Selecting Your Project

Step One: Explore Needs

- Where to start?
  - A good idea will not be successful if it is not needed
    - On the other hand, many good ideas may not interest you
  - Take the time to explore areas you care about and delve into subjects current literature does not adequately cover
  - There is a strong need for sound, evidence-based literature documenting the benefit that pharmacists provide
    - This evidence is key in expanding pharmacy services and bolstering efforts to get paid for them

Step One: Explore Needs

- Consider you interest areas and need for research in those areas
  - Pick a project that fits into your schedule and job responsibilities
  - Design can vary (outcomes-based research, innovative tool for practice)
  - Projects can vary in focus (clinical, management)
  - Putting everything down on paper will better allow you to evaluate your ideas

Step One: Explore Needs (Continued)

- Talk with your mentor, preceptor, residency director, and/or project advisor about the following:
  - Patient mix: Does your practice care for the patient this study needs enrolled?
  - Disease States most common in your population
  - Unmet needs at the site: what needs to be implemented/needs greater funding support
  - Opportunities to collaborate to expand external validity

Opportunities to Collaborate with a Third Party

- Receiving grants for original research projects
  - Found out if any foundations or other organizations are offering grants related to your areas of interest
  - Companies may have a regional contact person who coordinates research efforts and can tell you of opportunities
- Conducting pilot projects
  - Is there an organization that you have been wanting to collaborate but need to prove benefit?
  - Are they willing to financially support a small sample population as a trial?

Opportunities to Collaborate with a Third Party

- Helping College faculty with research
  - Explore the faculty's research interest and see if you can collaborate on a an existing project or can initiate a new project in your area of interest
- Investigating a Research Network
  - Can you collaborate with additional pharmacies, clinics, or different practice sites to enhance the impact, validity, or power of your study

Step Two: Choose Your Top Five Ideas

- Do any topics emerge as particularly promising?
  - Rank your ideas
    - Which ones attract you the most?
    - Which ones are truly workable?
    - What fit's with your company's mission and vision?
    - Where are there opportunities for funding?
    - What would provide the greatest benefit to your practice site?

Step Two: Choose Your Top Five Ideas (Continued)

- Place topics lower on the list when:
  - The condition/topic that interests you is not significantly present in your patient population
  - The time frame necessary to develop and carry out the project is too long
  - The resources to fund your project are not justifiable
  - The requirements for collaboration are too cumbersome
  - The resources are not available to continue your project in the long-term

Step Three: Review the Literature

- Define the research question
  - To research the literature, you first must frame your topic as a question
  - i.e., Does community pharmacist involvement in depression management and screenings improve depression management?
    - Must develop objectives to measure question
- Look for previous research
  - Determine whether the questions has been reasonably answered before conducting a comprehensive literature review
  - What research has been done?
  - How closely does the research come to answering the question at hand?

Step Three: Review the Literature (Continued)

- Reviewing literature is an invaluable step in selecting a project.
  - It allows you to identify research that has already been done in areas you are interested in pursuing
  - Reading about previous projects that have already been done can help you find a new angle or direction
    - Can trigger a new idea or different perspective
  - If your topic has been researched, you may be able to take the program and improve it or pull out a piece to research more fully
  - Reading about projects that have already been done can trigger new ideas or give you a different way of looking at things.

Step Three: Review the Literature (Continued)

- Break out concepts in the topic to aid your search
  - i.e., key concepts in the question stated above include "community pharmacist," "depression screening," "PHQ-9," and "depression outcomes"
  - Can combine concepts in search strategy
- Search biomedical databases
  - Should conduct a literature search using multiple engines
  - Keep a record of search engines, search terms, dates, and resources collected
  - You can limit the search by including additional search concepts (i.e., SSRIs) or by adding a date limitation.

Step Three: Review the Literature (Continued)

- Check the World Wide Web
  - Is the material referenced, and is it consistent with other sources of biomedical information?
  - Good sources may be government sites as well as those maintained by national health care-related organizations
    - Ex: CDC, WHO, ADA
- Can utilize GoogleScholar
- Obtain and review promising articles
  - Read through the articles that seem most relevant
  - Check each article's reference list for additional sources

Biomedical Databases Useful in Literature Searches

Medline

The Medline database, often known as the "gold standard" of biomedical databases, is a service of the National Library of Medicine. It is available free over the Internet via PubMed, a user-friendly services that gives helpful search tips and ways to define search terms.

www.ncbi.nlm.nih.gov/entrez/query.fcgi

Current Contents Connect

Updated daily, this searchable database provides tables of contents and records from approximately 7,500 journals and 2,000 books.

www.isinet.com/products/cap/ccc

Biomedical Databases Useful in Literature Searches

International Pharmaceutical Abstracts

This is touted as the world's most comprehensive pharmacy and pharmaceutical science database.

http://thomsonreuters.com/en/products-services/scholarly-scientific-research.html

The Cochrane Library

This collection of seven databases provides information and evidence to support health care decisions and to inform people receiving care. The popular Cochrane Database of Systematic Reviews (CDSR) contains reviews of health care interventions based on the highest level of evidence and relevance.

www.cochrane.org

Helpful Health Care Internet Sites

Entity	Website
Agency for Healthcare Research and Quality	www.ahrq.gov
Alzheimer's Association	www.alz.org
American Cancer Society	www.cancer.org
American Diabetes Association	www.diabetes.org
American Heart Association	www.americanheart.org
American Lung Association	www.lungusa.org
Arthritis Foundation	www.arthritis.org
Asthma & Allergy Foundation of America	www.aafa.org
Centers for Disease Control & Prevention	www.cdc.gov
Center for Drug Evaluation and Research	www.fda.gov/cder
Food and Drug Administration	www.fda.gov
National Institutes of Health	www.nih.gov
National Osteoporosis Foundation	www.nof.gov

Step Four: Choose a Final Topic

- Once you have narrowed your choices to feasible topics, sit down to discuss with your mentor, preceptor, residency director and/or project advisor
- Look at each idea and determine how if fits your role and site needs
- List pros and cons for each choice
- Review information gathered from the literature review
- Using these tools, you should be able to pinpoint a final project idea that is specific, unique, and feasible
- Pick something you are passionate about!

Step Four: Choose a Final Topic (Continued)

- Key matters to consider as you finalize your topic:
  - Can you complete this project in the timeframe you have available?
  - Who will complete the project if you cannot?
  - Will this project help advance the profession?
  - Does this project match your interests and your institution's needs?
  - Are resources available for the project to be successful?
  - Does the project need external funding?
  - Do you need additional training to be successful in designing or completing this project?
  - Who will complete your statistical design and data analysis?

Conclusion

- Choosing a topic is a process
- Breaking the topic selection process into easy, identifiable steps makes it manageable
- Each of the four steps discussed is important and taking shortcuts may cause a pitfall to occur
- Your research question needs to be thoroughly researched, well thought-out, and has a reason to be conducted
- By taking the time to brainstorm, research, plan, analyze, and discuss before you settle on a final topic, you will find you've established a foundation for a successful project