

PCNE Classification for Drug related problems

(revised 15-10-02 vm)

V3.01

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The Problems

Primary Domain	Code V3	SPSS code	Problem
1. Drug choice problem Patient gets or is going to get a wrong drug for his/her disease and/or condition	P1.1	1	Inappropriate drug prescribed (not most appropriate for indication)
	P1.2	2	Duplication of therapeutic group or active ingredient
	P1.3	3	Contra-indication for drug (incl. Pregnancy/breast feeding)
	P1.4	4	No clear indication for drug use
	P1.5	5	Patient asks for inappropriate drug (OTC)
2. Dosing problem Patient gets more or less than the amount of drug he/she requires	P2.1	6	Drug dose too low or dosage regime not frequent enough
	P2.2	7	Drug dose too high or dosage regime too frequent
	P2.3	8	Duration of treatment too short
	P2.4	9	Duration of treatment too long
	P2.5	10	Incorrect timing of doses
3. Drug use problem Drug is not being used as it should be	P3.1	11	Drug partially taken/administered
	P3.2	12	Drug not taken/administered at all
	P3.3	13	Too much drug taken/administered
	P3.4	14	Too little drug taken or administered
	P3.5	15	Wrong drug taken/administered
	P3.6	16	Patient is unable to use drug/form properly
4. Interactions There is a manifest or potential interaction	P4.1	17	Potential interaction
	P4.2	18	Manifest interaction
5. Adverse reactions Patient suffers from an adverse drug event	P5.1	19	Side effect suffered
6. Others	P6.1	20	No drug prescribed but clear indication
	P6.2	21	Drug level too low (not due to interaction and/or dosing problem)
	P6.3	22	Drug level too high (not due to interaction and/or dosing problem)
	P6.4	23	Patient dissatisfied with therapy despite taking drug(s) correctly
	P6.5	24	Insufficient awareness of health and diseases (possibly leading to future problems)
	P6.6	25	Unclear complaints. Further clarification necessary
	P6.7	26	Therapy failure for unknown reason (escape code)

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The Causes

Category	Code	Code SPSS	Causes
Drug/Dose selection The cause of the DRP is related to the selection of the drug and/or dosage schedule	C1.1 C1.2 C1.3 C1.4 C1.5 C1.6 C1.7 C1.8 C1.9	1 2 3 4 5 6 7 8 9	Inappropriate drug selection Inappropriate dosage selection More cost-effective drug available Pharmacokinetic problems Synergistic drug required Preventive drug required Dosage adjustment required due to organ impairment Deterioration/improvement of disease state New symptom presented
Drug use process The cause of the DRP can be related to the way the patient uses the drug, in spite of proper dosage instructions (on the label)	C2.1 C2.2 C2.3 C2.4 C2.5 C2.6 C2.7 C2.8 C2.9	10 11 12 13 14 15 16 17 18	Drug not used/ underused because of side-effects Drug not used/ underused because of costs Drug not used/ underused because of health beliefs Drug misused Drug used to suppress avoidable side-effect No therapeutic drug monitoring Inappropriate timing of administration and/or dosing intervals Patient unable to use drug/form properly Patient forgets to use/take drug
Information The cause of the DRP can be related to a lack of information or misinterpretation	C3.1 C3.2 C3.3 C3.4	19 20 21 22	Instructions for use/taking not known Patient not familiar with reason for drug treatment Patient has difficulties reading/understanding Patient Information Form/Leaflet Patient unable to understand local language
Patient/Psychological The cause of the DRP can be related to the personality of the patient.	C4.1 C4.2 C4.3 C4.4 C4.5 C4.6	23 24 25 26 27 28	Treatment not in line with health beliefs Patient does not want to bother doctor/GP Patient does not want to change drugs Patient has concerns about drugs Patient does not want to adapt life-style Burden of therapy
Logistics The cause of the DRP can be related to the logistics of the prescribing or dispensing mechanism	C5.1 C5.2 C5.3	29 30 31	Prescribed drug not available Prescribing error (only in case of slip of the pen) Dispensing error (wrong drug or dose dispensed)
Misc.	C6.1 C6.2 C6.3	32 33 34	Other reason No obvious reason Manifest side effect, no other cause

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The Interventions

Category	Code	Code SPSS	Interventions
No intervention	I0.0	1	No Intervention
At prescriber level	I1.1 I1.2 I1.3 I1.4 I1.5	2 3 4 5 6	Prescriber informed only Prescriber asked for information Intervention proposed, approved by Prescriber Intervention proposed, <i>not</i> approved by Prescriber Intervention proposed to prescriber, outcome unknown
At patient (or relative) level	I2.1 I2.2 I2.3 I2.4	7 8 9 10	Patient medication counselling Written information provided only Patient referred to prescriber Spoken to family member/caregiver
At drug level	I3.1 I3.2	11 12	Drug changed to Dosage changed to
Other intervention	I4.1 I4.2	13 14	Other intervention (Description) Side effect reported to authorities

Changes between V 3.0 and 3.01

Added new P3.4: Too little drug taken or administered. Moved other numbers.

Changed description of C3.4, C4.1, I1.3 and I1.4

P3.4 might be identical to P3.1, should be discussed.

Changes between V2.0 and V 3.0

Due to the Basle meeting between experts (2001), the whole problem section has been revised, in order to make the system compatible with other, similar systems. N.B. The codes have been changed too!

Manifest Interaction has been moved back to the problem section (now P4.1). This is debatable.

Changes between V1.0 and V 2.0

General:

- Word 'medicine' replaced by 'drug' (can be reversed if desirable)
- Suggested option to include 'Patient asks for OTC drug' and 'drug sold' does not have a link with a drug related problem, and therefore will not be included. If the patient asks for the wrong OTC drug, then P7.2 is available.

Problem section

- Domain 'Too much drug' added'
- Items 'Drug dose too low' and 'dosage regime not frequent enough' merged into new item: 'Drug dose too low or dosage regime not frequent enough' and moved to appropriate domain.
- Items 'Drug dose too high' and 'dosage regime too frequent merged into new item: 'Drug dose too high or dosage regime too frequent' and moved to appropriate domain.
- Item 'Drug not taken (only partially)' added.
- Domain 'Dosage' changed into 'Treatment Duration'.
- Item 'Patient is unable to use drug/form properly' moved to domain 'Patient related problems'.
- Item 'Manifest Interaction' removed (is cause) and 'Drug level too low' and 'Drug level too high' added to the appropriate domains. Item 'Potential interaction' is still in problem section. The manifest interaction is a cause.
- Item 'Patient asks for inappropriate drug (OTC)' added to domain Patient related problems
- 'Side effect suffered' combined, not really relevant if it is allergic or not.

Causes section

- Item 'Drug overused' removed (= drug misused)
- 'Prescribing error (slip of the pen)' changed into 'Prescribing error (only in case of slip of the pen)'. Other prescribing errors are covered in first domain.
- 'Manifest side effect, no other cause' added to Misc. domain (a side effect can be an independent cause for an undesirable reaction to a drug)

Intervention section

- Item 'Practical instruction to patient' removed (= Patient medication counselling)
- Item 'Written information provided only' added

- Item ‘Intervention proposed to prescriber, outcome unknown’ added
- Item: Side effect reported to authorities’ added

Comments on this classification and its use can be addressed at:

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