How to Improve Study Recruitment and Informed Consent: 3 Approaches

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Approach #1: Recruitment Process is about Ethical, Legal INFORMED CONSENT

- The study recruitment process is about obtaining informed, voluntary consent decisions in a manner that respects the individual rights of the participant
- Emphasis is placed on disclosure of all relevant information
- Legal rights and obligations are emphasized

Question for the group

As you enter the room to talk to a potential study participant, what are your (2-3?) most important goals?
Informed Consent Decision Support Behaviour Change

TCPS-2 General principles for consent

- Consent shall be given voluntarily
- Consent shall be informed
- Consent shall be an ongoing process

Ethical components of informed consent

1. The decision to participate in clinical research must be made voluntarily and free from coercion;
2. The decision-maker must be competent to make the decision;
3. Full disclosure of relevant information must be given;
4. The information must be understood by the decision-maker.


There is a problem with understanding...

- Cross-section of oncology RCTs, 30% believed their treatment had been proven to be the best treatment for their cancer (Joffe et al, Lancet, 2001)
- RCT of B-blockers for MI, 44% of patients interviewed did not understand random assignment (Howard et al, Control Clin Trials, 1981)
- Oncology chemotherapy trial, half of patients could not name any drug they were about to receive, and most could not remember side effects described on the consent form (Olver et al, Ann Onc, 1995)

Flory & Emmanuel (2004) JAMA.

Written informed consent documents serve important roles

- A permanent record
- Includes detailed information
- Can be reviewed by IRBs
- Serve as a legal contract

"Informed consent is more than just a signature on a form, it is a process of information exchange that may include, in addition to reading and signing the informed consent document, subject recruitment materials, verbal instructions, question/answer sessions and measures of subject understanding. Institutional Review Boards (IRBs), clinical investigators, and research sponsors all share responsibility for ensuring that the informed consent process is adequate. Thus, rather than an endpoint, the consent document should be the basis for a meaningful exchange between the investigator and the subject."


Table 1. The Process and Quality of Informed Consent_epochs

How often do consent documents include ... a statement about the withdrawal from the study at any time?

How often do consent documents include ... a statement that participation is voluntary?
How often do consent documents include ...

a description of which procedures are solely for research purposes?

0% 20% 40% 60% 80% 100%

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How often do consent documents include ...

a description of the intervention

0% 20% 40% 60% 80% 100%

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How often do consent documents include ...

a statement about the funding sources for the study?

0% 20% 40% 60% 80% 100%

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**Approach**

*Pragmatic* research: Implications for recruitment practices

- Pragmatic Research: compares benefits and harms of different standard medical treatments in real world conditions
- Different Flavours: Cost effectiveness trials, Standard of Care trials, Pragmatic trials, Research on Medical Practices...
- Focus is on determining effectiveness in real-practice settings, rather than whether an intervention CAN work in ideal settings.
- Pragmatic research:
  - Includes more kinds of patients (fewer exclusions)
  - Often involve many settings
  - Use routinely collected clinical data
  - Use more ‘clinically meaningful’ outcomes
  - Often provide challenges for standard consent practices...

Example: FLUID Trial

- Does it matter which fluid (Ringer’s Lactate, Normal Saline) is used for in-patient resuscitation?
- Both fluids considered usual care, in use for decades,
- Important differences in costs, no clear evidence of which is safer
- To measure small differences, and to make the intervention feasible, need to randomize hospitals (cluster-randomized trial), rather than individual patients

Consent for EVERY patient in the hospital?
- Hugely costly
- Impossible in some cases (e.g. ICUs)

Summary of Approach #1: Recruitment process is about INFORMED CONSENT

- Informed consent documents often don’t adhere to current standards
- Implementing the ‘process’ of informed consent can be improved
- Guidance for such improvements is abundant
- New models for ethical consent and recruitment are being developed and studied

Approach #2: Recruitment process is about DECISION SUPPORT

- The study recruitment process is about helping people make a difficult participation decision
- Emphasizes a deliberative decision making process
- Emphasizes people being clear on which outcomes they most value, and which choice would maximize the likelihood of those outcomes
- Emphasizes understanding of key points over disclosure of all information

Questions?

Alternative models of consent

<table>
<thead>
<tr>
<th>Option</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete waiver</td>
<td>No attempt made to notify or request permission from research subjects prior to participation.</td>
</tr>
<tr>
<td>Broadcast Information</td>
<td>Waiver of consent is allowed, but there is widespread public notification of the research process at the institution or in the community.</td>
</tr>
<tr>
<td>Integrated Consent</td>
<td>Research participation is discussed as part of the consent process for clinical care, and permission obtained in a manner consistent with the consent for clinical care.</td>
</tr>
<tr>
<td>Simple opt-out</td>
<td>Potential participants are told they will be included in the research process unless they decide not to participate.</td>
</tr>
<tr>
<td>&quot;Abbreviated&quot; or &quot;targeted&quot; verbal consent</td>
<td>Describe the basics verbally, including the purpose of the research, impact as compared with not participating in the study, material risks and alternatives.</td>
</tr>
</tbody>
</table>

*McKiny et al. Use of informal informed consent in pragmatic clinical research. *Lancet* 1993;2:**
The evolution of consent forms for research: a quarter century of changes.


More information, longer consent

1. Pressures of disclosure & documents over understanding
2. No common definitions of core concepts (e.g. comprehension)
3. No substantive theory re: how to improve comprehension

Problems with the current process of informed consent

• Originally developed to aid treatment/screening decisions
• First RCT demonstrating their effectiveness: 1983
• Over 80 RCTs of their effectiveness
• Cochrane review carried out 1999, updates 2003, 2009, 2011
• International consensus process in 2006 led to agreement on important components
• Validated measures for many components exist
• 2007 Washington State legislation requiring decision aids for all elective surgeries

Decision support thru decision aids

For treatment and screening decisions, decision aids...

• Improve knowledge
• Improve accurate perceptions of risk
• Improve the likelihood that patient chooses the action most consistent with the outcomes they value
• Reduce uncertainty
• Improve patient-practitioner communication
• May increase likelihood of choosing more conservative treatment options
• Do not affect anxiety, health outcomes


Thrombophilia and pregnancy

**WHAT ARE YOUR OPTIONS?**

You can decide...

- Not to join the study
- To join the study

**Not to join the study**
- All routine care treatments will be available to you.
- You will be closely monitored for the development of high blood pressure, small birth weight babies and blood clots.

**To join the study**
- You will continue to receive routine care and will be randomized to either Group A or Group B and will be closely monitored.
- There may be additional risks and benefits to participating; these are discussed on the next page.

**SUMMARY OF OUTCOMES AND RISKS**

Facilitating direct comparison

Benefits of Participating in the Study
- You have already had a blood test and it is possible that your test results may be available by the end of the procedure.
- You will be asked a series of health information questions so that we can search for information about you, your family and your risk factors.
- You may not wish to be told that you will not have these risk factors. We will then tell you about the effectiveness of the treatment for the active outcome difference and will provide you with an option to take that treatment.

Benefits of Not Participating in the Study
- You may have an increased risk of a pregnancy complication for most of your pregnancy.
- You may be at an increased risk of weakening of the bones (1 in 100 women).

Possible benefits of participating
- Possible risks of participating

**WHICH OUTCOMES ARE MOST IMPORTANT TO YOU?**

In order to decide whether or not to join the research study, we suggest you consider each part of the decision separately.

Please move the slider bar to indicate how important each is to you.

Possible benefits of participating
- Possible risks of participating

**SO HOW ARE WE DOING USING THIS APPROACH?**

- This is an approach that is relatively new in the context of recruitment decisions
- Again, looked at a random sample of Informed consent documents for key recommendations


How often do consent documents ...

Describe the advantages of participation?

Describe the disadvantages of participation?

Provide comparison probabilities using the same denominator?

Provide information about levels of uncertainty around probabilities?
How often do consent documents... Provide information about levels of uncertainty around probabilities?

0% 20% 40% 80% 100%


How often do consent documents... Asks participants to consider which advantages and disadvantages matter most to them?

0% 20% 40% 60% 80% 100%


How often do consent documents... provides a step-by-step way to decide whether or not to participate?

0% 20% 40% 60% 80% 100%

Summary of Approach #2: Recruitment process is about DECISION SUPPORT

- Thinking about recruitment decisions as tough patient decisions in need of support suggests a very different recruitment process
- The decision support literature provides lots of guidance on how to help people make tough decisions
- There is a substantial literature that shows how to help these decisions
- The current recruitment process doesn’t likely do a good job of it.

Questions?

Approach #3: Recruitment process is about BEHAVIOUR CHANGE

- The study recruitment process is about encouraging participation in clinical research
- Emphasizes that participation in research serves a public good
- Recruitment is a behaviour change problem; you aren’t participating, what techniques maximize likelihood that people will participate?

Participation rates in research are terrible

- In the U.S., 40% of National Cancer Institute funded trials are discontinued
  - 40% of those are because of poor recruitment
- In Ontario, ~8% of treated patients are recruited
  - % of recruited patients declined from 2009-2012
- In the UK, ~14% of patients are recruited...

Reasons people give for participating

- Help others
- Contribute to societal good
- Hope of personal benefit (whether true or not)
- Convenience
- (Conditional) altruism

Successful recruitment depends on individuals changing their behaviour

- Thinking at the level of the individual behaviour can be helpful
- To change behaviour, helps to understand how behaviour changes
- Existing theory can tell us a lot about the specific Behaviour Change Techniques (BCTs) available to us
What are BCTs?

- Are the proposed “active ingredients” or “elements” of behaviour change interventions
- Can be used alone or in combination with other BCTs
- Are observable and replicable
- Can have a measurable effect on a specified behaviour/s

A Taxonomy of all known behaviour change techniques

- Scheduled consequences
- Reward and threat
- Repetition and substitution
- Antecedents
- Associations
- Covert learning
- Natural consequences
- Health consequences
- Feedback and monitoring
- Goals and planning
- Social support
- Comparison of behaviour
- Self belief
- Comparison of outcomes
- Identity
- Shaping knowledge
- Regulation

- Punishment
- Extinction
- Negative reinforcement
- Shaping

- Action Planning
- Coping Planning
- Goal Setting
- Commitment

http://www.ucl.ac.uk/health-psychology/research/theories-techniques

How can BCTs help us improve recruiting to clinical studies?

- By exploring which BCTs already in use seem most effective
- By considering what new techniques should be tried

BCTs already being used in study recruitment

- Behavioral contract
- Commitment
- Social support
- Material Incentive
- Social Incentives

But what about ‘Undue Influence’?

“The voluntariness of consent is important because it respects human dignity and means that individuals have chosen to participate in research according to their own values, preferences and wishes.”

“Undue influence and manipulation may arise when prospective participants are recruited by individuals in a position of authority. The influence of power relationships (e.g., employers and employees, teachers and students, commanding officers and members of the military or correctional officers and prisoners) on the voluntariness of consent should be judged from the perspective of prospective participants, since the individuals being recruited may feel constrained to follow the wishes of those who have some form of control over them.

“Coercion is a more extreme form of undue influence, involving a threat of harm or punishment for failure to participate. Coercion would negate the voluntariness of a decision to participate, or to remain, in a research project”
Summary of Approach #3: Recruitment Process is about BEHAVIOUR CHANGE

- Improving recruitment rates would reduce research waste and provide a public good.
- Thinking about recruitment as a behaviour change exercise brings many known behaviour change techniques into play.
- Several techniques are already being used in standard recruitment processes.

Questions?

Clash of Consent and Decision Support Approaches (1 vs 2)

- Supporting DECISION MAKING doesn’t always involve MORE INFORMATION DISCLOSURE

Clash of Consent and Behaviour Change Approaches (1 vs 3)

- Efforts to ‘Change Behaviour’ smack of reducing voluntariness, coercion.
- But we are already trying to do it...

SUMMARY

- All 3 approaches are part of what we CURRENTLY do in study recruitment.
- Some are less explicit than others.
- Each approach suggests important ways to improve the informed consent process.
Practical Implications of the 3 Approaches

- More research to do
- Clear guidance about ways to optimize recruitment
- More choices about how to design recruitment processes

THANK YOU!

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