EFIC PAIN OUT project: Optimizing management of perioperative pain in Europe

The following slides introduce the project to providers on wards who might wish to participate.
Background

- Pain related outcomes reported by patients undergoing surgery are poor.
  - *This applies worldwide.*
  - *In adults and children.*

- There is large variability in the processes that lead to these outcomes.

- Strategies used over the last ~40 years have not yielded sufficient improvement.

*Strategies include: compiling evidence based clinical practice guidelines; establishing professional (pain, anesthesia) societies; carrying out research; providing care providers and patients with education; setting up specialized treatment facilities, e.g. Acute Pain Services.*

What to do?

-> Employ a new approach!
The Pain Care and Outcomes Improvement Project:

Employs several quality improvement strategies:

(a) Plan–Do–Study–Act-like methodology

(b) Clinical peer review

(c) ‘Learn from the best’

• Peer review is a well-established method to review and support improvement in professional and clinical practice … to maintain & improve quality of patient care.
• For acute pain – will be developed & tested as part of the project.

Australian Commission on Safety and Quality in Healthcare, 2010
Methods

Use standardized performance measurement tools developed by PAIN OUT.

2 wards from your hospital will work together with up to 10 hospitals from your country, forming a ‘national network’.

The network will be led in your country by a local collaborator, a ‘network leader’.

Carry out a 2 year project -> at the end, decide if and how to upscale the project in your hospital & country.
Project outline

**Administrative phase**
- contract
- ethics
- training surveyors

**PLAN phase, months 1 - 6**
- Kick off meeting
- Collect BASELINE data from patients in 1-2 wards \ hospital & analyze it;
- Mid project workshop to discuss findings; discuss aims; propose 1-3 intervention(s).

**DO phase, months 7 - 12**
- Discuss interventions with local multi-disciplinary working group & consent on 1-2 to implement;
- Obtain ethics approval (if necessary)
- Start implementing the intervention(s).

**STUDY phase, months 13 - 22**
- Carry out another round of data collection in the 1-2 wards.
- Analyze findings & prepare for summary workshop

**ACT phase, months 23 /24**
- Workshop summarizing findings and planning next steps within hospital & network

There is leeway with regards to duration of the phases, however, all hospitals in the network will progress together from one phase to another.
Benefits to you and your colleagues

You’ll be able to -

-> work with colleagues, nationally & internationally, interested in improving quality of pain management;

-> participate in developing a novel program;
   - EFIC plans to create a ‘quality improvement tool box’ based on findings from the project

-> publish findings in peer reviewed journals;

-> present findings at national and international meetings of your professional society.
The aim of collecting data is for *learning* and for *improving* practices carried out by you and your colleagues.

“It has been very useful to do the surveys because it has made us aware of the importance of postoperative pain’.
Dr H.V., Anesthesiologist, Mexico

‘I have been reviewing the files … well, is seems we still have a lot of work to do here…. but we’ll keep the work going !’
Dr D.M., Anesthesiologist, Mexico
What is PAIN OUT?

• A web-based quality improvement and research network addressing management of post-operative pain.
• The project has collaborators internationally – in Europe, Americas, Africa, South East Asia.
• Initial funding came from the European Commission.
• It is a not-for-profit, academic project, coordinated from Jena University Hospital, Germany.
How does work?
Clinicians, researchers, hospital administrators, policy makers can use the data to further knowledge about management of perioperative pain and pain-related patient reported outcomes. Immediate feedback & benchmarking is given to clinicians online.

Used for Quality Improvement.
How is the data collected?
Using 2 questionnaires

(1) Patient reported Outcomes
Filled in by the patient
In the patient‘s native language
~ 5 - 10 minutes to fill in

To get patient‘s perspective

(2) Process data
Demographics: gender & age, comorbidities; type of anaesthesia; preoperative analgesics.
Abstracted from patient's record by a surveyor
~ 10 minutes to fill in
Can be filled in directly to web-based server (depends on availability of Wifi connection).
Languages of the patient questionnaire

- Albanian
- Arabic
- Bahasa Malaysia
- Danish
- Dutch
- English
- Filipino
- Finnish
- French
- German
- Hebrew
- Hindustani
- Icelandic
- Italian
- Korean
- Mandarin
- Romanian
- Russian
- Serbo-Croatian
- Spanish
- Swedisch
- Span. Mexico

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**CUESTIONARIO DEL PACIENTE**

Las siguientes preguntas hacen referencia al dolor que usted ha experimentado desde la operación.

**P1.** En esta escala, indique el **peor dolor** sufrido desde la operación:

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**P2.** En esta escala, indique el **menor dolor** sufrido desde la operación:

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**P3.** ¿Con qué frecuencia ha experimentado **dolor intenso** desde la operación?
Rodee con un círculo el porcentaje de tiempo que mejor exprese el dolor intenso experimentado:

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The Patient Outcomes questionnaire assesses:
- Pain severity & interference e.g. with activities in & out of bed
- Affective impairment, e.g. anxiety, helplessness
- Adverse effects, e.g. nausea, drowsiness
- Perceptions of care, e.g. would you have wished for more medication to treat pain?
- Existence and intensity of chronic pain before admission to hospital.

The patient questionnaire is based on:
- Delphi process carried out during the EU-funding phase of PAIN OUT.
- Experience from QUIPS (German Acute Pain Registry).

Include which patients?

1. On the first post-operative day.
2. Of consenting age and over.
3. Who have given oral or written consent (depends on requirements of local ethics committee).
Which surgical specialities?

- General surgery
- Trauma and orthopaedics
- Obstetrics & gynaecology

Ambulatory surgery -> patients receive an email with the questionnaire

- Urological
- Neurosurgery
- Plastic surgery
- Thoracic surgery
- Vascular surgery
- Ear, nose and throat

Most of the data in the registry relates to these patients.
The surveyor inputs the data into the web-based software.

<table>
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<tr>
<th>DATA COLLECTION</th>
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<td><strong>A DATE OF DATA COLLECTION:</strong></td>
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<td><strong>B TIME OF DATA COLLECTION:</strong></td>
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<td><strong>C WARD WHERE DATA IS COLLECTED:</strong></td>
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<td><strong>PATIENT CODE:</strong></td>
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**S1 INCLUSION CRITERIA**

1. Time of data collection is POD1 and patient is 6 hse (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, unsided (include also patients who need help filling in the questionnaire for technical reasons).
   - YES | NO

Reason why patient is unable to fill in the questionnaire on his/her own (select):

- [ ]

Site code (access by password)

Patient code (anonymous)

Items from questionnaire
Data about **general surgery** from 31 different wards, internationally

Outcome assessed 'worst pain since surgery'.

**X axis** - each 'box and whisker' plot represents summarized data from one ward. **Y-axis** – scale assessing extent of outcome: 0 (=,'no pain') – 10 (=,'worst imaginable')

Average scores of wards on the **left** indicate low pain scores; on the **right** – scores are high.

Findings from your own site are identified: plot in **red**; others are anonymous, in grey.
What can you do with the data?

1. Assess quality of care

If outcomes are good (i.e. conform with current standards) – continue following over time.

If outcomes are not optimal - develop strategies for change & follow their implementation over time using the data.
What can you do with the data?

2. Research

Collaborators can use data from their site for *single* centre analyses.

Collaborators can obtain *multi*-center data for analyses

- Present findings at national and international meetings
- Publish in peer reviewed journals
  - See next slide

A document outlining the publication plan for the EFIC PAIN OUT project – will soon be available.
Publications based on PAIN OUT data


Evolution of the current project

- Routine PAIN OUT audit & feedback module; hospitals work independently; internationally

- PDSA approach, ver 1. 8 hospitals working independently, in 7 countries

- PDSA approach, ver 2. Creating a structure for 10 hospitals in 1 national network

- Mexican PAIN OUT network

- PDSA approach, ver 3. 10 hospitals in 8 national networks

- 8 national networks in Europe

- Current Project

- Project in progress

- Project completed
PAIN OUT is affiliated with:

1. International Association for Study of Pain (IASP)
2. European Pain Federation (EFIC)
3. European Society of Anaesthesiologists (ESA), an official ESA research group
Structure of the network and roles of participants
National networks created in: Belgium, France, Ireland, Italy, Netherlands, Serbia, Spain, Switzerland
Roles of Principal Investigator (PI) in each hospital

The PI should be interested to actively lead a project working towards improving quality of post-operative pain management in his/her hospital ward. The project will last 2 years and requires that he/she takes active part in activities such as:

- **Nominating and working with a multi-disciplinary team** to work on a program for assessing and implementing a change in pain management practices in two wards within the hospital;
- **Selecting 1-2 surgical wards** where the QI work will be carried out;
- **Recruiting 2-4 surveyors** to collect 130 complete patient datasets in the 1-2 surgical wards during 2 time periods, each lasting about 4 months;
- Supervising the surveyors and periodically assessing quality of their work;
- Supervising analyses of the data; the PI will receive guidance how to carry out the analyses;
- **Participating** (him/her-self or a colleague from the multi-disciplinary team) in three 1-day workshops;
- Submitting a mid-project progress report and a detailed report at the end;
- Optional: **presenting findings** at conferences and **writing research** papers.

Hospitals will receive some funding for data collection and travel to the 3 national workshops. Reimbursement will be based on submitting the required data sets and two reports according to the project timetable. Failure to submit these on time will result in non-payment of funds.

Hospitals will join PAIN OUT. The subscription fees for the first two years will be covered by the project, the third year onwards by the hospital itself. Hospitals may leave PAIN OUT once the two year project is complete.

The information outlined here describes the basic premises of the project. However, details may change with time as a result of experience gained and/or due to project needs.
Selecting a **surveyor** for the project

The hospital will allocate 2-4 people to carry out data collection.

1. **The person collecting data** -
   - Can be a student (nursing or medical) \ nurse \ resident;
   - They may use the data to promote their studies, e.g. academic degree \ or publication.
2. **Will not** – as much as is possible – have clinical duties on the ward where he\she is collecting data
   - To prevent patients feeling obliged to please the surveyor in the answers they give when filling in the questionnaire.
3. Will be fluent in reading English;
4. Will be given time to undergo **training** about methodology of the project. This includes:
   - Reading the project manual (SOPs) and filling in a quiz;
   - Collecting 10 -15 trial patient datasets \ entering the data into the PAIN OUT mask;
   - Attending the kick off meeting for additional training.
5. Will be given time **to collect data** for the project in 1 or 2 wards.
   - # patients: ~130 patients X 2 phases, lasting 4 months each -> ~ 33 patients\ month -> ~ 8 \ week;
   - ~ 15% of patients approached for participation may refuse to participate.
   - Time required: 20-30 minutes per patient -> ~ 3-4h \ week for 8 months of data collection.
6. **As both training for data collection AND gaining experience with data collection are time consuming** --> aim, as much as is possible, to keep the same surveyors for the duration of the project.
Setting up the **multi-disciplinary Working Group (WG)** in your hospital

- The WG will help lead the project within the hospital
- What is the charge of the WG?
  - WG members will communicate to their colleagues in participating wards: (1) project goals; (2) project stages; (3) findings from the baseline and post-intervention phases; (4) gain their involvement and assistance in implementing the intervention.
  - Long term: earn commitment of colleagues to implement and disseminate practices that aim to improve management of pain.

The working group will consist of *(this is a suggestion; the composition of the WG is left to your discretion)*:

- Principal investigator – leader of the team
  - Will communicate & coordinate activities with the Director of Surgery & Head Nurse & hospital administration
- Surveyors
- Surgeon (s) from the participating wards
- Ward Nurse(s)
- Pharmacist
- Additional team member(s)?
Remuneration to collaborating centers

1. The fee for participating in PAIN OUT for the duration of the project;
2. 2000 € for collecting data (4 € \ dataset\ 2 wards \ 2 data collection phases);
3. 3000 € to cover costs of travel for 2 people to the national kick off meeting and 2 workshops (against receipts).
This project is made possible through funding by Grünenthal GmbH via its CHANGE PAIN initiative.