Introduction to Type 2 Translational Research
PH 650

Fall 2010
Tuesday, 4:45 p.m. - 7:15 p.m.
Room 1220 HSLC Building (750 Highland Ave.)
University of Wisconsin-Madison

Course Organizer: Maureen Smith, MD, PhD
Office address: Rm. 210-31 UBOB (800 University Bay Dr., Madison, WI)
Office phone: 608-262-4802
Office fax: 888-263-2864
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.
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 class, 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.

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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.

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Course Timeline Overview

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<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Tues., Sept 7</td>
<td>No class. Student Survey (available on Learn@UW) is due in Dropbox on Learn@UW by 4:45 p.m.</td>
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<tr>
<td>Fri., Sept. 10</td>
<td>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>Tues., Sept 14</td>
<td>First class meeting</td>
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<tr>
<td>Wed., Sept 15</td>
<td>Each group submits a PDF of their article for Assignment 1 to the Dropbox on Learn@UW by 3 p.m.</td>
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Fri., Sept 17  Dr. Smith approves article or provides feedback on obtaining a different article.

Tue., Oct 19  Second half of class allotted for groupwork

Wed., Oct 20  Each group submits Worksheet 1 to the Dropbox on Learn@UW by 9 p.m.

Fri., Oct 22  Dr. Smith provides feedback on Worksheet 1

Tues., Oct 26  **Mid-semester 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 24  Each group posts Questions 1 and 2 of Worksheet 2 in the Dropbox on Learn@UW by 9 p.m.

Mon., Nov 29  Dr. Smith provides feedback on Worksheet 2, Questions 1 and 2.

Wed., Dec 8  Each group posts Worksheet 2 in the Dropbox on Learn@UW by 9 p.m.

Fri., Dec 10  Dr. Smith provides feedback on Worksheet 2.

Tues., Dec 14  **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 14 - Introduction to Translational Research**


**01b - Tues, Sep 14 - Type 2 Translational Research - How?**


**Developing the Research Question**

**02a - Tues, Sep 21 - Setting Priorities**


**02b - Tues, Sep 21 - Policy Relevance**


**Research Strategies and Methods - Effectiveness Research**

**03a - Tues, Sep 28 - Effectiveness Research**


03b - Tues, Sep 28 – IOM Priorities for Comparative Effectiveness Research


04a - Tues, Oct 5 – Methods for Effectiveness Research - Introduction


04b - Tues, Oct 5 – Methods for Effectiveness Research - State of the Art


Research Strategies – Implementation Research

05a - Tues, Oct 12 – Implementation Research – Healthcare Providers


05b - Tues, Oct 12 – Implementation Research – Patients


06a - Tues, Oct 19 – Implementation Research – System Redesign


06b - Tues, Oct 19 – Implementation Research – Community Settings

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]
15 minute presentation with 5 minutes for Q&A; complete peer evaluation forms.

**Research Methods - Implementation Research**

**07a - Tues, Nov 2 - Methods for Implementation Research - Experimental and Quasi-experimental**


**07b - Tues, Nov 2 - Methods for Implementation Research - Community Intervention Trials**


**08a - Tues, Nov 9 - Methods for Implementation Research - Qualitative Data Collection**


**08b - Tues, Nov 9 - Methods for Implementation Research - Qualitative Data Analysis**


**Research Strategies and Methods - Policy Research**

**09a - Tues, Nov 16 - Policy Research**


**09b - Tues, Nov 16 - Methods for Policy Research**


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]
10a - Tues, Nov 23 - Human Subjects Research


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

10b - Tues, Nov 23 - HIPAA Regulations


11a - Tues, Nov 30 - Communicating with Researchers


11b - Tues, Nov 30 - Communicating with Practitioners and Partners


Partnering to Implement Change

12a - Tues, Dec 7 - 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.]


12b - Tues, Dec 7 - Quality Improvement Research


OPTIONAL - Academy of Post Graduate Health Care Education HISC. Healthcare Improvement Skills Center. [http://www.improvementskills.org](http://www.improvementskills.org)


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Tues, Dec 14, 4:45-7:15 p.m. - Final Presentations

Ver 4 - 10-28-10