

**IUPUI Program Review and Assessment Committee Assessment Project Proposal
COVERSHEET**

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Project Title: Assessing the Effect of an Ethics Course on Undergraduate Students' Ethical Judgement

Project Dates: August 2016 – December 2016

Project Checklist:

- ✓ Statement of support from Dr. Brent Arnold, Chair
- ✓ Budget
- ✓ IRB Consulted (IRB application will be submitted)

Abstract:

Ethics education in the health care field is important for students so they can learn to identify ethical dilemmas and develop ethical reasoning skills. Measuring the effect of an ethics course on undergraduate students' ethical judgement is important to answer the question of whether ethics courses ought to be taught at the undergraduate level and what improvements need to be made to the curriculum. The intent of this project is to provide both a quantitative and qualitative assessment of the impact and value of W363, an undergraduate health care ethics course on students' understanding and approach to ethical dilemmas.

Project Purpose:

Over the past three decades, significant progress has been made toward requiring ethics education in health sciences undergraduate curriculum; however, ethics courses are still not required at all universities [1-2]. The need for ethics education in the health care field is important for students to learn to identify ethical dilemmas and to develop ethical reasoning skills that they will need when they enter clinical practice [2].

Measuring the effect of an ethics course on undergraduate students' ethical judgement and ability to approach and resolve ethical dilemmas is important to answer the question of whether ethics courses ought to be taught at the undergraduate level and how ethics courses should be taught. As health care ethics education has traditionally focused on medical students, there are very few published studies that assess the effect of health care ethics courses on undergraduate students' understanding and approach to ethical dilemmas. Thus, there is a need for this type of assessment.

The intent of this project is to provide both a quantitative and qualitative assessment of the impact of an ethics course on students' understanding and approach to ethical dilemmas.

This assessment is important for health care ethics educators, schools offering health care related undergraduate degrees, and students pursuing health care related undergraduate degrees because it will provide insight into the value of ethics curriculum at the undergraduate level for students in the health care field. Additionally, this project will provide information on how ethics education at the undergraduate level can be improved to provide new pathways to learning. Specifically, this project will provide much needed information on whether a course specifically dedicated to health care ethics contributes to student learning of the IUPUI, PUL 6: Values and Ethics, which aims to help students make sound decisions.

Intended Outcomes of the Project:

As ethics education is not compulsory at all universities, this project will help answer the question of whether ethics courses ought to be required of undergraduate students in health care fields, and what cognitive value, if any, ethics courses provide. The data and information procured during this study will be used to meet two outcomes: 1) the outcomes data from this study will be used to revamp the current undergraduate ethics course so that it better meets students' needs; and 2) the outcomes data from this study will be published in an ethics education journal and presented at an ethics education conference in order to help inform other educators about the value of ethics education at an undergraduate level. This project is novel because there are very few published studies assessing the value of health care ethics education in the undergraduate curriculum [3].

Assessment Method:

A cohort design will be utilized which includes approximately forty ($n = 40$) Health Sciences undergraduate students enrolled in W363, an introductory health care ethics class taught during the fall of 2016. The course is designed to equip students to identify and reason

through ethical dilemmas in the health care field. Additionally, students in this course are encouraged to engage in self-introspection throughout the semester in order to discover their own ethical baseline, while also being taught to examine ethical dilemmas from every prospective.

In order to assess whether this undergraduate ethics course is successfully teaching ethical competency, a mixed methods approach will be utilized. In order to obtain quantitative data, students will be administered the Ethics and Health Care Survey Instrument (EHCSI) at the beginning and end of the semester (instrument attached in the appendix). The EHCSI is a validated assessment tool consisting of 12 ethical case vignettes involving a health care dimension [4]. The vignettes feature ethical dilemmas in which there is a broadly shared, ethically acceptable answer among medical ethicists. In order to obtain qualitative data, students will be asked a series of 10 open-response questions about their confidence in relation to confronting and resolving ethical dilemmas in clinical practice and the impact of the ethics course on their understanding and approach to ethical dilemmas.

Data Analysis:

At both the beginning and end of the semester, students EHCSI scores will be recorded. Additionally, at the end of the semester, students will be given the qualitative open-response questions. Results of all students EHCSI scores at the beginning of the semester and the end of the semester will be statistically analyzed and compared using the Wilcoxon rank-sum test in order to identify whether there is a significant relationship between a change in students' ethical competency and the ethics class. In order to identify areas whether there was movement in the students' ethical values from the beginning of the semester to the end of the semester, the McNemar's test will be applied. The statistical analysis presented in this project are consistent with EHCSI instrument analysis [5-6]. Qualitative responses will be coded using Nvivo

qualitative data software and analyzed using emergent thematic analysis, a validated qualitative coding system which is appropriate for this type of assessment [7-9].

Evaluation and Dissemination of Results:

In addition to completing the reporting requirements of the assessment grant, the results of this research study will be published in an applicable journal and presented at an ethics education conference. The intention of publishing the results of this study and presenting at an ethics education conference are to provide much needed information about the value of undergraduate ethics courses and to help answer the question of whether ethics courses ought to be taught at an undergraduate level. Additionally, the outcomes from this study will be used to implement curriculum changes within the W363 ethics courses currently being taught at IUPUI.

Budget:

1. Funding for a student assistant to assist the researcher with scoring the EHCSI results, analyze the qualitative data, and write the report manuscript: \$504 (\$12 per hour times 42 hours of work).

2. Conference registration and travel where results of study will be disseminated to educators: \$996.

3. Stipend for supporting faculty: \$1000.

Total Budget: \$2500

References:

1. Mattick K, Bligh J. Teaching and assessing medical ethics: where are we now? J Med Ethics 2006;32:181-185.

2. Loike JD, Rush BS, Schweber A, and Fischbach RL. Lessons Learned from Undergraduate Students in Designing a Science-Based Course in Bioethics. *CBE Life Sci. Educ.* 2013;12(4):701-710.
3. Asghari F, Samadi A, Cormohammadi T. Effectiveness of the Course of Medical Ethics for Undergraduate Medical Students. *J Med Ethics Hist Med.* 2009;2:7.
4. Goldie J, Schwart L, Mcconnachie A, Morrison J. The Impact of a Modern Medical Curriculum on Students' Proposed Behavior on Meeting Ethical Dilemmas. *Medical Education* 2004;38:942-949.
5. Goldie J, Schwart L, Mcconnachie A, Morrison J. Impact of a new course on students' potential behavior on encountering ethical dilemmas. *Medical Education* 2001;35:295-302.
6. Goldie J, Schwart L, Mcconnachie A, Morrison J. The impact of three years' ethics teaching, in an integrated medical curriculum, on students' proposed behavior on meeting ethical dilemmas. *Medical Education* 2002;38:489-497.
7. Miller ML, Crabtree BF. The dance of interpretation. In: Crabtree BF, Miller WL, eds. *Doing Qualitative Research*. Thousand Oaks, CA: Sage; 1999:127-143.
8. Miles MB, Huberman AM. *Qualitative Data Analysis*. Thousand Oaks, CA: Sage; 1994.
9. Bernard H. *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. Walnut Creek, CA: AltaMira; 2002.

ETHICS AND HEALTH CARE SURVEY

GENERAL INSTRUCTIONS: Please Read Carefully: In each case below, please assume that all the options presented are equally available to you. Consider yourself to be the physician in the case. Choose from among the listed options, the one course of action that seems to you to best express respect for the deepest and most important ethical commitments in medicine. In the space below each answer, briefly set out the reasons for your choice. In other words, given the listed alternatives, which choice should a responsible physician make under the circumstances described.

1. Assisted Suicide.

Katherine Lewis is a 40 year old woman suffering from Guillain Barre Syndrome, a painful neurological illness that leaves its sufferers paralysed for unpredictable lengths of time. Many people recover from the syndrome more or less completely and live long relatively healthy lives. However, Katherine herself has been paralysed for THREE years and requires assistance from a ventilator to breathe. During this time she has been under your care. Ten months ago, it was determined that Katherine would never be able to move or breathe on her own again because of the extent of damage to her nerves and muscles. You explained this to Katherine in a gentle but clear manner. Last week Katherine asked to speak with you privately. She told you that she had considered her options, and had decided that she no longer wanted to live. She said her life held no value for her if it meant being in constant pain and without the freedom to move or even breathe on her own. She tells you that she has discussed this with her family and that they have accepted her wishes to have the ventilator removed.

You have two options:

1. You apply for a court order to permit you to withdraw the treatment.
2. You refuse to assist her.

2. The patient with epilepsy.

Edith Gratton is a sexually active, somewhat immature 24-year-old woman, who has suffered from a treatment-resistant form of epilepsy. Although a newly available medication promises to help her significantly, it imposes 10% risk of severe birth defects should she become pregnant. As a Catholic, Ms. Gratton is opposed to abortion and has reservations about birth control. Should she be informed of this new medication? Should it be prescribed if she requests it?

You have two options:

1. Do not inform her of this new medication.
2. _ Inform her about this new medication and prescribe it if she requests it.

3. The Patient's Family.

Joseph Castle, now 72, has been your patient for the last twelve years. He has said that if it ever happened that he should permanently lose consciousness, he would not want to be kept alive "on tubes". Having sustained severe brain damage following a cerebral haemorrhage, Mr. Castle now appears to have permanently lost consciousness: recovery is now extremely unlikely. He had been kept on a naso-gastric tube for nutrition and hydration until the prognosis became clear. When his sister and nephew (his only living relatives) are informed about the impending removal

of all life support, they demand that he be kept alive. Despite extensive discussion with them, they are adamantly opposed to letting him die.

You have two options:

1. Go along with his relatives wishes.
2. Seek court approval to remove the naso-gastric tube and permit the patient to die of dehydration.

4. The Jehovah's Witness.

You are a surgeon on call at the district general. A 27-year-old woman is brought in after an automobile accident. Having sustained internal injuries and significant blood loss, she is in need of immediate surgery. You speak with her - she is still quite clear headed - and you tell her what you propose to do. She agrees to surgery but tells you that, because she is a Jehovah's Witness, she will not consent to a blood transfusion. Jehovah's Witnesses believe that transfusions are contrary to the word of God. The patient will probably require a transfusion if she is to live. Further conversation discloses that she has been a Jehovah's Witness all her life, is unmarried with no dependents, and is serious about the refusal of the transfusions. She says she wants to live very much and asks you to do what you can to save her.

You have three options:

1. Refuse to perform the operations unless she will permit you to administer the transfusion that will almost surely be necessary. She will not give you permission and, without the operation, there is a 97% chance that she will die.
2. Agree to perform the operation, promising to administer no transfusion, even if necessary to save the woman's life. With this restricted procedure there is an 85 % chance that you will watch her die on your operating table, knowing you might save her by doing something you told her you would not do.
3. "Agree" to perform the operation, promising to administer no transfusion, even if necessary to save the woman's life. But if a transfusion becomes necessary to save the woman's life - this is what will probably happen - do it, notwithstanding your promise. There will be only a 5% chance that the woman will die.

5. The Prostitute.

Carla Harris, a prostitute, has been your patient for four years. Having been treated for many sexually transmitted diseases, she finally tests positive for the HIV antibody. You urge her repeatedly to change her behavior, to refrain from acting in ways that could transmit the virus. Despite your best efforts, she gives you no assurance that her clients will be protected. Indeed six weeks later she contracts yet another venereal infection.

You have two options:

1. Notify the Health authorities so that they can intervene to protect your patient's clients.
2. Continue to try to alter your patient's behavior but do not report her.

6. Teenager Requests Abortion.

The Lamberts, a strict Catholic family, has attended your practice for ten years. Their 15-year-old daughter consults you, without her parent's knowledge, and asks you to refer her for an abortion. She explains that a pregnancy would ruin her plans to attend university. Mary insists that her parents not be informed of her choice.

You have three options:

1. Refer her for the abortion and do not disclose this to her parents.
2. Refer her for the abortion and inform her parents.
3. Inform her parents of their daughter's request and ask their consent.

7. The Down's Baby.

The Mather's were in their mid-thirties with two other children. At birth their son was diagnosed clinically as having Down's Syndrome complicated by duodenal atresia. Babies with Down's Syndrome will display some degree of mental retardation as they become older. Without surgery to correct the duodenal atresia, the child cannot digest or pass food and will die. The Mather's refuse to consent to the surgery. They will not give up the baby but firmly believe that it would be unfair to their other children to raise them with a Down's Syndrome child.

You have two options:

1. Go along with the parents' request.
2. Obtain legal authority to treat the child against the will of the parents.

8. Childhood Leukaemia.

Sunitha is a bright 12-year-old girl whom you have been treating for leukaemia. Her condition is not responding to treatment, and you realise that there is nothing more that can be done for her. Her parents are informed of this and they are adamant that Sunitha should not be told. They feel that she has suffered enough through this illness and do not want to spoil the little time remaining by telling her that she is dying.

You have two options:

1. Tell Sunitha.
2. Abide by her parents' decision.

9. The Attractive Patient.

You have just taken over a single-handed practice on a remote, small Scottish island. You have always wanted a rural practice, and hope someday to marry and raise children on the island. Lee Cuthbert is an attractive, intelligent, levelheaded patient whose family has lived on the island for generations. Lee is also a member of the bird watching club you have joined. You have been treating Lee for some time for a difficult and unpleasant skin condition, which appears to be clearing up. Although surgery visits will continue to be necessary for monitoring, the patient is substantially improved. At the end of a visit, Lee smiles warmly and invites you for dinner, clearly evidencing an interest in being more than your patient.

Your options are:

1. Accept the invitation.
2. Do not accept the invitation.

10. The Registrar.

You are a senior house officer. Mrs. Katz is a 54-year-old woman who has been on your ward for nine days. She is in the terminal stages of cancer and is clear headed and aware. Afraid of the pain, she has said to her doctor "please do not let me suffer". This was accepted and written in her chart as an advanced directive. One day, Mrs. Katz tells you she wants to live to see the birth of her first grandchild. Later that night, while you are on duty, you are called to attend Mrs* Katz who has suffered a cardiac arrest. Your registrar, heading the team, decided not to resuscitate, despite your information regarding Mrs. Katz's comment made earlier that day.

Your options are:

1. Do nothing.
2. Recount the incident to the consultant in charge.

11. The New Face.

You are a plastic surgeon working in a private hospital. Andrew Thompson, a wealthy man in his 40s, has requested facial reconstruction that carries significant risk. Although there are no deformities, he has been obsessed with the idea that his face is not his own. Though he appreciates that there is no rational basis for his belief, he wants the surgery anyway. In the course of conversation with Mr Thompson's psychiatrist, it becomes clear to you that, while there is no reason to expect that Mr Thompson's distress at his facial condition will be relieved by plastic surgery, there is equally no reason to expect that it will be made any worse. Your lawyer advises you that the patient is competent to understand the medical risks of the procedure and to give consent to the surgery.

Your options are:

1. Agree to perform the surgery.
2. Decline to perform the surgery.

12. The Cabby.

Daniel Steward is a 46-year-old taxi driver who was recently diagnosed as having epilepsy. You have broken the bad news to him, and explained that a consequence of this illness is that he must give up his driver's license for his safety and that of others. He is angry about this, but promises to report it to the Driver and Vehicle Licensing Agency (DVLA) rather than have you do it. A few weeks later, you are walking home after surgery, and you happen to see Mr. Steward picking up a fare in his taxi.

You have two options:

1. Try to persuade Mr. Steward to keep his promise and give up his license.
2. Report Mr. Steward yourself.



**SCHOOL OF HEALTH
AND REHABILITATION
SCIENCES**

INDIANA UNIVERSITY
IUPUI

March 22, 2016

re: Letter of Support for Dr. Amber Comer's PRAC Project Proposal

To Whom It May Concern:

I am writing to indicate my full support for Dr. Amber Comer's PRAC Project Proposal entitled "Assessing the Effect of an Ethics Course on Undergraduate Students' Moral and Ethical Judgement." I believe that this project is valuable and will help our department assess the value of our undergraduate ethics curriculum.

If you have any questions or require any further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Brent Arnold", is written over a light blue horizontal line.

Brent Arnold
Chair of Health Sciences