Introduction to Type 2 Translational Research
PH 650

Fall 2011
Tuesday, 4:30 p.m. - 7:00 p.m.
Room 1220 HSLC Building (750 Highland Ave.)
University of Wisconsin-Madison

Course Organizer: Maureen Smith, MD, PhD
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Email: maureensmith@wisc.edu
Office hours: Generally available following class, or by appointment
Prerequisites: No formal prerequisites
Instructor: Maureen Smith, MD, PhD
TA: Tola Ewers, MS (lmewers@wisc.edu; 402-613-7589 cell)

Course Objectives

The objectives of this course are:
1) To understand the conceptualization of translational research, focusing on “Type 2” or community-based translational research.
2) To illustrate basic concepts and methods in research as applied to current issues in healthcare.
3) To understand the diverse perspectives that can be used to inform Type 2 translational research in different organizations.

Course Readings

A packet of required readings has been organized by weekly reading assignments and will be available on the course Learn@UW site. Staying current with assigned readings and participation in class discussions is required.
Course Requirements and Evaluation

Mid-Semester Group Presentation (300 possible points)

- Groups of students will be determined by the faculty instructor at the beginning of the course based on a survey of your long-term research interests. During class, the groups are requested to exchange phone numbers and e-mail addresses and to schedule meeting times.

- For your group project, you must select a published randomized clinical trial that attempts to determine whether an intervention has a direct effect on physical or mental health. Note that these interventions are not limited to drugs, devices, or procedures but can also include activities such as exercise, weight loss, or meditation. Interventions are excluded that focus on improving health by identifying opportunities for motivating behavior/system change or strategies to encourage behavior/system change.

- At the course midpoint, each group will give a short presentation on the challenges in applying their clinical trial results to improve healthcare delivery and health outcomes. Specifically, identify the gaps in knowing how to apply these results and describe additional effectiveness and implementation research needed. Each group will have approximately 30 minutes (depending on the number of groups): 20 minutes for the presentation and 10 minutes for questions.

- The final reporting of the grade is a simple total of three components (faculty evaluation of the presentation, peer evaluation, and faculty evaluation of the individual student). Only the total grade is reported—since the peer evaluation is anonymous, we cannot reveal any of the grades for the three components. Students strongly support this policy.
  - Faculty evaluation of the presentation: Dr. Smith will evaluate the total presentation for the purpose of assigning a group grade. The presentation will be graded on a basis of 0-100 points (with 100 being highest). The group grade for the presentation is awarded to each student in the group.
  - Peer evaluation: Each student is required to evaluate every other member of his/her group. This peer evaluation is worth 100 points. Each student must apportion a fixed number of points to her/his peers. It is the students' responsibility to determine what criterion to use in this apportioning of points. Some of the criteria students may use could be time spent, useful discussion, work on research, work on presentation development, and general organizational skills. The peer evaluation form will be posted on Learn@UW. The form must be completed and returned at the time of your presentation.
  - Faculty evaluation of individual student: Each student must present a component of the overall presentation. Dr. Smith will evaluate the student on a basis of 0-100. This component of the evaluation will be based on the presentation as well as the student’s previous participation during the course.

- Each student presents their completed evaluation of fellow group members as a “ticket” to the presentation. The evaluation form must be completed and returned prior to the presentation.

Final Group Presentation (300 possible points)

- During the final two classes, the group project is presented and defended.

- The final group presentation should be a complete analysis of the challenges in applying the results of their chosen clinical trial to improve healthcare delivery and health outcomes. Additional details will be provided after the first presentation. The types of information that will likely be included in the final presentation are:
Describe an effectiveness, implementation, and/or policy research project that fills a significant gap that you identified in your mid-semester presentation.

Describe which participants should be involved in the research and how (patients, organizations, consumers, clinicians).

Identify appropriate methods to conduct the research and justify your choice.

Identify possible human subjects or HIPAA concerns in conducting your research.

Describe issues in presenting your results.

Identify possible barriers to implementation of the results of your proposed research.

The final reporting of the grade is a simple total of three components (faculty evaluation of the presentation, peer evaluation, and faculty evaluation of the individual student). Only the total grade is reported—since the peer evaluation is anonymous, we cannot reveal any of the grades for the three components. Students strongly support this policy.

Faculty evaluation of the presentation: Dr. Smith will evaluate the total presentation for the purpose of assigning a group grade. The presentation will be graded on a basis of 0-100 points (with 100 being highest). The group grade for the presentation is awarded to each student in the group.

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Faculty evaluation of individual student: Each student must present a component of the overall presentation. Dr. Smith will evaluate the student on a basis of 0-100. This component of the evaluation will be based on the presentation as well as the student's previous participation during the course.

Each student presents their completed evaluation of fellow group members as a ticket to the presentation. The evaluation form must be completed and returned at the time of your presentation.

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Course Timeline Overview

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<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>Fri., Sept 2</td>
<td>Student Survey (available on Learn@UW) is due in Dropbox on Learn@UW by 4:30 p.m.</td>
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<tr>
<td>Tues., Sept 6</td>
<td>First class meeting. Groups for presentations announced. Students are requested to exchange contact information (phone numbers, e-mail addresses) and schedule meeting times</td>
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<tr>
<td>Thurs., Sept 8</td>
<td>Each group submits a PDF of their article for Worksheet 1 as well as answers to Worksheet 1 Questions 1 to 5 to the Dropbox on Learn@UW by 7 p.m.</td>
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<tr>
<td>Fri., Sept 9</td>
<td>Dr. Smith approves article or provides feedback on obtaining a different article; resubmit answers to Questions 1 to 5 for new article, if needed.</td>
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<tr>
<td>Tue., Sept 20</td>
<td>No class meeting</td>
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<tr>
<td>Tue., Oct 11</td>
<td>Second half of class allotted for groupwork</td>
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Ver 5 – 8-16-11
Fri., Oct 14    Each group submits Worksheet 1 to the Dropbox on Learn@UW by 5 p.m.
Tue., Oct 18   Dr. Smith provides feedback on Worksheet 1 prior to classtime. Second half of class allotted for groupwork

**Tues., Oct 25**  *Worksheet 1 presentations during class*
Please use the PowerPoint template provided on Learn@UW as the starting point for creating your presentation. You may change the titles of the slides, change the slide layout, add graphics, etc. to meet your group’s needs, but the basic points addressed in the template must be included in your presentation.

Wed., Nov 16  Each group posts Questions 1-4 of Worksheet 2 in the Dropbox on Learn@UW by 9 p.m.

Mon., Nov 21  Dr. Smith provides feedback on Worksheet 2.

Wed., Nov 30  Each group posts Worksheet 2 in the Dropbox on Learn@UW by 9 p.m.

Fri., Dec 2  Dr. Smith provides feedback on Worksheet 2.

**Tues., Dec 6 & 13**  *Final presentations during class*
Please use the PowerPoint template provided on Learn@UW as the starting point for creating your presentation. You may change the titles of the slides, change the slide layout, add graphics, etc. to meet your group’s needs, but the basic points addressed in the template must be included in your presentation.

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**Sample Group Project Topics**

Below are examples of clinical trials. The references below are given only as a starting point for your research. You may use any references of your choosing to identify an appropriate clinical trial.


Introduction

01a - Tues, Sep 6 – Introduction to Translational Research

01b - Tues, Sep 6 – Type 2 Translational Research – How?

Developing the Research Question

02a - Tues, Sep 13 – Setting Priorities

02b - Tues, Sep 13 – Policy Relevance

Effectiveness Research

03a - Tues, Sep 27 – Effectiveness Research
03b - Tues, Sep 27 – Comparative Effectiveness Research and Patient-Centered Outcomes Research


Patient-Centered Outcome Research Institute (PCORI). [Find It]


Implementation Research

04a - Tues, Oct 4 – Implementation Research with Healthcare Systems and Providers


04b - Tues, Oct 4 – Implementation Research with Patients


05a - Tues, Oct 11 – Implementation Research in Community Settings (Guest Speaker)

Dzewaltowski et al. (2004). Behavior change intervention research in community settings: how generalizable are the results? Health Promot Int. 19(2):235-245. [Find It] [PubMed]

05b - Tues, Oct 11 – Group Work

Second half of class available for Worksheet 1 presentation group work.

06a - Tues, Oct 18 – Community-based Participatory Research (Guest Speaker)

06b - Tues, Oct 18 - Group Work
Second half of class available for Worksheet 1 presentation group work.

Tues, Oct 25 - Worksheet 1 Presentations
15-minute presentation with 5 minutes for Q&A, 1 minute for transition; complete peer evaluation forms.

Research Methods

07a - Tues, Nov 1 - Methods for Experimental and Quasi-experimental Designs
OPTIONAL - Mason et al. (2001). When is it cost-effective to change the behavior of health professionals? JAMA. 286(23):2988-2992. [Find It] [PubMed]

07b - Tues, Nov 1 - Methods for Community Intervention Trials

08a - Tues, Nov 8 - Methods for Qualitative Data Collection

08b - Tues, Nov 8 - Methods for Qualitative Data Analysis
9a - Tues, Nov 15 - Human Subjects Research


OPTIONAL - Collaborative Institutional Training Initiative (CITI) training:
https://my.gradsch.wisc.edu/citi/index.php

9b - Tues, Nov 15 - HIPAA Regulations


Communicating the Results

10a - Tues, Nov 22 - Communicating with Researchers


10b - Tues, Nov 22 - Communicating with Practitioners and Partners


Partnering to Implement Change

11a - Tues, Nov 29 - Action Research


[Note: additional information about CBPR can be obtained from a great University of Washington website and from an AHRQ Evidence Report (#99; Contract No. 290-02-0016) prepared in 2004.]


11b - Tues, Nov 29 - Quality Improvement Research


Tues, Dec 6 and 13 - Final Presentations

25-minute presentation with 5 minutes for Q&A, 1 minute for transition; complete peer evaluation forms.