; and (2) whether the definition should explicitly exclude two other categories of data (questionnaire and clinical data), as set forth in defendants' proffered construction.

With respect to the first argument, the specification plainly states that the term "is intended to be broadly interpreted to include any patient related data associated with the payment of health related services." Although plaintiff suggests that the examples that follow this broad definition (as well as others) should be included in the construction of this claim, it is not clear what is gained by further gilding the definition in this manner. Given that the claim purports to encompass "*any* patient-related data associated with the payment of health related services," it does not appear to this court to be particularly more helpful to delineate specific, but non-exhaustive, examples of types of data that may be included under the umbrella of such a broad definition.

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For similar reasons, I must reject defendants' proposal to exclude explicitly "clinical data" and "questionnaire data" from the construction of this term. This proposed construction is based on the provision in the specification that "other health related data," of which these two categories are examples, may be used to supplement or enhance "payor claims data." (**See Plf. Cl. Constr. Br. App.**, Exh. 1(B) at col. 13, l. 46-48.) Contrary to defendant's suggestion, this provision in no way can be read to suggest that "payor claims data" does not or cannot include these other forms of health-related data. If questionnaire data and clinical data are included in the patient-related data received from the payor, those species of information are properly considered "payor claim data."[4] Indeed, to accept defendants' position would essentially nullify the patents all together, since the gleaning of clinical (*i.e.*, health-related) data from payor records is precisely what the patents purport to do. **See SynQor, Inc. v. Artesyn Technologies, Inc.**, 709 F.3d 1365, 1378 -1379 (Fed. Cir.) ("A claim construction that excludes the preferred embodiment is rarely, if ever, correct and would require highly persuasive evidentiary support."), **cert. denied**, 134 S.Ct. 648 (2013) (citation and internal quotation marks omitted).

On the other hand, I do not believe the claim, despite its breadth, can be read, as plaintiff proposes, to modify the phrase "payment of health-related services" to read "any manner of payment for health-related services." The claim speaks of "any patient-related data;" it does not include a similar modifier relating to the method by which

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[4] Defendants argued at the hearing that "clinical data" was distinguishable from "clinical information." They failed to expatiate how these terms were different from one another, however, and I find no basis on which to conclude that there is any appreciable distinction (other than the obvious semantic one) between them.

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payment for services is made.

I thus find and conclude that the terms "payor claims data" and "claims data" are properly construed to mean "any patient-related data associated with the payment of health\-related services by health insurance plans and/or governmental bodies that pay for health-related services and/or pharmacy benefits managers."

2. Health Care Record(s)/Records of Health Care Data

The parties agree that these two terms should be construed to have the same meaning. Moreover, it now appears that the parties agree that the term "health care data" is properly construed to mean "data related to the provision of healthcare to a patient." (**See Def. Cl. Constr. Br.** at 7.) Nevertheless, the parties continue to dispute what constitutes a "record" of health care data.

At the heart of the parties' dispute is whether the term "health care records" includes insurance claims data as well as healthcare data, as plaintiff advocates. Defendants insist that there is a distinction between insurance claims data and clinical or other health-related data. Having previously rejected that argument in connection with the construction of the term "payor claims data," I find defendants' proposed construction similarly insupportable in this context.

As used in the patents, what is claimed is

> [a] computer system to communicate health care data
> between a health care payor and a participant, the computer
> system comprising:
>
> an intermediary computer system configured to communicate
> with one or more legacy payor databases that store records
> of health care data and operated by one or more payor
> computer systems[.]

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(**Plf. Cl. Constr. Br. App,**, Exh. 1(E) at col. 18, ll. 65-67 - col. 19, ll. 1-4.)[5]   The source

of these records is a payor's database. Thus, any proper construction cannot be

divorced from the payor, which the parties agree refers to a health insurance plan or

governmental body that pays for health-related services and/or a pharmacy benefits

manager. The records stored in such a payor's database may be expected to include

both clinical data and insurance claim information. This broader construction accords

also with the parties' agreed construction of the term "health care data" to include,

without limitation to clinical information only, any "data related to the provision of health

care to a patient."

On the other hand, plaintiff's proposed construction, which would incorporate the

concept of "payor claims data" into the construction of this term strikes this court as

unnecessary. Similarly, and as stated in connection with the construction of that term, I

see no reason to further muddy the waters by including the lengthy list of examples of

"additional health care data" that plaintiff proposes be appended to the construction of

this otherwise straightforward term. The term is already broad, encompassing any type

of data related to the provision of healthcare to a patient that may be part of the payor

database.

I thus construe the term "record of health care data" to mean "a collection of data

related to the provision of health care to a patient." I believe this construction is

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[5] Some of the patents refer instead to the derivation of healthcare data "from one or more sources related to a patient," wherein the computer system communicates directly with "insurer databases" and "provider databases." (**See Plf. Cl. Constr. Br. App.**, Exh. 1(H) at col. 18, ll. 31-40.) These claims further clarify that the type of information available to the system includes both insurance data and clinical, health-related data.

sufficiently broad to encompass payor claims data as previously construed to include both insurance and claims-specific and healthcare-specific information.

3. Payor Data

This term was not one of the nine originally designated by the parties for construction. (*See* **Recommendation on Defendants' Motion To Amend Court's Order for Briefing on *Markman* Issues (Docket No. 32)** at 3-4 [#46], filed June 10, 2013.) Although it therefore might be proper to refuse to construe it, because the term is disputed and because the parties have briefed the issue, I find it efficacious to address it here.[6] *See **O2 Micro International Ltd. v. Beyond Innovation Technology Co., Ltd.***, 521 F.3d 1351, 1362-63 (Fed. Cir. 2008) ("When the parties present a fundamental dispute regarding the scope of a claim term, it is the court's duty to resolve it.").

The parties agree that the "payor data element" is the starting point for the creation of the PHR. They further agree that the term "payor data element" is broader than "payor claims data" – indeed, the patents themselves specify that the "payor data element includes payor claims data." (**Plf. Cl. Constr. Br. App.**, Exh. 1(C) at col. 22, ll. 62-63.) Defendants' proposed construction, based on their earlier proposed construction of "payor claims data," would merely eliminate the two categories – clinical data and questionnaire data – that defendants suggested should not be included in the construction of "payor claims data," thus defining the term as "patient-related data associated with the payment of health related services." As the court has rejected

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[6] Although plaintiff further objects that "payor data" is taken out of context, it does not suggest how the term used in context – in the phrases "payor data element" or "health care payor data" – would be construed any differently. In other words, it has not shown how construction of the most significant part of the phrase without further construction of the remainder would be incorrect or prejudicial.

defendants' proposal to omit these categories of data from the construction of payor

claims data, however, defendants' construction is unworkable – it essentially would be

merely duplicative of the definition of "payor claims data."

Instead, I agree with plaintiff that "payor data" and "payor data element" are

entitled to a straightforward construction as simply "data kept or generated by a payor,"

regardless whether such data is specifically related to patients.

B. POST-EXTRACTION TERMS

1. Normalized/Normalizing

Of the myriad thorny issues before the court in this matter, the proper

construction – indeed, the construction, *vel non* – of this term is among the thorniest.

Defendants contend that these terms are impermissibly indefinite and thus cannot be

construed. Plaintiff counters that it is improper to construe these terms because they

are used in the patent only as modifiers to other terms, and those terms have not been

designated for construction. Nevertheless, both parties then proffer suggested

constructions, thereby undermining their primary arguments significantly. Moreover, the

court finds that it is both possible and appropriate to construe the terms"normalized

format" and "normalized data," which is how the terms appear in the patents.

As an initial matter, plaintiff suggests that it is inappropriate to consider, and

previously moved to strike,[7] the declaration of Dr. David Parry, submitted by defendants

in support of their argument that these terms are indefinite.   As allowed by the patent

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[7] The court previously denied without prejudice plaintiff's **Plaintiff's Motion To Strike Exhibits C and M From Defendants' Amended Claim Construction Brief** [#63], filed August 30, 2013, in order to consider the matter within the context of the claim construction itself. (**See Order** [#123], filed September 22, 2014.)

law of New Zealand, Dr. Parry's report was submitted originally in connection with the

prosecution of applications for letters patent in New Zealand by parties opposed to the

applications. Ultimately, the applications were denied by the New Zealand patent office

based, in part, on the opinions of Dr. Parry on which defendants rely.

Plaintiff points to well-established law in the Federal Circuit strongly cautioning

against "indiscriminate reliance on the prosecution of corresponding foreign applications

in the claim construction analysis:"

> [T]he theories and laws of patentability vary from country to
> country, as do examination practices. For this reason, we
> have noted that the varying legal and procedural
> requirements for obtaining patent protection in foreign
> countries might render consideration of certain types of
> representations inappropriate for consideration in a claim
> construction analysis of a United States counterpart.

AIA Engineering Ltd. v. Magotteaux International S/A, 657 F.3d 1264, 1279 (Fed.

Cir. 2011) (internal citations and quotation marks omitted). Plaintiff further argues that

Dr. Parry's statements in the context of this litigation – wherein defendants have not

retained him as an expert themselves and admit they cannot make him available for

deposition by plaintiff – constitute hearsay.[8]

Yet even assuming *arguendo* that this evidence is properly considered, two

things strike the court in regard to Dr. Parry's opinion. First, both Dr. Parry and plaintiff's

expert, Dr. Bryan Bergeron, agree that the term "normalization" (which is not used in the

patents in that form) is a term of art in the field of healthcare informatics. Moreover, the

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[8] Defendants admitted in their response to the motion to strike that they have proffered Dr. Parry's
report "to show the common understanding of certain terms . . . in the relevant field." (**Def. Resp. Br.** at 6
[#66], filed September 23, 2013.) This plainly is a request for the court to accept the truth of the
statements, which is the very essence of hearsay. *See* **FED. R. EVID.** 801(c)(2); *Zamora v. Board of
Education for Las Cruces Public Schools*, 553 Fed. Appx. 786, 790 (10th Cir. Jan. 24, 2014).

definitions they endorse are very similar. Dr. Bergeron states that "normalization" refers

to "various processes that convert data to a more useful form." (**Pl. Cl. Constr. Br.**

App., Exh. 2 ¶ 26 at 7.) Dr. Parry suggests similarly that normalization "involves the

analysis of a database to increase its efficiency." (**Def. Cl. Constr. Br. App.**, Exh. M ¶

61 at 13.) I perceive little, if any, substantive difference between these two broad

definitions.

Second, Dr. Parry's ultimate conclusion is that the term "normalization" as used in

the New Zealand patent applications does not adhere to the commonly accepted

definition of normalization, but instead involves "deriving meaning from the data, using

this to map the data to the 'predefined format,' and then inserting the data into the

correct field in the final database." (**Id.**, Exh. M ¶ 68 at 15.) Dr. Parry found this

definition ambiguous because "[t]he exact nature of the normalization step is not clear"

and seemed to require at least an underlying knowledge of the original database from

which the information was extracted that was not disclosed in the application. (**See id.**,

Exh. M ¶¶ 69-71 at 16.)

Put in the context of the patent laws of this country, the opinion therefore appears

to address most directly the issue of enablement, rather than the concept of

indefiniteness. **See** 35 U.S.C. § 112 ¶ 1. **See also Transocean Offshore Deepwater**

Drilling, Inc. v. Maersk Drilling USA, Inc., 699 F.3d 1340, 1355 (Fed. Cir. 2012)

(enablement requirement demands that "the specification must enable one of ordinary

skill in the art to practice the claimed invention without undue experimentation") (citation

and internal quotation marks omitted). This conclusion is confirmed by defendants'

claim construction brief, in which they fault the patents for failing to "disclose any way to

achieve this functionality [of converting the original data to a different format] in

practice." (**Def. Cl. Constr. Br.** at 13.) Enablement, however, is an issue going to the

validity of the patent, *see Invitrogen Corp. v. Clontech Laboratories, Inc.*, 429 F.3d

1052, 1070 (Fed. Cir. 2005), and the Federal Circuit has cautioned against considering

issues going to validity as "a regular component of claim construction," *Pfizer, Inc. v.*

Teva Pharmaceuticals, USA, Inc., 429 F.3d 1364, 1376 (Fed. Cir. 2005) (citation and

internal quotation marks omitted). Such considerations come into play only when, "after

applying all the available tools of claim construction, . . . the claim is still ambiguous,"

and then only to preserve the validity of the patent. *Id.* For these reasons, I do not find

consideration of Dr. Parry's opinions appropriate or, frankly, helpful in addressing the

proper construction of the terms at issue here.

Dr. Bergeron's opinion, however, is expressed at such a high level of generality

as to be not particularly helpful, either. For one thing, the patents do not use the term

"normalization," but instead speak of "normalized format" and "normalized data."

Moreover, although normalization in the broadest sense may include "various processes

that convert data to a more useful form," the patents themselves describe a specific

process, set forth as a series of discrete steps by which data in one or more original

formats from various sources is analyzed and converted into a new format:

> wherein the normalized format is of a type that displays
> health care data from one of more sources associated
> with a single patient such that any health care data
> associated with that patient having the same meaning
> is expressed in the same format despite any prior
> formatting;
> a rules engine that establishes the normalized format for
> health care data associated with the patient and
> predetermines how each of the plurality of selected
> health care data is to appear in its respective field to
> send to the participant;
> wherein fields in the normalized format that correspond to
> the fields containing the health care data for the

patient not expressed as predetermined by the
normalized format is remodeled to be expressed as
predetermined by the normalized format become
normalized data; and
wherein the computer is configured to transfer the
normalized data over a data network to a participant
computer system.

(**Plf. Cl. Constr. Br. App.**, Exh. 1(H) at col. 18, ll. 49-54.) Thus, the claimed computer

system is one which acquires healthcare data from various diverse sources expressed

in different formats and converts that data – now "normalized" – into a format that itself

can be described as "normalized."

Moreover, the claim itself provides a definition of the "normalized format": a

"normalized format" is one "that displays health care data from one of more sources

associated with a single patient such that any health care data associated with that

patient having the same meaning is expressed in the same format despite any prior

formatting."[9] "Normalized data" is data that has been converted to the "normalized

format," which may then be transferred over a data network to a participant computer

system. The system "normalizes" the data when it undertakes this process.

2. Remodel/Remodeled

Although defendants insist that the terms "remodel" and "remodeled" likewise are

indefinite, their arguments are so conclusory and underdeveloped as to not merit further

consideration by the court. **See South Denver Anesthesiologists, PC v. Oblachinski**,

2007 WL 2255123 at *1 (D .Colo. Aug. 3, 2007). Moreover, it appears that defendants'

arguments again invoke questions of enablement, rather than indefiniteness. To that

extent, they fail substantively as well as for the same reasons discussed above.

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[9] This same definition appears in the independent claims of the other patents-in-suit in which
these terms appear. (**See, e.g.**, **Plf. Cl. Constr. Br. App.**, Exh. 1(E) at col. 19, ll. 31-35; Exh. 1(F) at col.
19, ll. 8-12; Exh. 1(I) at col. 44, ll. 18-22; Exh. 1(J) at col. 44, ll. 29-24.)

Plaintiff points out that these terms are used in two different contexts. In the first,

the system that receives healthcare data is described as one that is "configured to

remodel" the data. The second speaks of the "remodeled" data itself. Dr. Bergeron

submits that these terms are terms of art and that a person of ordinary skill in the field of

healthcare informatics would understand the term "remodel" to mean "to alter the

structure of data" and the term "remodeled" to mean "the structure of the data has been

altered." (**Plf. Cl. Constr. Br. App.**, Exh. 2 ¶ 27 at HT App. 590.) Because these

definitions also capture the plain and ordinary meaning of the term "remodel" in context,

I agree that these constructions are correct and adopt them herein.

3. Personal Health Record(s)[10]

As noted above, the goal of the patents-in-suit is to create a patient-centric PHR

that is widely accessible across providers and other parties involved in the provision of

healthcare to a patient (including the patient herself). Both parties draw their respective

proposed constructions from a lengthy portion of the specification which compares and

contrasts the PHR with the more familiar provider-centric EMR. After discussing the

limitations inherent to the EMR, the specification goes on to describe the PHR:

> The present invention is not merely a system for
> electronically storing and accessing medical records, but
> relates to computerized systems and methods, including
> software attendant thereto, for generating a personal health
> record ("PHR") . . . In contrast to an EMR, the PHR
> contemplated herein is intended to include all relevant
> health-related information for a patient, regardless of the
> specific health care provider. The clinical information
> regarding the individual patient may be collected from
> diverse sources including, but not limited to information from
> claims through the health plans, multiple EMR's being used

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[10] The parties agree that the terms "Personal Health Record(s)," "PHR," "electronic health record(s)," "personal/individual health record," and "patient's electronic health record" as used in the patents-in-suit all have the same meaning.

from different providers providing care to that patient,
medication records from the pharmacy benefit managers
("PBMs"), information from labs and imaging centers, and
direct input by the patient to provide a unified
personal/individual health record.

(**Plf. Cl. Constr. Br. App.**, Exh. 1(B) at col. 2, ll. 11-27.) Defendants argue that

"Personal Health Record(s)" thus must be construed as a record "intended to include *all*

relevant health-related information for a patient," as stated in the specification. Plaintiff

counters that reading the word "all" to require the PHR to contain each and every

medical record of an individual patient is impractical and ignores the larger context in

light of which the specification must be read.[11]

Initially, I note that even if I were to accept defendants' proposal, "all" does not

literally mean "all," even under the terms of the specification itself. The specification

does not refer to "all" health-related information on a patient, but only to "all relevant"

health-related information. The specification itself therefore recognizes that the PHR will

contain less than literally "all" of a patient's healthcare information. Moreover, as

expressed in the final phrase of the sentence (which defendants omit from their

proposed construction), what distinguishes a PHR from an EMR is that the information

contained in a PHR is not limited to that available from a specific healthcare provider.

Indeed, in describing the limitations of the EMR, the specification notes specifically that

it is not a complete record primarily because it is "limited in scope to a specific health

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[11] Although Dr. Bergeron testifies that the currently accepted meaning of "PHR" does not require
the inclusion of literally all medical data on a patient (*see* **Plf. Cl. Constr. Br. App.**, Exh. 2 ¶¶ 22-23 at HT
App. 588-589), the court's inquiry must focus on what one skilled in the art would have understood the
term to mean at the time of the invention, *see Phillips*, 415 F.3d at 1313. Dr. Bergeron acknowledges
that the term did not have a widely accepted meaning at the time the initial patent (to which all other
patents-i-suit claim priority) was applied for. (**Plf. Cl. Constr. Br. App.**, Exh. 2 ¶ 22 at HT App. 588.)

care provider." (**Id.**, Exh. 1(B) at col. 1, l. 42.)

Nor am I persuaded by defendants' argument that the patentee's attempt to distinguish the prior art during prosecution compels a different conclusion. **See Phillips**, 415 F.3d at 1313 (claims should be read in light of the patent's entire specification and prosecution history). The patent examiner initially rejected Claim 1 of the '904 patent on the ground that it would have been obvious to one skilled in the art to combine aspects of prior art references (specifically Mayaud and Jacobs) to teach a method for generating a PHR. (**See Def. Cl. Constr. Br. App.**, Exh. D at 4-6.) While it is true, as defendant notes, that the patentee argued that Mayaud "is susceptible to gaps in the data," those gaps were argued to result from Mayaud's reliance on primary sources (i.e., healthcare providers). Thus, if a doctor did not participate in Mayaud's system or did not keep electronic records, "this would lead to gaps in the data." (**Id.**, Exh. B at 11-12.) The innovation represented to be the heart of the patents-in-suit was the initial creation of the PHR from the payor data element, which subsequently could be supplemented with information from healthcare providers directly. (**See id.**, Exh. B at 14.) Indeed, the fact that the PHR can be supplemented after its creation plainly refutes defendants' suggestion that the PHR itself must contain all health-related data on a patient.

Thus, although the PHR represents a more comprehensive picture of the patient's medical history, I perceive nothing in the broader context of the specification to support the notion that the PHR is intended or required to capture every shred of healthcare data that might be available about a patient. Instead, the PHR is intended to be a comprehensive and unified record of the patient's health-related data. These goals

can be met even if the PHR does not contain every single piece of health-related

information relevant to a patient. Indeed, it strikes this court as a nearly impossible

hurdle to require any system to capture literally all data on any topic.

Of course, the court may not rewrite claims to make them operable or to sustain

their validity. **Chef America, Inc. v. Lamb–Weston, Inc**., 358 F.3d 1371, 1374 (Fed.

Cir. 2004). Nevertheless, "a construction that renders the claimed invention inoperable

should be viewed with extreme skepticism," **AIA Engineering Ltd.**, 657 F.3d at 1278

(citation and internal quotation marks omitted), and the claim only should be construed

as inoperable where there is but one reasonable interpretation of the language, **Chef**

America, 358 F.3d at 1374. Such is not the case here. The court therefore will "avoid a

construction with a nonsensical result." **Illumina, Inc. v. Complete Genomics, Inc.**,

2012 WL 423734 at *31 (N.D. Cal. Feb. 8, 2012).

For these reasons, I find and conclude that "Personal Health Record(s)" is

properly construed to mean, "a comprehensive, patient-centric record of health-related

information for a patient regardless of the specific healthcare provider containing

information that may be collected from diverse sources."

4. Universal Health Care Concept Code

The specification provides an express definition of the term "Universal Health

Care Concept Code" ("UHCCC"):

> As used herein, the term "universal health care concept codes"
> means a common language that enables a consistent way of
> indexing, storing, retrieving, and aggregating clinical data across
> specialties and sites of medical care. Each "universal health care
> concept code" is a unique identifier indicative of a node in a
> hierarchy of health care concepts to which other types of medical

data can be mapped. The term "universal health care concept code" is intended to be synonymous with the term "SNOWMED code."

(*See* **Plf. Cl. Constr. Br. App.**, Exh. 1(B) at col. 2, ll. 49-58.)

Although plaintiff asks the court to focus on the first two sentences of this definition, it is the third sentence that actually clarifies what the patentee intended to convey by the term "UHCCC." That intention could not be clearer – the term is synonymous with "SNOWMED code." Indeed, that was the precise term that had been used in an earlier iteration of the patent; it was replaced with the more generic "UHCCC" in response to the patent examiner's observation that the term "SNOMED" was trademarked and therefore should be replaced. (**Def. Cl. Constr. Br. App.**, Exh. F at 12-13.)

Under these circumstances, plaintiff's arguments regarding the alleged plain and ordinary meaning of these terms is irrelevant. *See Thorner v. Sony Computer Entertainment America LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012) (patentee may act as his own lexicographer where he clearly expresses intent to use a term in a manner other than its plain and ordinary meaning). Its suggestion that the specification is somehow ambiguous is simply specious. The court concludes that the term "universal health care concept code" is properly construed to mean "SNOWMED code."

IV. ORDERS

THEREFORE IT IS ORDERED that the following disputed terms of the patents-in-suit are construed as follows:

1. "Payor claims data" and "claims data" mean "any patient-related data

associated with the payment of health-related services by health insurance plans and/or governmental bodies that pay for health-related services and/or pharmacy benefits managers";

2. "Record of health care data" means "a collection of data related to the provision of healthcare to a patient";

3. "Payor data" means "data kept or generated by a payor";

4. "Normalized format" means a format "that displays healthcare data from one of more sources associated with a single patient such that any healthcare data associated with that patient having the same meaning is expressed in the same format despite any prior formatting"; "Normalized data" is data that has been converted to the "normalized format," which may then be transferred over a data network to a participant computer system; and the system "normalizes" the data when it undertakes this process;

5. "Remodel" means "to alter the structure of data"; and "Remodeled" means "the structure of the data has been altered";

6. "Personal Health Record(s)" means "a comprehensive, patient-centric record of health-related information for a patient regardless of the specific health care provider containing information that may be collected from diverse sources"; and

7. "Universal health care concept code" means "SNOWMED code."

Dated October 29, 2014, at Denver, Colorado.

BY THE COURT:

Robert E. Blackburn
United States District Judge

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