DICTUM

The Decision Identification and Classification Taxonomy for Use in Medicine

"A dictum is a statement or opinion of belief considered authoritative but not binding, because of the authority of the person making it"

Black´s Law Dictionary

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Content

Introduction

Physicians apply and refine their medical knowledge more or less continuously during work. This substrate of knowledge informs how they evaluate small bits of information and how they handle complex situations. Hence, they make a wide range of decisions, from judgment of a skin rash at the glimpse of an eye to difficult deliberation and shared decisions about how to best treat a breast tumor.

We aimed to understand how physicians' decision-making is influenced by patient-physician communication processes. Previous research has focused on difficult decisions involving treatment options or the use of screening tests, decisions that involve the patient. However, we wanted to examine *all* relevant clinical decisions physicians make, how communication contributes to these, and how the processes of decision-making contribute to communication. The literature provided no exhaustive tool for identifying and categorizing the wide array of decisions that appear when we studied videotapes of physician-patient encounters.

We developed DICTUM aiming to fill this void. It is important to note that we did not intend to assess **how** the decisions were made. This tool aimed at recognizing **clinically relevant decisions that surface as physician statements during the encounter**.

The tool was developed through a content-driven iterative process informed by the experiences and perspectives of four physicians studying a sample of 40 out of 130 videotaped encounters from the Department of Internal Medicine in a Norwegian general hospital. The material comprised videos of authentic clinical encounters from ward rounds, outpatient clinics and emergency rooms, in which seven medical subspecialties were involved.

The development of the tool has dealt with three main obstacles;

1. What is a decision, and, more precisely; what is a clinically relevant decision?
2. When are these clinically relevant decisions made?
3. Do the decisions share properties allowing us arrange them in mutually exclusive categories?

Most of the time these decisions are made within a short and determinable time frame, thereby resembling an event. We propose that these events can be assessed with relation to two dimensions; a temporal dimension (past, present, future) and a topical dimension (10 categories of decision types). The present manual explains in detail how decisions can be identified and coded. In the development phase of this coding manual we have also formulated a definition of what constitutes a clinically relevant decision: **"A clinically relevant decision is a verbal statement committing to a particular course of clinically relevant action and/or statement concerning the patient's health that carries meaning and weight because it is said by a medical expert".**

Since development, the taxonomy has been tested in seventeen different specialties. Its reliability has been tested and applied to a body of 372 encounters of which examples shown in this codebook are drawn.

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Norway, 2015

General coding instructions using DICTUM

DICTUM identifies decisions conveyed by physicians as events in the clinical encounter. Each decision is given an event code, indicating a specific moment of the consultation. Since statements or passages of dialogue that constitute decisions last longer than a moment - and for practicality during coding - the code is entered as a point event at the end of the relevant statement.

The identification of decisions is sometimes made easy by shifts in the dialogue. However, in many interchanges and longer monologues it is harder to decide what should count as a decision. The following general rules have been agreed upon and thoroughly tested:

Several codes possible per turn:
More than one decision might be conveyed within one turn of speech. However, in order to be coded as separate decisions, they should *cover different categories in at least one of the taxonomy's two dimensions*. The physician may do this either within:

- *the same decision type* (if the physician makes a decision about one drug and goes on to make a decision about another drug).
- *different types* (decision about a drug followed by a decision scheduling the next control).
- *different temporality (see next paragraph)*

One code per topic per turn:
If the physician makes several decisions *within the same topic, temporality and the same turn* of speech it becomes more difficult to hold decisions apart, which is why only one code should be given.

Physicians do a lot of such "information-packaging" to their patients, for example; starting a drug, deciding upon dosage, intervals, informing about effects and side effects, checking for interactions etc. Our tests in the development phase have shown that it is feasible to code this sequence as one code. Detailed assessment of sequences like the one described above is more suited for sub analysis.

An exception to this rule (one code per turn per topic) is when the physician refers to decisions in different time dimensions, for example:

- Physician: "We decided to put you on a drug that you'll have to take four times a day" (*past*).
- Patient: "I think I will forget if I have to do it that often, do I have to?"
- Physician: "Ok, I think it is OK to have a double the dose morning and evening, reducing the frequency to twice a day (*present)*.
- Patient: "But I always seem to get stomach pains when I take any kind of medication."
- Physician: "Well, stomach pain is a possible side effect of this drug. If you get severe pain you should stop taking the pills." (*future*).

(See further instructions about coding of the time dimension on page 6)

General versus tailored information giving:
Often physicians try to explain medically related information to their patients, for example causes of a disease, how common it is, how it may be treated, how it affects survival rates in a population and so forth. In these situations statements reflecting general medical knowledge on a population level are not coded as decisions. If this information is *tailored for the current*

patient and describes or interprets his situation it is coded as a decision. (For example: "I think you got cancer due to your smoking" versus "A lot of patients get cancer due to smoking")

Questions are never decisions (unless...):
If a seemingly relevant medical rephrasing of what the patient just said is returned to the patient in the form of a question, *without further elaboration or categorizing* from the physician, it is not coded as a decision, even though it demonstrates the physician's expert role and power of definition.

Patient involvement:
When the patient asks a question and the physician responds, the response often contains a statement reflecting a clinically relevant decision.

Also a decision sometimes develops from an initial question which the physician may form to himself or to the patient (for example: "I wonder, should we stop this drug?"). At this point the statement is not coded as a decision. The code is made when the answer to the question is finalized, whether it reaches its conclusion through discussion with the patient, another physician or if the physician decides alone.

Options:
If the physician presents *more than one* option for the patient, the introduction of options is not coded as a decision. Even though on many levels it is an important decision, it is not an independent clinical decision, but a first step towards a clinical decision. The option decided upon is coded as a decision.

If the physician decides to check back with the patient (for example: "Can you tell me, what I just told you?"), this sequence is not coded as a decision.

If the physician suggests, recommends or orders a procedure, treatment or management of a problem which the patient does not give consent to, the physician´s initial request is coded as a decision. If request and denial follows one another it is registered as one code. If the physician promotes his decision several times it is coded as a repetition *(see further instructions about coding of repetitions on page 6).*

Decisions appearing outside the regular dialogue between physician and patient:
All statements observed in a video are included and subject to analysis. Clinically relevant decisions may be made or conveyed at any time. This includes situations where the physician dictates the patient´s chart or talks face-to-face or on the telephone with another physician, other health care personnel, relatives or next-of-kin.

DICTUM´s two dimensions; time and type

The taxonomy is based on the premise that it is possible to identify decisions in the patient-physician dialogue and that these decisions share essential properties allowing us to categorize them in mutually exclusive categories. We classify decisions in two dimensions; *a temporal dimension (3 categories) and a topical dimension (10 categories).* In addition, we have found it helpful to identify restatements or *repetitions*.

How decisions relate to time

All decisions are coded either as past, present or future, based on a judgment of whether the decision in question was actually made before the consultation and is now just conveyed to the patient *(past),* or has emerged from the interaction with the patient *(present),* or is stipulated as a hypothetical future event, depending upon some condition to be fulfilled *(future*).

Decisions are classified as past, present or future, and may be marked by;
the symbols ←, =, →
or in the coding software the keys p, . , f
Further examples will be specified under each topical category

Past: By "conveying established conclusion" we mean statements of decisions made before the encounter (minutes before or last week or last year) and brought into the dialogue as new information. For example: "You have had a heart attack" or "You will be discharged today". *However; if the planned course of action changes as a result of the dialogue we mark it as a present decision. If the information presented to the patient appears to be known by the patient, we do not code the information as a decision.*

Present: Decisions that emerge as a result of the clinical dialogue and investigations made in the consultation. For example: "This requires an ultra sound" or "OK, I am going to start you on a new medication".
Sometimes it is hard to distinguish established conclusions from present ones. Whenever you as a coder are in doubt about this, decisions should be coded as present.

Future: Decisions are sometimes relegated to a future time dependent upon some condition to be fulfilled. These statements are initiated by conditional subordinating conjunctions such as "if**,** unless, in case, should you etc". For example: "If you don´t get any better you should double the dosage".

Repetition:

Most encounters contain repetitions; events where the physician restates decisions that have already been made or conveyed in the consultation. We have chosen to code repetitions because they are so frequent, and because they help us complete the identification of all decisions.
Every decision identified and coded is given the key r. If coded in the software, you will then be asked to punch in topical category and temporal category. If you code in an excel-sheet every repetition (r) should be given a chronological number. A consultation containing 15 decisions should have them sorted from 1 to 15 in sequential order (i.e. r1, r2, r3, etc).

How decisions may be categorized according to type: See next page.

DICTUM

DECISION TYPE (with coding key assigned) **TIME: Past (c), present (.), future (f), repetition (r)**

1. GATHERING ADDITIONAL INFORMATION (g)

Decision to obtain information from other source than patient interview, physical examination and reading the patient´s in-house chart.

1. Actively seeking external information from other party (other hospital, general practitioner, family member etc).
2. Discussing patient with other physician or health care personnel
3. Ordering new tests/diagnostic procedures for the patient

Excluded: Taking the patient's history, clinical examination and reading in the patient´s in-house chart.

2. EVALUATING TEST RESULT (e)

Simple assessments of clinical and paraclinical tests and examinations, either being a statement that findings are normal or a statement about a pathological finding.

Excluded: Simple assessments of patient history without further elaboration.

3. DEFINING PROBLEM (d)

Complex assessments that defines what the problem is and reflects a medically informed conclusion.

These statements differ from simple evaluative statements about a test or an examination, and they have to meet at least one of the criteria listed below in being;

1. a diagnostic conclusion
2. an evaluation of state of health
3. an etiological inference
4. a prognostic judgment

4. DRUG-RELATED (m)

Decision to start, refrain from, stop, alter or maintain a drug regimen,

including both prescription drugs and over-the-counter drugs such as vitamin supplements and herbal medicine, including all modes of administration; tablets, suppositories, intravenous, intra articulary, nebulizer etc.

5. THERAPEUTIC PROCEDURE-RELATED (i)

Decision to intervene upon a medical problem, plan, perform or refrain from therapeutic procedures of a medical nature, including surgery, wound care, interventional radiology, and radiation therapy.

Excluded: Decisions concerning drugs administered using needles or other devices (nebulizers etc), are classified as Drug-related decisions.

6. LEGAL AND INSURANCE-RELATED (l)

Medical decision concerning the patient, which is based upon or restricted by legal regulations or financial arrangements.

7. CONTACT-RELATED (c)

Decision regarding admittance or discharge from hospital, scheduling of control and referral to other part of the health care system.

8. ADVICE AND PRECAUTION (a)

Decision to give patient advice or precautions, thereby transferring responsibility from provider to patient.

9. TREATMENT GOAL (t)

Decision to set defined goal for treatment and thereby being more specific than giving advice.

10. DEFERMENT (n)

Decision to actively delay decision or a rejection to decide upon problem presented by patient.

1. Gathering additional information – (g):

Decision to obtain information from other source than patient interview, physical examination and reading the patient´s in-house chart.

1. Actively seeking external information from other party, e.g. other hospital, general practitioner, family member etc.
2. Discussing patient with other physician or health care personnel
3. Ordering new tests/diagnostic procedures for the patient

Excluded: Taking the patient's history, reading patient´s in-house chart and ordinary clinical examination, interpretable without help from a paraclinical department ***(including hands-on testing like measuring blood pressure, ophhtalmoscopy, monofilament test etc).***

Gathering additional information decisions could be subcategorized as; ordering test, consulting colleague and external information. Examples of category 1 decisions:

Order test: "I'll get an ultrasound of it tonight"
"There is no point in a new EEG now"
"You'll send in fecal tests after 4, 6 and 8 weeks…"
"We'll do the A1c and some blood tests afterwards"

Consulting colleague: "This is a bit special so I will discuss it with a colleague" (picks up the phone)
"I will discuss it a bit with my consultant"

External information: "We will get those images sent over and have them assessed"

Examples of how category 1 decisions relate to the temporal dimension:

Past: "We have decided to order some new tests of you" (on a ward round)

Present: "I would like to get a new liver biopsy from you." (to outpatient with liver malfunction of unknown cause)
"We must get the patients charts from his family practitioner" (to nurse after concluding on a lack of information about the patients medication)

Future: "If the pain in your neck should increase, we have to get some images of it" (to outpatient with cancer and suspected metastases to the bone)
"If I am in doubt, I will call my consultant" (to patient in the E.R. after the physician has suggested a diagnosis and subsequent treatment)

2. Evaluating test result – (e)

Simple assessments of clinical and paraclinical tests and examinations, either being a statement that findings are normal or a statement about a pathological finding.
Simple assessments differ from complex assessments (see next category).
Excluded: Simple assessments of patient history – without further elaboration *(i.e. "That's nice" (when patient informs of maximum walking length).* ***Simple responses to commands during physical examinations*** *(Instruction followed by i.e. "That's fine")*

Specification: Simple assessments are binary or polar in nature, and are articulated as;

- normative judgements (fine versus not fine, normal not normal) or
- in a descriptive manner implying a context-specific normative judgement (blood pressure: elevated versus not elevated).

Descriptive statements (e.g. citation of laboratory values) without elaboration or normative judgement are <u>not coded</u> as an evaluation of the test.

Specification: During medical procedures physicians tend to offer simple evaluations of the procedure itself as it goes along. If simple evaluations are given without further elaboration or categorization (i.e. during stress-ECG), we don´t code each of them as separate decisions, only <u>the evaluation of the procedure as a whole is coded</u>. This relates to the rule of "one code per topic per turn".

Interpretation of test decisions could be subcategorized as; <u>good, ambiguous or bad.</u> Examples of category 2 decisions:

Good:	"140/80… I think that is very good"
	"I see that your A1c is 8,1, that is great"
	"The x-ray looks fine"
	"Everything was in perfect order; I found nothing wrong (after full neurological exam)
Bad:	"Your A1c was not so good"
	"You are a bit low on potassium"
	"Your blood pressure is high. 180/100 is high"
Ambiguous:	"It wasn't too bad, but it's not great either" (after lung auscultation)

Examples of how category 2 decisions relate to the temporal dimension:

Past:	"I checked your blood tests and they were fine" (to outpatient with leukemia)
	"HbA1c was not good" (to outpatient with diabetes)
	"The d-dimer was normal" (to patient with breathlessness in the E.R.)
Present:	"It sounds fine (to patient after auscultating lungs)"
	"They are slim" (when examining ankles in patient with heart failure prone to oedema)
	"This was a completely normal test" (to patient after stress-ECG)
	"Your pacemaker is working well" (to patient after pacemaker-test)
Future:	"If your white blood count continues to climb, it is very good (to outpatient with leukemia 2 weeks after chemotherapy)

3. Defining problem – (d)

Complex assessments that defines what the problem is and reflects a medically informed conclusion. These statements differ from simple evaluative statements about a test or an examination, and they have to meet at least one of the criteria listed below in being;

1. a diagnostic conclusion
2. an evaluation of state of health
3. an etiological inference
4. a prognostic judgment

Defining problem decisions could be subcategorized according into the above mentioned categories.

Diagnosis: ”This is a classic case of light asthma”
”Ganglion (cyst) it is called”
”Based on today’s exam I think it is more likely that you’ve had a minor stroke”
”This is basically what we call osteoarthritis”

Etiology: “I think it is paracetamol and dextropropoxyphen that has damaged your liver”
”It is the torn cruciate ligament that prevents your knee from stopping where it should”

Prognosis: ”The chemotherapy cannot remove what you have on your lungs”
”You can profit on training up to a year after the injury”

Evaluating state of health: “Your diabetes is very well regulated”
”He’s breathing nice and slowly, I think he has responded well to treatment”

Examples of how category 3 decisions related to the temporal dimension:

Past: “You have had a heart attack” (to patient on ward rounds the morning following admittance)
“You had atrial fibrillation when you were admitted” (to patient on ward rounds)
“We found out you have diabetes” (to patient on ward rounds the morning following admittance)
“We have been uncertain for a long time now about the cause of your hepatitis” (to outpatient with liver malfunction of unknown cause)

Present: “You don´t have cancer” (to outpatient with liver malfunction of unknown cause)
“It is possible that it is a deep vein thrombosis” (to patient with swollen leg in the E.R.)
“It may be a viral infection” (to patient on ward rounds the morning following admittance)
“You don´t tolerate opiates then” (to outpatient with cancer describing side effects of morphine)
“There is no indication of serious illness in you”(to patient on ward rounds the morning following admittance)
“It is your blood pressure that has caused your kidney failure, not diabetes” (to outpatient with kidney failure of previously unnamed cause)
“This is a disease which will never disappear” (to patient with heart failure)
“You have a good prognosis” (to patient with heart attack and stented coronary arteries on ward rounds the day of discharge)

Future: “If the test comes back negative, it means you don´t have the disease. (to young girl tested for hereditary disease)
“If the cancer continues to grow, this will probably be your last summer (to patient with advanced cancer)

4. Drug-related – (m)

Decision to start, refrain from, stop, alter or maintain a drug regimen, including both prescription drugs and over-the-counter drugs such as vitamin supplements and herbal medicine, including all modes of administration; tablets, suppositories, intravenous, intra articulary, nebulizer etc.

Specification: When several specifications concerning the same drug, i.e. dosage, administration interval, side effects and so on are given subsequently, they are coded as one decision, unless they differ in relation to time (past, present, future).

Drug-related decisions could be subcategorized as; start, stop, alter, maintain, refrain.

Start: ”We’ll start with azathioprine 50 mg”
”I was thinking you should get desloratadin, allergy pills”
”We’ll give a four day treatment of dexamethasone”
”I would like you to get some vaginal estrogen”

Refrain: ”We cannot give you chemo today”
”You should not take ibuprofen or other blood thinners before the surgery”

Stop: “It means that you can stop taking beta blockers”
”You should cut the iron tablets”

Alter: ”You’d better reduce to 50 (micrograms of levaxine)”
”Go down to 2 plus 2 (prednisolone 5 mg)”
”You should increase the levemir dosage 2 units at a time”

Maintain: ”You should continue taking salbutamol when you need to”
”Cortisone, you’ll take as earlier”
“As a foundation you should always take paracetamol 1 gram 4 times a day”.

Examples of how category 4 decisions relate to the temporal dimension:

Past: “I removed Paracetamol from your chart” (to patient on wards round three days after surgery)
“We have increased your blood pressure medication” (to patient on ward rounds before discharge)

Present: “I am going to give you some nitro glycerine” (to patient with chest pain in the E.R.)
“I recommend you take the medications we prescribe, and don´t take the medicine you have been given in Vietnam.” (to outpatient from Vietnam living in Norway)
“I am going to give you 2 litres of i.v. fluids”. (to patient admitted for dehydration)
“We are not going to increase your blood pressure medication” (to outpatient with hypertension)
“You have to start taking the medicine that protects your stomach from acid” (to patient with previous stomach ulcer)

Future: “Ideal dosage is 200 mg, if it is necessary we may need to increase dosage” (to patient with heart failure on ward rounds)
“If we don´t get good blood sugar control, we may need to introduce metformine” (to outpatient with diabetes)

5. Therapeutic procedure-related – (i)

Decision to intervene upon a medical problem, plan, perform or refrain from therapeutic procedures of a medical nature, including surgery, wound care, interventional radiology, and radiation therapy.

Therapeutic procedure-related decisions could be subcategorized using two different sets of modifiers;
1: start, stop, alter, maintain, refrain
2: surgery, focused care, radiological intervention, radiation therapy.

Surgery: ”It’s alright to get this operated”
”We cannot operate more on you”
Radiation: ”And I will refer you to radiation therapy”
Interventional radiology: ”As long as you are good we are not going to do anything now (angiography/PCI)”
Focused care: ”We’ll take off this part of the cast so that you’ll be able to bend your finger”
”I think you should go a couple of weeks without the (vaginal) ring”
”You don’t have to change on the wound every day, it only irritates, let it be”.

Examples of how category 5 decisions relates to the temporal dimension:

Past: “The conclusion from our multi disciplinary meeting is not to offer you surgery” (to outpatient with cancer)
Present: “We have to operate” (to patient with abdominal pain due to a ruptured abdominal aorta) .
“We are going to do something about this” (to patient with hypertension of such serious nature that the physician states an intervention is necessary)
“We will put a bare-metal-stent inside your coronary artery” (to a patient with heart attack awaiting coronary angioplasty).
“This must be very difficult for you in your situation” (to outpatient, followed by non-verbal signs that the physician is alert and listening – not just a meaningless phrase).
Future: “If the metastases progress in your skeleton, we will give you radiation therapy” (to outpatient with advanced cancer and metastases to the bone)
“If the pain in your leg worsens, we’ll consider stenting your femoral artery” (to outpatient with maximum walking distance of 100 meters due to narrow arteries in his lower extremities)

Excluded: Decisions concerning drugs administered using needles or other devices (nebulizers etc), are classified as <u>Drug-related decisions.</u> Examples;

“I’ll give you an injection of cortisone in your shoulder”
“You’ll get blood thinning shots for a few days.”
“I have ordered intravenous fluids for you.”
“Give him salbutamol on the nebulizer 4 times a day”

6. Legal and insurance-related – (l)

Medical decision concerning the patient, which is based upon or restricted by legal regulations or financial arrangements.

Legal and insurance-related decisions could be subcategorized as; sick leave, drug refund, insurance, disability.

Drug refund: ”Esomeprazol and pantoprazol is the same, pantoprazol is cheaper and the State has decided that you should drive an Opel, not a BMW”.
”Because of this (muscular stiffness on simvastatin) you qualify for atorvastatin”

Sick leave: ”You will get a sick leave note from us”
”We’ll keep it like that (50% absent from work)”
”You will be in paid leave of work for at least three months”

Disability: ”The way you function right now you cannot drive your car”

Insurance: “The surgery will be covered for by your health insurance”

Examples of how category 6 decisions relates to the temporal dimension:

Past: “We have determined your loss of function as a result of the injury to be 15%” (to patient when discussing insurance)

Present: “I cannot write this prescription on Blå Resept (state given refund)” (to patient requesting state given refund for a prescription medication)
“You should not drive a car until further notice” (to patient after cardiac arrest)
“No, I don´t want your daughter to be a translator, we will send for one” (to patient not fluent in languages the physician speaks, related to government recommendations of having professionals translate physician-patient dialogue)

Future: “If you don’t get any better, we’ll have to consider applying for disablement pension” (to patient with chronic disease making him incapable to work)

7. Contact-related – (c)

Decision regarding admittance or discharge from hospital, scheduling of control and referral to other part of the health care system.

Contact-related decisions could be subcategorized as; admit, discharge, schedule control, telephone, referral to other part of health care system.

Schedule: ”I’ll schedule a control for you here in 3 months”
”I won’t schedule a new control here, seeing that you have a new appointment at the cancer centre.”

Admit: (To patient’s mom): ”My suggestion is that he is admitted to the bed ward”
”I think you should spend the night in our observation ward”
”She is so weak that she should be admitted”

Discharge: ”We are going to have to send you home while we wait for an opening (at the nursing home)”
”We thought you were going to get to go home today”

Telephone: ”I’ll call you when I get back the results”

Referral: ”I will refer you to a neurologist”
”I’m thinking I’ll send a referral to a physiotherapist”

Examples of how category 7 decisions relates to the temporal dimension:

Past: “As planned you are going to be discharged today” (to patient on ward round)
“We have decided to refer you to another hospital for a second opinion” (conveyed to patient on ward rounds after discussion with the departments team of physicians)

Present: “I want to see you again in three months” (to outpatient with heart failure)
“We are going to check you regularly for cancer” (to outpatient with liver malfunction of unknown cause)
“I am going to refer you to the pain clinic” (to outpatient with cancer and severe pain)
“I will refer you to physical therapy” (to patient after surgery)
“And then I await you being referred back to me” (to outpatient being admitted to another department)
“You are at least staying here until tomorrow” (to patient on ward rounds)

Future: “If things get worse, we have to consider more frequent controls” (to outpatient with autoimmune disease)
“If this does not work and you don´t get any better, we will consider referring you for a second opinion” (to outpatient with minimal improvement on final choice of treatment)
“If this NSAID cure doesn’t do the trick, I will refer you to a specialist.” (general internist to patient with tennis elbow)

8. Advice and precaution – (a)

Decision to give patient advice or precautions, thereby transferring responsibility from provider to patient.

Specification: When a series of topically different advice is given (smoking, training, diet), each specific advice is coded. If series of topically similar advice is given (eat food low on carbohydrates, vegetables, diet soda, not rice, not pasta, meat and fish) they are all coded as one decision if they are stated within the same turn.
When the physician instructs the patient to take contact in the future, if so and so should happen, this is coded as category 8: (advice and) precaution, not category 7: contact-related. The reason for this distinction is that the physician in such an event transfers the responsibility for the contact from provider to patient.

Advice and precautions could be subcategorized as advice (which could be divided into relevant subcategories) and precaution.

Smoking: ”I would recommend you to cut it completely”
“It will require effort from you – you will have to stop smoking”
Exercise: ”I would recommend you to increase your level of activity”
“I would stay away from soccer”
Diet: ”Mind the calories; sweetened beverages, potato chips, cakes, sauces…”
Weight: ”The weight increase should not continue, then you’ll have crossed a line”
Hydration: (To boy’s mom): ”He should get at least 3-4 glasses (to drink) per day”
“Be careful to drink a lot of water”
Alcohol: ”Together with warfarin, it’s not advisable to drink alcohol”
Mobilization/ Immobilization: ”Be careful with sudden movements and heavy lifting”
“Avoid activity that you notice makes this worse”
“Mind keeping the leg high while you are sitting”
Sleep: ”Staying up late lowers the threshold for cramps”
Precaution: ”If you were to get a fever, you have to contact a doctor”
“If you start bleeding heavily (from your bowels), you have to contact the hospital”
”But if it gets more painful in the chest or something like that, you’ll take contact”
”If it doesn’t get better, call 911”.

Examples of how category 8 decisions relates to the temporal dimension:

Present: “You have to be careful with the salt” (to outpatient with heart failure)
“Having good control of your blood sugar and blood pressure will be predictive of your future kidney function” (to outpatient with kidney failure)
“You may put your entire weight on the leg now” (after fracture of the of the shin)

Future = Precaution: “If you get any more chest pains, it is imminent that you contact your physician again” (to patient on ward round the day of discharge)
“If you get a new medicine it is vital that you tell the physician you have got chronic renal failure” (to outpatient with kidney failure)

9. Treatment Goal – (t)

Decision to set defined goal for treatment and thereby being more specific than giving advice.

Specification: Treatment goals are often set using quantitative measures (for example desired value for blood pressure, laboratory tests or walking distance), but may as well be composed by words alone. The process of setting treatment goals may be initiated by checking patient expectations, abilities and preferences.

Treatment goals could be subcategorized as; quantitative or qualitative.

Quantitative: ”The goal has to be that it should be 120/80”
”We want to get the A1c down between 7 and 8”
”I would like to see your viral counts under 50”
Qualitative: ”What you should work on the next year is building your strength”
”Seeing that this is a curative setting I don’t dare to lower your dose”
”The goal has to be to get as good as you were before”

Examples of how category 9 decisions relates to the temporal dimension:

Past: “Last year we agreed on a goal of HbA1c under 8” (to outpatient with diabetes)

Present: “120/80 is an ideal blood pressure for you” (to patient with kidney failure due to hypertension)

Future: “If the tests show what we fear, we will have to discuss the goals of your medical treatment.” (to patient with suspected cancer in advanced stage)

10. Deferment – (n)

Decision to actively delay decision or a rejection to decide upon problem presented by patient.

Specification: The code requires verbal or very clear non-verbal sign that the physician makes a decision about this, if the patient says something that the physician just does not pick up – we don't know if it is an active decision of deferment and we should not code.

Deferment decisions could be subcategorized as; active and specified, wait and see, change of subject, transfer of responsibility.

Transfer responsibility: "I don't know for sure, but they know all about it at the cancer centre"
"The issue of your driver's licence, you have to discuss with your family doctor"

Change subject: Patients asks about prescription for Viagra – physician changes topic

Wait and see: "We'll see how it goes"
"I would like to wait and see (with regards to grommets)"
"I think we'll wait and see for 4 weeks"

Active and specified: "I'll have to think about this (choice between sunitinib and interferon treatment)"

Examples of how category 10 decisions relates to the temporal dimension:

Past: "We have decided to postpone this until your next consultation". (to outpatient with chronic heart valve failure who wishes surgery. The internist refers to previous discussion with his superior)

Present: Patient; "I am troubled with nausea and dyspepsia" (to outpatient with liver failure)
Physician; "But let us talk more about this with the liver biopsy or not."
Patient; "My knee is what is really bothering me". (on ward round at the cardiac department)
Physician; (silence). "Well, right now we are focusing on your heart".

Future: "If you make these requests the next time, I will not discuss it any further". (to outpatient with substance abuse problem)