



Improvement in
postoperative PAIN OUTcome

The PAIN OUT project

- an overview





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What is PAIN OUT?

A research project that aims at improving postoperative pain treatment outcomes by use of a toolkit consisting of

- 1. a benchmark module that feeds back outcomes
- 2. an electronic knowledge library

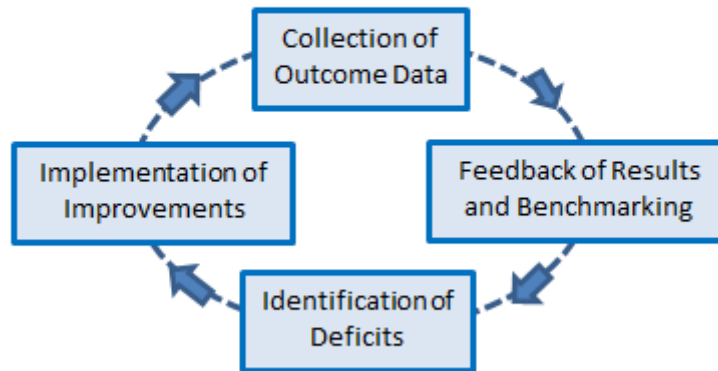
From 2009 to 2012, PAIN OUT was funded by the EC.





Improvement in postoperative PAIN OUTcome

The PAIN OUT Process





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Which patients can be included?

Currently, there are 3 PAIN OUT modules:

- PAIN OUT standard (post-op adult patients)
- PAIN OUT follow-up (after 6 and 12 months)
- PAIN OUT infant (post-op pediatric patients)

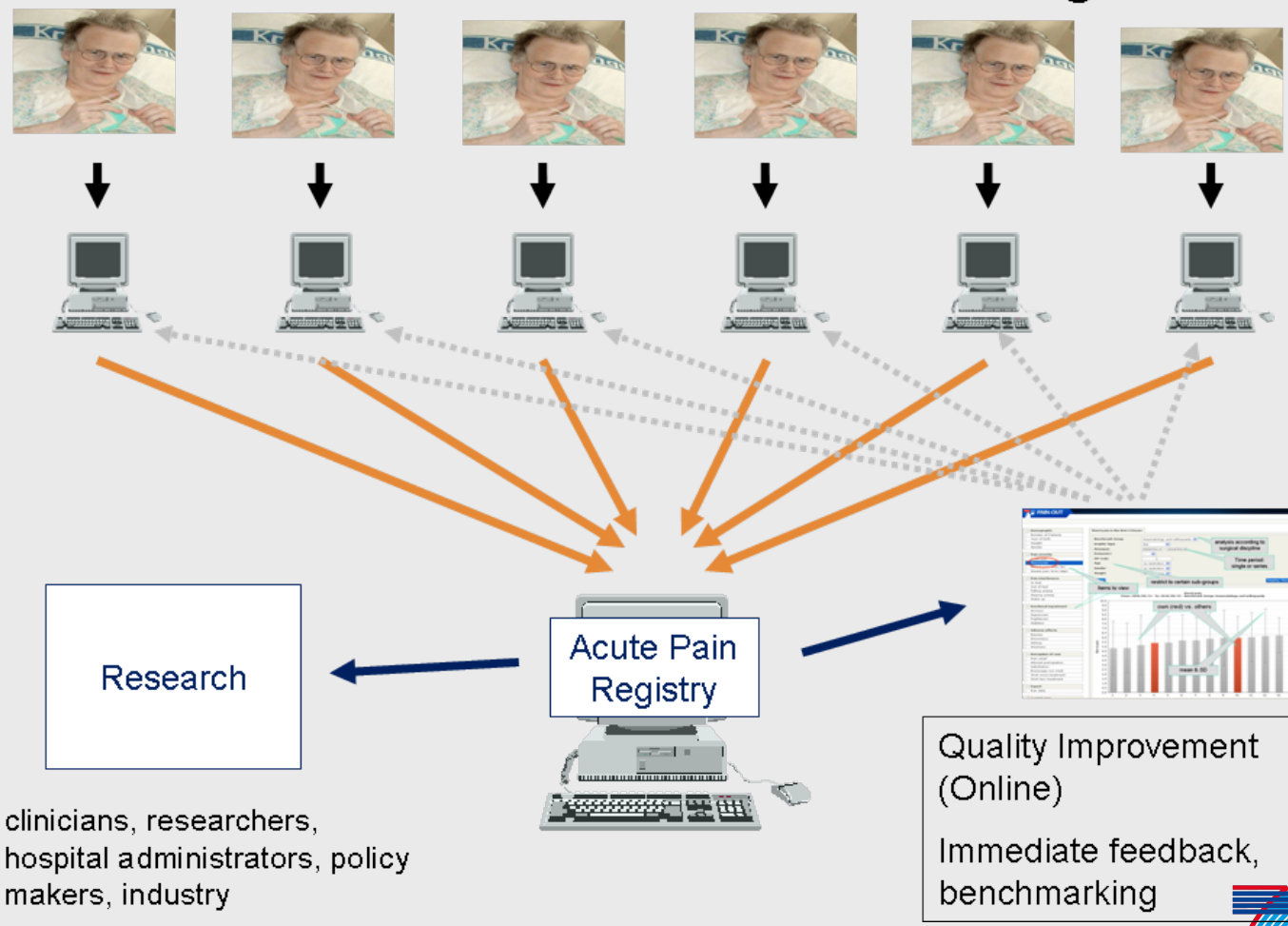
Additional modules in preparation: PAIN OUT outpatient, PAIN OUT obstetrics





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Feedback & Benchmarking





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1. Collection of data

Patient outcome questionnaire and process questionnaire collected on paper form

PAIN OUT Outcome: English_26.pdf - Adobe Acrobat Standard

PATIENT CODE: _____

PATIENT OUTCOMES QUESTIONNAIRE

The following questions are about pain you experienced since your surgery.

P1. On this scale, please indicate the **worst pain** you had since your surgery:

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

no pain worst pain possible

P2. On this scale, please indicate the **least pain** you had since your surgery:

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

no pain worst pain possible

P3. How often were you in **severe pain** since your surgery?
Please circle your best estimate of the percentage of time you experienced **severe pain**:

0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------

never in severe pain always in severe pain

P4. Circle the one number below that best describes how much, since your surgery, **pain interfered with or prevented you from ...**

a. doing **activities in bed** such as turning, sitting up, changing position:

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

PAIN OUT Process_26.pdf - Adobe Acrobat Standard

Page 2

Mark medications given to patient; record cumulative doses. PATIENT CODE: _____

MEDICAL HISTORY

H1 Comorbidities

yes no not possible to obtain the information

If yes, which (check all that apply):

Cancer	<input type="checkbox"/> Cancer
Renal	<input type="checkbox"/> Renal insufficiency or disease without dialysis <input type="checkbox"/> Renal disease requiring dialysis
Psychiatric	<input type="checkbox"/> Affective disorders (depression, anxiety, phobia, PTSD, bipolar disorder) <input type="checkbox"/> Schizophrenia
	<input type="checkbox"/> Alcohol use disorder <input type="checkbox"/> Current smoker <input type="checkbox"/> Substance abuse of drugs (legal and illegal)
Cardiovascular	<input type="checkbox"/> Hypertension <input type="checkbox"/> Coronary artery disease or myocardial infarction or cerebral vascular accident
Hematology	<input type="checkbox"/> Sickle cell disease
GI disease	<input type="checkbox"/> Liver Cirrhosis <input type="checkbox"/> History or current upper or lower GI ulcer (peptic or duodenal ulcer disease)
	<input type="checkbox"/> Irritable bowel disease (Crohn's disease, ulcerative colitis)
Pulmonary disease	<input type="checkbox"/> Asthma <input type="checkbox"/> Sleep apnea <input type="checkbox"/> Chronic Obstructive Pulmonary Disease (COPD)
Neurologic	<input type="checkbox"/> Fibromyalgia
Steroid use	<input type="checkbox"/> Regular administration of oral or parenteral corticosteroid medications
Multiple trauma	<input type="checkbox"/> At least 1 fracture(s) / laceration(s) / tissue damage in addition to the current reason for surgery
Other surgery	<input type="checkbox"/> Patient has already undergone another surgery during current hospitalization
	<input type="checkbox"/> Other, specify: _____

H2 Existing condition (check medical record)

Pregnancy, Week: not relevant not possible to obtain the information

Lactation not relevant not possible to obtain the information

H3 Did the patient receive any opioid(s) before the current admission?

yes no not possible to obtain the information



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2. Inputting of data into webmask

The screenshot displays the PAIN-OUT webmask interface. The top navigation bar includes the PAIN-OUT logo and the text 'PAIN-OUT'. A sidebar on the left contains a menu with 'Pain Out' and 'Base Module' options, and a 'Current User' section showing 'JenaUni Operator'. The main content area is titled 'Screening' and contains a 'DATA COLLECTION' section with the following fields:

- A DATE OF DATA COLLECTION: 2010/09/14
- B TIME OF DATA COLLECTION: 14:25 [hh:mm]
- C SITE WHERE DATA IS COLLECTED: 110 (dropdown menu)
- PATIENT CODE: 5ARVSVUPWQ

Below the data collection fields is the 'S1 INCLUSION CRITERIA' section, which lists six criteria with radio buttons for 'YES' or 'NO' selection:

1. Time of data collection is POD1 AND patient is 6 hrs (minimum) in the ward. YES NO
2. Patient is consenting age or over. YES NO
3. Patient has not undergone repeat surgery (same organ) during current hospitalization. YES NO
4. Patient is in ward, available for interview. YES NO
5. Patient has given his assent (or consent) to participate. YES NO
6. Patient is able to fill in questionnaire on his\her own, unaided (include also patients who need help filling in the questionnaire for technical reasons). YES NO

At the bottom of the inclusion criteria section, there is a text input field for 'Reason why patient is unable to fill in the questionnaire on his \ her own (select):'. A 'Save' button is located in the top right corner of the form area.

Site code
(access by password)

Patient code
(anonymous)

Items from
questionnaire



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3. Online feedback of results

PAIN-OUT

Demographic
Number of Patients
Year of birth
Weight
Gender

Pain severity
Least pain
Worst pain
Severe pain time (%)
Severe pain time (ctgr)

Pain interference
In bed
Out of bed
Falling asleep
Staying asleep
Wake up

Emotional impairment
Anxious
Depressed
Frightened
Helpless

Adverse effects
Nausea
Drowsiness
Itching
Dizziness

Perception of care
Pain relief
Allowed participation
Satisfaction
Encourage non med.
Wish more treatment
Wish less treatment

Export
Raw data

Current User

Worst pain in the first 24 hours

Benchmark Group: traumatology and orthopaedy
Graphic Type: Bar
Timespan: 2009/09/14 - 2010/09/15
Datasets: -
OP-Code:
Age: no restriction
Gender: no restriction
Weight: no restriction

Items to view

restrict to certain sub-groups

analysis according to surgical discipline

Time period: single or series

Display / View

Worst pain
From: 2009/09/14 - To: 2010/09/15 - Benchmark Group: traumatology and orthopaedy

Category	Worst Pain Score (Mean & SD)
1	4.8 (2.0 - 7.8)
2	4.8 (2.0 - 7.8)
3	5.2 (2.0 - 8.5)
4	5.4 (2.8 - 7.4)
5	5.4 (2.8 - 8.4)
6	5.6 (2.8 - 8.4)
7	5.6 (2.8 - 8.4)
8	5.8 (2.8 - 8.4)
9	5.8 (2.8 - 8.4)
10	6.0 (3.5 - 8.2)
11	6.0 (2.8 - 8.4)
12	6.1 (2.8 - 8.4)
13	6.2 (2.8 - 8.4)
14	6.3 (2.4 - 8.2)





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Requirements for participation

- Data collectors must be able to read English
- Staff resources: to get meaningful results, you should be able to collect a minimum of 20 datasets/month/ward; one dataset takes around 20 minutes
- Technical requirements: computer with internet access
- Application at local ethics committee
- Signature of PAIN OUT contract (annual fee: 2,000 €)





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How to join the network?

www.pain-out.eu

or

e-mail to: pain-out@med.uni-jena.de

