Ethics and CRIS

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On the agenda

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2. Survey results
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   2. Ethics, an important issue for CRIS?
   3. The situation
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3. Further perspectives
Introduction
Research ethics, a topic for CRIS

Our assumptions (state of the art, own research):

1. Research ethics are highly relevant for the evaluation, the monitoring and the governance of research activities.

2. CRIS will become increasingly relevant for dealing with ethical issues:
   - Their data models should be able to represent ethical aspects of research projects.
   - Their development, implementation and functioning should be compliant with usual (actual) ethical standards of scientific research.

Objective: to gain empirical evidence on the ethical challenge

• An exploratory survey with CRIS experts from different European countries
  • to investigate their view on ethical requirements
  • to assess their attitudes towards ethical principles and scientific misconduct

• A small-scale follow-up study
  • to assess whether and to what extent ethical issues and aspects are considered in the design, implementation and application of CRIS
Methodology: exploratory survey

- Online questionnaire (Survey monkey)
  - 10 pages, 23 questions
- February 25, 2021 – April 26, 2021
  - 5 reminders
- 40 initial contacts
  - Sample selected from euroCRIS directory and events
  - Project managers, editors, system administrators, scientists, librarians
- 18 responses (45%)
  - 15 complete and 3 partial responses
Methodology: follow-up study

• Online interviews (Zoom)
  • 9 questions
• June 2, 2021 – June 11, 2021
• 12 initial contacts
  • Sample selected from euroCRIS directory
• 7 interviews (58%)
  • Validated anonymous transcription
Cautionary statement

Small sample, and small number of respondents
• No statistical validity
• No general conclusions

But instead:
• Exploration
• Material for further discussion
• Perspectives for further research
The survey respondents
euroCRIS membership and professional sector

euroCRIS membership

Professional sector
Job profile

Are you a provider, manager or administrator of a research information system

- Yes: 13
- No: 3

You are

- CRIS provider: 7
- CRIS project manager: 3
- CRIS administrator: 3
- CRIS user: 1
- Other: 2
Follow-up: ethics experts, other institutions and countries should be included

• A CRIS system should be accompanied by an ethics committee.

• The members of our research ethics committee, for instance, they will know much better, but they are not typically part of the present information management.

• It would be really useful if the ethics experts could be involved in this. It's probably a requirement actually but it's not an easy conversation to arrange.

• You would have to ask other people from other countries who also do not have CRIS.

• What about those institutions that don't use CRIS? Why didn't you ask them (e.g. research manager, research proponents, service management)?
Ethics, an important issue for CRIS?
Increasing importance of research ethics
Especially in the context of open science

Pressure in particular from
• Legal framework
• Funding bodies
• Authorities
Main relevance for CRIS: the usage of results
Follow-up: transparency, security and implementation

• It's not so much the use of the metrics or the value of the metrics, it's about the transparency of the data and who can have access to it.

• Two groups of problem areas:
  • One is sensitive data, data leakage, data loss, including IP and personal data related concerns.
  • And then there is the implementation side of it which is much more soft, much fuzzier. You can hurt people’s feelings by implementing software in a wrong way.

• These are ethical discussions, if you keep potentially career-damaging information in a database. If you start recording information of misconduct, does it mean to prohibit people from getting funding and to harm their career?

• The ethics committee should be involved during the purchase and implementation of CRIS.

• Ethics become more important but this does not mean that it becomes a priority. It depends on the local institutional and political framework. Perhaps the institution decides that other issues are more important that have to be served first.
The situation
Personal experience with ethics and CRIS

A (large) minority has already experienced ethical issues

Examples
- Ingestion of sensitive data
- Anonymization of research data
- Incomplete personal data
- Assessment of individual performance
- Information about animal testing
Are methods for considering ethical aspects introduced in your CRIS?

Mostly, no

Examples

- Compliance with standard ethics requirements upon preparation and submission of project proposals
- In several ways including at the levels of software, implementation policies, and usage guidance
- Creation/formulation of a DMP is part of CRIS, including ethics
Does your CRIS produce data and reports including information related to research ethics?

Mostly, no
Implemented metrics

- Number of experts in ethics
- Number of members of ethics committee
- Existence of a local ethics committee
Well prepared for the future? Not really
Why?

• **Research Ethics has not been much discussed in the CRIS context.**
• **I think it's quite early in the process**
• **I think at the moment most CRISs do not yet have adequately ethical procedures/controls integrated.**
• **In some systems you can find first attempts to record or handle ethical reviews. In most cases these is in an early stage.**
Ethical issues and metrics
Among the following ethical principles that apply to scientific research in general, please indicate 1 to 5 principles, which in your opinion are the most relevant:

- Objectivity
- Integrity
- Human subject protection
- Openness
- Honesty
- Fairness
- Trust
- Accountability
- Animal care
- Confidentiality
- Respect for intellectual property
- Carefulness
- Respect for colleagues
- Efficiency

Most relevant principles:
- Objectivity
- Integrity
- Human subject protection
- Openness
- Honesty
Among the following list of unethical scientific behaviors in general, please indicate between 1 and 5 behaviors that you believe are most harmful.

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Falsifying or ‘cooking’ research data</td>
<td>14</td>
</tr>
<tr>
<td>Using another’s ideas without obtaining permission or giving due credit</td>
<td>12</td>
</tr>
<tr>
<td>Dropping observations or data points from analyses based on a gut feeling that the...</td>
<td>8</td>
</tr>
<tr>
<td>Failing to present data that contradict one’s own previous research</td>
<td>8</td>
</tr>
<tr>
<td>Ignoring major aspects of human-subject requirements</td>
<td>7</td>
</tr>
<tr>
<td>Inappropriately assigning authorship credit</td>
<td>7</td>
</tr>
<tr>
<td>Withholding details of methodology or results in papers or proposals</td>
<td>7</td>
</tr>
<tr>
<td>Unauthorized use of confidential information in connection with one’s own research</td>
<td>5</td>
</tr>
<tr>
<td>Harming the design, methodology of results of a study in response to pressure from...</td>
<td>5</td>
</tr>
<tr>
<td>Overlooking others’ use of flawed data or questionable interpretation of data</td>
<td>5</td>
</tr>
<tr>
<td>Not properly disclosing involvement in firms whose products are based on one’s own...</td>
<td>5</td>
</tr>
<tr>
<td>Publishing the same data or results in two or more publications</td>
<td>2</td>
</tr>
<tr>
<td>Using inadequate or inappropriate research designs</td>
<td>2</td>
</tr>
<tr>
<td>Inadequate record keeping related to research projects</td>
<td>2</td>
</tr>
<tr>
<td>Relationships with students, research subjects or clients that may be interpreted as...</td>
<td>1</td>
</tr>
<tr>
<td>Circumventing certain minor aspects of human-subject requirements</td>
<td>0</td>
</tr>
</tbody>
</table>

**Most harmful misconduct**
- Falsifying/cooking research data
- Plagiarism
- Dropping observations
- Failing to present data
Should a CRIS take into account these issues?

- Mostly, yes
Hot topics for CRIS
Relevant metrics

- Existence of a local ethics committee
- Number of ethics committee reviews or audits
- Topics of reporting of misconduct
- Number of members of ethics committee
Data model and format

• Our clients can choose to capture any of the indicators listed but they are not part of our standard data model.

• CERIF compliant, those indicators can be presented in the data model, but it is not in operation at the moment.

• These indicators are currently not covered by our data model. We plan to extend the data model to cover the activities of researcher in certain committees which also may be ethical committees.

• Only Number of experts in ethics could be measured, if key word "ethics" will be filled by researcher.

• How to identify in CERIF the object "ethics committee"? Is it organisation? Or is it event (probably ethics committee meetings...)?
Potential data sources

- Data providers such as universities, funding agencies
- Internal research administration processes plus potentially a number of external inputs such as clinical trials registries
- Data for extensive ethical compliance and contact would have to be built internally by the institutions. The major publication databases would probably also have something to offer here, so Scopus, WOs, and Dimensions.
- Cooperation with local ethics committee - there are some publication databases including information on papers retracted/rejected due to scientific misconduct, aren't there?
- Anti-plagiarism system is used for publishing ethics. Probably CERIF related data model could be suitable for mentioned indicators.
Follow-up: privacy, transparency and ease of use

• The CRIS is a really excellent place for keeping information about and tracking training.

• To look at topics may be interesting to get an idea what topics are looked at and dealt with in a proper way, and which are missed or not in focus yet, which one would expect but they never show up.

• If there's a true ethics violation or a suggestion of one then that's actually a very exceptionally private issue until the very end.
  • In the United States academic analytics basically does a lot of aggregation and web crawling to collect information that then sometimes institutions are using for faculty evaluation. I support those faculty for being annoyed and even angry that they are been evaluated with information that's not transparent.

• In their implementation, it is necessary avoid formalism and excessive administrative burden (bureaucracy...).
Further perspectives
Priority action: new services, data model and data sources
Follow-up: Specific issues

• In the United States, in Canada, in Australia, New Zealand and probably increasingly in South America - we're really addressing how our data may be biased. I don't know what the implications of that exactly are for CRIS systems, but as we think about all data and all metadata, it's an opportunity for us to also think about (biased descriptors with outdated and offensive terminology...).

• What does it mean to record information about international collaborations when research partnerships with China become a sensitive question in some countries? This is a whole Pandora box of questions.
Follow-up: Best practice

- One really useful way forward for this would be to identify a system where this is already been carried out to some extent. It would be really useful to see some preliminary best practice approach, maybe related to data management, especially about sensitive data or health related data, to make sure that the guidelines provided by journals have been followed by the authors. This could be reflected in the metadata sets for publication or research data. UK universities start to implement advice on ethics and research data management.

- I have seen some ethics committees, trusted and often senior people who are usually reviewing research projects, being brought in as part of the stakeholder group for the purchase of a CRIS system. In such a stakeholder group you usually find the library, the research office, IT department and academic representatives and then the Pro Vice-Chancellor or the Vice-Rector or somebody like that, and in these groups, I also have seen the ethics committee.
Follow-up: Further discussion

• We would have a difficult debate on data protection and whether information about ethics should be part of the system and if so, if it should be apart from the personal file; I think the discussion will be extremely difficult.

• But we could one thing (central monitoring of what we are doing to keep ethical standards) but not the other (collecting centrally all the breaches and what has gone wrong or what single persons have done or have not done).

• There's this question on what we are doing with the CRIS - how can it be judged from an ethical point of view. And this question hasn't been discussed too openly yet, or in other contexts, perhaps as a part of this “responsible metrics” discussion. I think it should be discussed, it's very important to say “okay let's think about what we are doing and what it makes with the people because we are using their data”.

September 30, 2021  euroCRIS webinar "Ethics and CRIS"
Follow-up: Further research

• *I am not sure who will make first step. I hope there will be some EU project dealing with this issue.*
Thank you

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