The Office of Academic Affairs and the Provost’s Office present

2014-2015 Teaching Academy

All Rush University Faculty
are invited to the
2014-15 Teaching Academy!
Presentations will be held every 3rd Tuesday of the month from
12:00 – 1:00 p.m. in room 994 AAC.
Lunch will be provided.

Teaching Academy Workshops/Seminar Series
(Tentative Schedule and Topics)

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Please send your RSVP and/or questions to Stephanie Sacriste, Department Manager, Office of Academic Affairs at Academic_Affairs@rush.edu or (312) 563-6395.
How To Be An Effective Manuscript Reviewer
Anne-Marie Malfait MD PhD

Mary Cassatt
Disclosures

Associate Editor *Arthritis and Rheumatology* (Arthritis and Rheumatism)
The official journal of the American College of Rheumatology
(the #2 ranked journal in Rheumatology)
Approx. 50 manuscripts/yr

Associate Editor *Osteoarthritis and Cartilage*
The official journal of OARSI
(the #1 ranked journal in Orthopaedic Research)
Approx. 52 manuscripts/yr

Peer reviewer: approx. 1 paper/month

Authored 60 peer-reviewed papers – reply to reviewers
Learning Objectives

• Define and describe the scientific peer review process

• List reasons why you should peer review manuscripts

• Identify guidelines and resources that will help you as a reviewer (and as an author)

• Describe the general approach to effective peer review
What is Peer Review?

A process by which a scholarly work (such as a paper or a research proposal) is checked by a group of experts in the same field to make sure it meets the necessary standards before it is published or accepted (Merriam-Webster).
Diagram Of A Typical Peer Review Process

Editor-in-Chief
(Deputy Editors)
Associate Editors
Why you should review research articles

It will help you:

• organize your own ability to think and analyze
• develop your own writing of papers and grants
• learn more about your area of interest
• broaden your scope
• supply service to your colleagues
• gain recognition from editors
Should you accept an invitation to review?

• Is the requesting journal relevant to your work?

• Review abstract: Do you have expertise needed?
  
  note: sometimes expertise on one aspect of the work is needed – this may be reflected in the invitation letter

• Do you have time now to perform a careful and thoughtful review?

• Do you have time now to do TIMELY review?
  
  Most journals grant 2 or 3 weeks; Average time is 24 days (JAMA 1998)

If you accept, then do it. If you need an extension, contact the editorial office.
How to review a research article

- **READ** Guidelines for authors
- Structured abstract
- Study design:
  - Clinical trials: CONSORT
    Transparent reporting of clinical trials
  - Observational studies: STROBE
    Strengthening the reporting of observational studies in epidemiology
  - Meta-analyses, systematic reviews: PRISMA
    Transparent reporting of systematic reviews and meta-analyses
  - Pre-clinical and basic studies: ARRIVE
    [http://www.nc3rs.org.uk/page.asp?id=1357](http://www.nc3rs.org.uk/page.asp?id=1357)
    Animal Research: Reporting of *In Vivo* Experiments

All these websites publish guidelines and a checklist that are helpful to authors and reviewers. Some journals demand that authors submit a checklist.
How to review a research article
General outline

1. Specific questions (Yes/No or a Scale)
2. Confidential comments to the editor
3. Comments to the authors
4. Recommendation
How to write an effective review
1. Specific questions

Often on a scale

Example:
Originality and novelty of study[1-5]
Scientific quality of study[1-5]
Design of study [1-5]
Interpretation and discussion of literature and own results[1-5]
Validity of conclusions [1-5]
Clarity of writing and English language quality[1-5]
Overall manuscript quality rating Best (1) to Worst (10)

Example:
Subject matter and interest: 1-5
Originality of ideas and conclusions: 1-5
Experimental design: 1-5
Quality of methods and data: 1-5
Interpretation, brevity and clarity: 1-5

These questions frequently remain unanswered. They are, however, very helpful to the editors.
How to write an effective review

2. Confidential Comments To Editors

• Brief summary of good points and problems
• Assessment of whether problems are fixable with revision or fatal and unlikely to be fixed
• Comment whether or not the paper, even if revised, is suitable for publication in the journal (and why)
• Impact
  • ? game-changer
  • ? incremental
  • ? derivative
  • ? no significant addition to literature

• Let the editor know if a specific aspect of the manuscript is outside your expertise. E.g. biostatistics.
How to write an effective review
2. Confidential Comments To Editors

• Be passionate about papers you like
• A single enthusiastic, persuasive reviewer can overcome two negative reviewers and even skeptical editors
• This is true especially if you are able to say why you like the study, what paradigm it overturns, how it advances the field or could change treatment, etc.
• Most journals seek three outside referees: It is uncommon to have all three reviewers agree that a given paper is good or bad
How to be an effective reviewer

3. Template of “comments to authors”

Break your comments into sections

1) Brief summary (2-3 lines)

2) Major comments
   a) General comments (often contains the major reason for poor rating). *E.g.* “Well conducted *in vitro* studies but lack of *in vivo* validation dampens my enthusiasm”. “May be better suited for a specialized journal”
   b) Major comments broken down in
      Introduction - *e.g.* misrepresentation of the State-of-the-Art
      Methods - *e.g.* lack of appropriate control
      Results - *e.g.* poorly presented, no quantification of data
      Discussion - *e.g.* conclusion is not supported by experiments shown (over-interpreted)

3) Minor comments
<table>
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<tr>
<td><strong>Title</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Abstract</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>INTRODUCTION</strong></td>
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</tbody>
</table>
| **Background** | 3 | a. Include sufficient scientific background (including relevant references to previous work) to understand the motivation and context for this study, and explain the experimental approach and rationale.  
b. Explain how and why the animal species and model being used can add scientific value. |
| **Objectives** | 4 | Clearly describe the primary and any secondary objectives of the study, or specific hypotheses being tested. |
| **METHODS** | | |
| **Ethical statement** | 5 | Indicate the nature of the ethical review permissions, relevant licences and specific guidelines for the care and use of animals that cover the research. |
| **Study design** | 6 | For each experiment, give key details of the study design including:  
a. The number of experimental and control groups.  
b. Any steps taken to minimize the effects of subjective bias when assessing animals to treatment (e.g., randomization procedures and when assessing results e.g., if done, describe who was blinded and when).  
c. The experimental unit (e.g., a single animal or group of animals).  
A time-line diagram or flow chart can be useful to illustrate how complex study designs were carried out. |
| **Experimental procedures** | 7 | For each experiment and each experimental group, including controls, provide precise details of all procedures carried out.  
For example:  
a. How (e.g., drug formulation and dose, etc) and route of administration, anaesthesia and anaesthesia used (including monitoring), surgical procedure, method of euthanasia. Provide details of any specialist equipment used, including suppliers.  
b. When (e.g., time of day).  
c. Where (e.g., home cage, laboratory, water maze).  
d. Why (e.g., rationale for choice of specific anaesthetic, route of administration, drug dosages). |
| **Experimental animals** | 8 | a. Provide details of the animals used, including species, strain, sex, developmental stage (e.g., mean or median age plus age range and weight (e.g., mean or median weight plus weight range)).  
b. Provide other relevant information such as the source of animals, international strain numbers, genotype, health status, gender, strain, strain, number of cages, etc. |
| **RESULTS** | | |
| **Baseline data** | 14 | For each experimental group, report relevant characteristics and health status of animals (e.g., weight, locomotor status, drug or test naive) prior to treatment or testing (this information can often be tabulated). |
| **Numbers analysed** | 15 | a. Report the number of animals in each group included in each analysis. Report absolute numbers (e.g., 10/20, not 50%).  
b. If any animals or data were not included in the analysis, explain why. |
| **Outcomes and estimation** | 10 | Report the results for each analysis carried out, with a measure of precision (e.g., standard error or confidence interval). |
| **Adverse events** | 17 | a. Give details of all important adverse events in each experimental group.  
b. Describe any modifications to the experimental protocols made to reduce adverse events. |
| **DISCUSSION** | | |
| **Comparison/analytical implications** | 15 | a. Interpret the results, taking into account the study objectives and hypotheses, current theory and other relevant studies in the literature.  
b. Comment on the study limitations, including any potential sources of bias, any limitations of the animal model, and the implications associated with the results.  
c. Describe any implications of your experimental methods or findings for the replacement, refinement or reduction (the 3Rs) of the use of animals in research. |
| **Generalisability/translation** | 19 | Comment on whether, and how, the findings of this study are likely to translate to other species or systems, including any reference to human biology. |
| **Funding** | 20 | List all funding sources (including grant number) and the role of the funder(s) in the study. |
How to write an effective review
3. Comments To Authors

• Constructive sentence or two overview
  – ... clearly written, well-designed...
  – enthusiasm diminished by... or
  – several issues need clarification...or
  – paper could be improved by ..... 

• Supportive, non-inflammatory tone

• Review each section of paper individually

• Review tables and figures

• DO not state whether paper should be accepted or not.
How to be an effective reviewer

• Within the minor comments section of the review, most referees include mention of typographical mistakes and request minor changes to the text and figures, but you can relegate some of the experimental requests to this section as well, if you think that they are not crucial to the overall conclusions

• You should obviously correct any factually incorrect statements, but offer — don’t demand — suggestions about interpretation of data
How to be an effective reviewer

• Be dispassionate: strident reviews aggravate authors and make editors wonder whether you have ulterior motives

• Imagine how you would feel as an author if you received the comments you were writing as a reviewer

• If you just can’t resist, at least confine your wrath to the “confidential comments to editors” section
How to be an effective reviewer

• The key to any review is to understand what is being asked? Do the experiments (and approach) adequately test the hypothesis? Do the results justify the conclusions or model? Are the studies convincing?

• If yes, say so. If no, state as clearly as possible what aspects are not convincing
How to be an effective reviewer

• Provide references to back up your points, unless your assertion is patently obvious
• It greatly helps editors and the authors
How to be an effective reviewer

• The key is to evaluate whether the experiments adequately address the hypothesis and support the conclusions.

• Manuscripts generally propose a hypothesis and then test this experimentally; the results constitute an argument, usually in support of, although sometimes refuting, a hypothesis.
How to be an effective reviewer

• Don’t trash the paper to the editors in the confidential comments and say only wonderful things to the authors; this occurs often and only confuses authors
How to be an effective reviewer

• Speak plainly, but dispassionately — in the same tone as you would in writing a manuscript
• Do not use all caps, exclamation points etc.
How to write an effective review

4. Recommendation

• Minor revision
  – very few issues to address

• Major revision
  – fixable issues
  – major and minor problems
  – ? re-analysis of data needed

• Reject
  – unlikely to be fixable problems
  – volume of issues to be addressed

Not all journals give you the option to make a recommendation
How to be an effective reviewer

• Consider carefully your overall recommendation

• Editors want to know whether the paper is interesting enough to publish even if it is faultless scientifically — or, what would make the paper good enough, even if all i’s are not dotted but the concept is intriguing and scientifically important

• In many ways, this is the most important question you have to address and where the editors depend on you the most
Reviewing a Revision

• Please accept to review a revision
• Response to all reviewers
  – response to critique
  – action or inaction taken in response to critique
• Marked copy reflective of response
• Disposition:
  – accept: All critiques addressed appropriately.
  – further revision: Fixable issues remain.
  – reject: Significant issues remain or inadequate response to initial review.
When reviewing a revision

• Don’t shift the goalposts!
• On review of a revision, do not raise new issues unless they occur as a result of new data added in response to the original review; nothing aggravates authors more than this
• While most authors will be responsive to the critiques, not all are, and you should evaluate this in a re-review
How to be an effective reviewer

• If you agree to review a paper, review it
• Shirking responsibility happens much more often than you think
How to be an effective reviewer

• Keep the manuscript confidential

• If you ask for help (e.g. from a postdoctoral fellow), mention their name to the editors.
Reviewer anonymity

• More and more journals give you the option to add your name to the review – this is a personal choice

• Anonymous review does not mean you are anonymous to the editors. Many journals rate their reviewers.

Note: you can ask editors for feedback on your review. Many journals send all reviews to all reviewers.
How to be an effective reviewer

• Déjà vu?

• Should you agree to review a manuscript if you have previously reviewed it for another journal? Is this a case of double jeopardy?

• You should declare this in response to the invitation and let the editors decide
How to be an effective reviewer

• Referees should recuse themselves as reviewers if they collaborate with the authors or if there is a material conflict — financial or otherwise

• Inform the editors of any potential conflicts that might be perceived as relevant as early as possible following invitation to review, and we will determine how to proceed

• Disclosing a potential conflict does not invalidate the comments of a referee, it provides the editors with additional information relevant to the review

• The editors rely on referees to be transparent
How to be an effective reviewer

• The editors’ decision does not rest on a referee majority: one well-worded, persuasive review can overrule others that are not substantive or constructive

• The editors collectively serve as the last referee — the ultimate arbiters who have to be convinced of the merits of the study — this is where the authors’ cover letter and the referees’ first paragraphs/confidential comments are of great help

• The editor makes the decisions, overrules the referees when their demands are unreasonable, and edits comments that are mean for the sake of being mean

• The toughest reviews often come from referees suggested by the authors
A scientific journal has retracted 60 papers linked to a researcher in Taiwan, accusing him of “perverting the peer-review process” by creating fraudulent online accounts to judge the papers favorably and help get them published.

Sage Publications, publisher of The Journal of Vibration and Control, in which the papers appeared over the last four years, said the researcher, Chen-Yuan Chen, had established a “peer-review and citation ring” consisting of fake scientists as well as real ones whose identities he had assumed. It said that in at least one case, Mr. Chen, who also uses the first name Peter, reviewed his own paper using one of the aliases.

In all, Mr. Chen, an associate professor of computer science who resigned in February from the National Taiwan University of Education amid an investigation, appears to have created 130 email accounts that were used in reviewing the papers. A spokeswoman for the publisher said it had contacted all the accounts but received no replies.
With thanks to:

Stefan Lohmander
Editor-in-Chief
Osteoarthritis and Cartilage

Joanne Jordan
Deputy Editor
Osteoarthritis and Cartilage
Resources


- “How to Peer review a manuscript”
  David Moher and Alejandro Jadad - BMJ
12: How to peer review a manuscript

DAVID MOHER, ALEJANDRO R JADAD

Peer review is an activity central to increasing the quality of communication in the health sciences, but almost no formal or standardised training for peer reviewers exists. In this chapter we provide a series of practical tips on how to peer review a manuscript and write the report based on the evidence from published research that is summarised elsewhere in this book, and on our combined experience of reviewing for approximately 30 journals. Overall, we believe that the best way to increase the quality of peer reviewing would be to conduct such reviews based on up to date evidence – an approach we call evidence-based peer review.

In theory, the peer review process exists to provide feedback to authors and editors of journals, and to ensure that readers find in journals information that will help them make better decisions. In practice, however, peer review is a poorly understood process that is becoming the focus of intense scrutiny and controversy. The controversy around peer review has intensified recently with the speed with which the internet is developing and the challenges that this new powerful medium is creating for the traditional paper-based peer review system. The peer reviewer, the person who assesses the merits of a manuscript submitted for publication in a journal, is at the heart of the controversy.

In this chapter, we will focus on how to peer review a submitted manuscript. The chapter is divided into two sections. In the first section, we will describe some generic practical tips that a novice peer reviewer should consider while evaluating an article for publication in a journal. The second section will highlight some basic aspects of the “code of conduct” that peer reviewers should follow when submitting a review to journal editors and authors. Our target audience is particularly those peer reviewers who have limited experience in reviewing manuscripts for publication in biomedical journals, or individuals who are thinking of becoming peer reviewers. Many of the points discussed could also be relevant to others involved in the peer review process (authors and editors).
How to peer review a manuscript: practical tips

As shown elsewhere in this book, there is little evidence to guide peer reviewers on how to peer review an article. Therefore, most of the tips described below are the result of our combined experience as peer reviewers for some 30 journals. We do not pretend in this to be comprehensive, but aim to share our experience, hoping that the strategies that work for us will also benefit others. Our main tips are the following.

Do not rush to accept an invitation to peer review a manuscript

Typically, if a journal considers you as a prospective peer reviewer, someone from the editorial office will contact you by telephone, fax, or email. The person will ask whether you would be prepared to review a manuscript for them and whether it could be completed within a specified period, usually three weeks to a month. You ask the editorial office of the journal to send additional information, ideally including the abstract of the manuscript, and to allow you a couple of days to make a decision. In other cases, you may simply receive the whole manuscript with a cover letter from the journal editor or an editorial assistant, asking the same question.

In most cases, the journal editors want you to make a decision quickly. For a novice reviewer, this is likely to be a very tempting opportunity that may appear impossible to reject. We recommend that at this point you judge whether you have the time to deliver the review. Similarly, you should ask yourself whether you are familiar enough with the content area or the methods described in the manuscript to produce a good review. If there is some hesitation at this point, we recommend that your answer be no, regardless of how difficult it may be to reject the opportunity. Another important issue is potential conflicts of interest. If there is any doubt about this, we recommend that you contact the journal editor to discuss the specific details and obtain advice.

Protect enough time to ensure that the deadline is met

If you accept to review the manuscript, we recommend that you protect enough time to ensure that the deadline is met. Peer reviewers’ work takes time. Yankauer’s surveyed 276 reviewers of the American Journal of Public Health by questionnaire, obtaining replies with usable information from 85% (n = 234). Reviewers reviewed for 3-6 journals (median) and spent 2.4 hours (weighted median) completing a review, on average. Donated time amounted to a total of 3360 hours for all respondents. We expect that a novice peer reviewer
would take, on average, 8–12 hours to review a manuscript and produce a report for the journal.

**Remember that your only source of information will be the report you receive from the journal**

The only way that you, and any peer reviewer, can gauge any aspect of a biomedical study is by examining its written report, that is to say, the submitted manuscript. You will have no opportunity to solicit additional information from the authors. This has some intrinsic problems. It is possible that a study with many biases can be well reported. Conversely, it is also possible that a well designed and executed study is poorly reported. The only evidence that exists on this comes from examining reports of randomised controlled trials of breast cancer; it suggests that only minimal differences can be found between the events that occurred during the trial and what appears in the report.4

**Follow a systematic process to review the manuscript**

There are no validated instruments, or at least widely accepted ones, that could help you do a comprehensive review of a manuscript. Most journals include forms or instructions with the manuscript to guide the reviewer during the review process, but these vary widely from journal to journal. In our experience, most of these forms include, to a greater or lesser extent, issues that refer to the importance of the research question, the originality of the work, its strengths and weaknesses (content, methodological, ethical), the presentation/clarity of the paper, the interpretation of results, future directions, and suitability for publication. Some of these issues are easier to address than others. Judging the importance of the research question as well as the presentation/quality of the paper, for instance, is usually very subjective.

Although you could follow a subjective approach to assess the originality of the work, its strengths and weaknesses, and the interpretation of the results, you should strive to make the process as objective as possible. There are several tools that could help you achieve this goal. For instance, you could improve your assessment of the originality of a piece of work by searching for systematic reviews on the same topic. If the manuscript refers to healthcare interventions, the Cochrane Library is an ideal resource.5 To assess the general quality of a report, you could use a 34-item instrument that was developed specifically to assess “medical research reports”.6 The items in this instrument are grouped following the typical format of a report and include 5-point scales to score them. You could also use tools that have been developed to assess specific types of manuscripts. For instance, if the manuscript describes a randomised controlled trial, you may find
the CONSORT statement very useful (see Chapter 13). Similarly, if the manuscript describes a systematic review, you could use a validated index to judge its methodological rigour. Similar tools are likely to emerge to assess other types of studies. In sum, you should make every effort to follow a systematic process to reach your conclusions, trying to support them with the best available evidence. This conscientious, explicit, and systematic approach, using evidence to guide the peer review process, could be called evidence-based peer review, as it is analogous to evidence-based decision making.

Communicating your comments to editors and authors: writing your report

Once you have completed your review, the next task should be to write a report that summarises your comments about the manuscript. The report should be aimed at helping editors to judge what to do with the manuscript and helping authors to improve their work. The following is a series of practical steps that may help you achieve this goal.

Follow the instructions of the journal

Most journals will include forms with some questions about the adequacy of the manuscript and its suitability for publication. You should try to answer them clearly in your report, even though you may disagree with their relevance or importance. If you do, you should share your concerns with the editor.

Most journals include one page for you to write general and specific comments for the editors and one or more pages to describe, separately, your comments to the authors. Separating your comments into general and specific is usually very helpful. Setting out the comments following the sections of the manuscript, labelling them by page, paragraph, and line, usually helps editors and authors locate the target for your comments easily. Make sure that you use clear, easy to understand language, and if necessary, examples to clarify points. We strongly encourage you to refrain from submitting handwritten notes as part of your review. These comments make reviews difficult to read and often result in important comments never reaching and/or being understood by authors.

Summarise the manuscript in a short paragraph before you detail your comments

As we described above, there is evidence that authors of manuscripts accepted for publication pending revisions disagree with
reviewer comments about a quarter of the time. Perhaps this is due, in part, to the fact that reviewers have not understood the manuscript they are reviewing. By providing a short summary of the work, you will not only help the editor remember the essence of the work you reviewed, but also provide the elements for editors and authors to judge whether you understood it or not.


**Always provide constructive criticism**

We encourage you to be constructive in any feedback you provide to authors. Remember that the majority of authors spend considerable time drafting a manuscript and then revising it many times before it is submitted for publication. There is little to be gained by providing destructive criticism. If you are reviewing a manuscript for a journal with an international authorship, you should be sensitive to those authors whose first language is not the language in which the report was written. You should reserve comments about language, grammar, and spelling to be made in your comments to the editor, not directly to the authors.

**Do not use your review as an opportunity for revenge**

An effective peer review is one in which the reviewer's comments are focused solely on the manuscript and not on the individuals who wrote it. The majority of reviewers associated with biomedical journals do not receive masked copies of the manuscripts they review. This means that you will know whose work you are reviewing, but the authors will not know that you reviewed their work, unless you tell them by signing your review. You should not take advantage of this situation to make disparaging comments about the authors of the manuscript. Such comments are inappropriate and discouraged by everybody involved in peer review. Editors keep a vigilant eye out for these comments to ensure they are not communicated to the authors.

**Describe any conflict of interest**

Even if you have communicated your concerns to the editor about potential conflict of interest and received “clearance”, you should mention this in your comments to the editor.

**Acknowledge any help received during the reviewing process**

You should report whether you completed the review alone or asked someone else for help (for example, a graduate student or a colleague). The names of anyone who has contributed to the review should be listed.
**Do not go out of your depth**

In most circumstances you will be asked to review a manuscript because the corresponding editor perceives you as having expert knowledge in a particular area, such as content, methodology, or statistics. Be sure that you understand the type of advice the editor needs from you and do not feel that you need to cover all possible aspects of the work. Going beyond the boundaries of your knowledge or expertise could do more harm than good, not only to the recipients of your report, but also to your own reputation and credibility.

**Label the source of each of your comments explicitly**

You should be very explicit in your report, labelling your comments either as reflecting your own opinion or as being supported by data.

**Decide whether to sign the review or not**

We are closer to being able to make an evidenced-based decision about signing your peer review. As we mentioned, earlier in the chapter, there appears to be almost no difference in the quality of peer reviews, and the time taken to complete them, whether they are open or anonymous. Importantly, recommendations about the merits of publication are similar, regardless of whether peer reviewers are identified to authors or not. Van Rooyen and colleagues found that open reviewers, compared to those reviewers whose identity was unknown to the authors, opted for a similar rate of rejection (40% v 48%).\(^1\) Similar results have been reported elsewhere.\(^1\) In addition fewer than 10% of reviewers refused to sign their reports, suggesting that more openness is now feasible.

In a new move the *British Medical Journal* has decided to implement open peer review.\(^1\) Among the reasons given for this move were the need to promote academic credit for completing peer reviews and the accountability of the peer reviewer. We are encouraged by this move and hope that other journals will follow this lead.

**Send your comments within the deadline given by the journal**

There is nothing more discouraging for authors than to wait, often anxiously, for months to receive written feedback from editors and peer reviewers. Recent evidence from an examination of over 1000 peer reviews\(^1\) indicates that the average time to complete a peer review was 24 days (95% CI: 23.5 to 25.1). As we said above, if you know that you cannot complete a review within the time period requested, you should decline the invitation to review it.
Alternatively, if you have already agreed to complete the review but circumstances suggest that you will require additional time, you should communicate this information to the journal immediately.

Journals could facilitate more efficient peer review if they called reviewers to ascertain their interest and time availability to complete a review rather than simply mailing the manuscript, automatically expecting an affirmative answer. This suggestion is likely to be easier for the larger journals that have full time editorial staff and appropriate financial resources.

**Keep the content of the manuscript confidential**

You should maintain the same ethical standards you would like others to abide by when reviewing your own work. You should never disclose or use, in any way, directly or otherwise, the contents of the manuscript you are reviewing. On the other hand, you should be aware of the potential for “subliminal integration”, that is, subconsciously using information contained in a manuscript you have reviewed. Although this is not the same as plagiarism, which is inappropriate under any circumstance, it often can be very close. Reviewing manuscripts is likely to stimulate thoughts in the minds of many reviewers. To what extent these ideas stimulate your own is an uncertain issue. Many journals, in their covering letter, remind peer reviewers that they have received a privileged communication. You should not try to contact the authors of the manuscript for any reason while the manuscript is still under review. If you have doubts, contact the editorial office of the journal, where you will usually get helpful advice.

**Ask for feedback from the journal**

Some journals will send you the comments made by other peer reviewers about the same manuscript you have reviewed. By comparing your comments with those by others you could, indirectly, assess your own performance. However, this is not the same as receiving direct feedback about the quality of your own review. We would encourage you to ask the journal editor for feedback about your work. If you receive it, you should accept the comments regardless of their nature, and act upon them. That will only make you better next time.

**References**

Peer review is the system used to assess the quality of scientific research before it is published. Independent researchers in the same field scrutinise research papers for validity, significance and originality to help editors assess whether research papers should be published in their journal.
Peer review now results in over 1.5 million scholarly articles published each year and is fundamental to the integration of new research findings in hundreds of fields of inquiry. For scientific knowledge to progress scientists need to share their research findings with other scientists and this is done through publishing in peer reviewed scientific journals. Peer review is also the tool used for reviewing grant proposals for research funding.

Peer review provides a system to select which research should be brought to the attention of other researchers. It also gives authors feedback to improve the quality of their research papers before publication. The peer review system judges the validity, significance and originality of the work, rather than who has done it. Because it indicates that research has been scrutinised by independent experts in the field, peer review is also an important consideration for policy makers, reporters and the public when weighing up research claims and debates about science.

Peer reviewing is particularly important for early career researchers because it allows them to gain insights into other developments in their research area and play a greater role in their research community. Reviewers develop their own research, writing and data presentation skills, and their ability to look at their own work objectively.

However, there has been growing talk of “a crisis in peer review” – with concerns raised about the global expansion of scholarly research, and to particular incidents of flawed papers making it into print, leaked email exchanges showing researchers trying to influence the process; as well as the mounting pressures on researchers to get grants and publish papers, leaving little time to review papers.
In Voice of Young Science (VoYS) workshops, early career researchers raised questions about how to get involved in reviewing, how to be sure of doing a good job and what to expect as authors and reviewers.

This is a nuts and bolts guide to peer review for early career researchers written by members of the VoYS network. Using a collection of concerns raised by their peers, the VoYS writing team set off to interview scientists, journal editors, grant bodies’ representatives, patient group workers and journalists in the UK and around the world to find out how peer review works, the challenges for peer review and how to get involved.

We have not avoided criticisms of the peer review process in this guide but rather entered into the debate, asking journal editors and reviewers some challenging questions about scientific fraud and plagiarism going undetected; issues of trust and bias; ground-breaking research taking years to publish and the system benefiting a closed group of scientists.

**CONTENTS**

1. How the peer review process works

2. Some of the limitations of peer review

3. The role of peer review in society

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1Voice of Young Science (VoYS) is a network of early career researchers who stand up for science in public debates about science. Further information at www.senseaboutscience.org/pages/voys.html.
There are three key roles in peer review: the authors who write the papers, the reviewers who provide expert opinions and advice, and the editors who make the decisions.

Figure 1: Diagram of a “typical” peer review process (there are many varieties)
To gain an insight into how peer review works, we asked editors from a variety of peer reviewed journals, how they select reviewers, reduce potential bias and make decisions about which manuscripts to publish.

**WHAT DO YOU DO WHEN A PAPER IS SUBMITTED?**

“I have a whole load of manuscripts coming to me each day - far more than I can publish. So I have to look at them and decide firstly, is this paper relevant to the journal I’m editing? (Is it groundbreaking etc.) I’m looking for the best papers, but I often know very little about the nitty gritty of the research area. It is the experts that I send the paper out to review to, who know the subject area well and can help me make a judgement.”

CHRIS SURRIDGE
Chief Editor and Associate Publisher of Nature Protocols

“When your paper is submitted, we first of all look through it briefly to check the format and length, the clarity of the discussion, research methods and overall fit with the journal. This is a fairly quick process - around two weeks or so. If it passes this 'desk review' procedure, we then send it out for full review to subject experts.”

ROBERT BLACKBURN
Editor-in-Chief of the International Small Business Journal (ISBJ)

**HOW DO YOU THEN SELECT REVIEWERS?**

“If I know the field intimately I will select people to review from my knowledge base. If I don’t know the field, I select reviewers by searching ‘PubMed’ (a free online database of citations and abstracts) for authors of similar research or pick suitable authors from the bibliography of the paper. I don’t think it makes sense to carefully and precisely select and invite only verifiable world leaders. Most luminaries are often too busy, and the process of selection becomes far too slow.”

DR MICHAEL CURTIS
Editor-in-Chief of the Journal of Pharmacological and Toxicological Methods
“Finding subject reviewers is a careful procedure because it is voluntary and anonymous. We find these experts from our Editorial Board plus others - you may have cited somebody extensively and we may ask them, or we use our database of previously published authors and reviewers. The ISBJ also provides you with the opportunity to suggest possible reviewers - obviously not your friends or colleagues!”

ROBERT BLACKBURN
Editor-in-Chief of the International Small Business Journal (ISBJ)

Once the reviews have been submitted, it’s decision time. Peer review is not a democratic voting system. It is the editor who makes the final decision based on all the information available to them.

HOW DO YOU REACH THE FINAL DECISION ON A PAPER?

“To reach a decision on a paper, we take into consideration a combination of the reviewers’ opinions and our editorial judgement. In addition to looking at the broader recommendations made by the reviewers, we think about the specific scientific points they raise, in light of their areas of expertise, the feasibility of any requested revisions, and the effects these revisions may ultimately have on the overall conceptual interest and quality of the paper. All of these considerations factor into our overall view of the appropriate next steps for the paper.”

DR MARIE BAO
Associate Editor, Developmental Cell, Cell Press

Many journals have an editorial team with an editor-in-chief and a number of scientific editors who are assigned responsibility for the peer review of individual papers. These journals often hold discussions before accepting a paper.

HOW DO YOU OVERSEE THE PROCESS WITH YOUR EDITORIAL TEAM?

“We invite several reviewers in order to get a view which is independent from the editorial team. If the reviewer and the assigned editor agree that a paper should be rejected, we reject. But if there is reasonable support, then we start a confidential online discussion with additional editors. Usually it becomes clear very quickly whether a paper is going to be accepted or rejected, but if there is no clear consensus, then as Editor-in-Chief, I make my own assessment and provide a recommendation to the handling editor.”

PROFESSOR PHILIP STEER
Editor-in-Chief, of BJOG: An International Journal of Obstetrics and Gynaecology
Enter the reviewers....

WHAT DO THEY HAVE TO SAY ABOUT THE BENEFITS OF BEING A REVIEWER?

The benefits of reviewing are diverse: from improving your critical thinking, giving and receiving feedback and gaining insights to improve your future publications. Reviewing is an essential skill to develop as a researcher.

WHY DO YOU REVIEW?

“Partly because it is an accepted part of membership in the academic community. But also, it is always interesting to see the latest work in my particular specialist areas and be able to comment on it and hopefully sometimes improve it prior to publication; to act as a gatekeeper for quality in an area of science that I know about and care about.”

DR STEPHEN KEEVIL
Medical Physicist, King’s College London

90% review because they like playing their part as a member of the academic community

85% just enjoy seeing other papers and being able to improve them

Almost all researchers believe that their last paper was improved through the peer review process

2 Results from the 2009 Peer Review Survey: Sense About Science with support from Elsevier carried out one of the largest ever peer review surveys of over 4000 authors and reviewers: http://www.senseaboutscience.org/pages/peer-review-survey-2009.html
When accepting the invitation to review you are agreeing to provide a fair, robust and timely critique that is useful for the authors in improving their manuscript (whether or not the journal accepts the manuscript).

Before you accept to review a paper, ensure you can submit within the time frame because slow review times are a source of frustration for authors. Many journals record how long a reviewer has taken to submit a review. If they are frequently very slow, editors will take this into account and avoid inviting the reviewer again. Some journals also rank your review once it is submitted, so if you do a good job; you are likely to be invited again.

If, after agreeing to review, you find that you will not be able to complete the review in the agreed time frame, contact the journal and let them know.

If you have any conflicts of interest— for example, you work closely with the author or are in direct competition – you must declare these to the editor. If you are unable to accept the invitation to review, suggestions of alternative reviewers are welcomed by editors.

WHAT CRITERIA DO YOU LOOK FOR?

“For me it is the originality of the work, the importance of the questions addressed, the appropriateness of the techniques used, the quality of the data and the reliability and significance of the conclusions that are the most important criteria.”

PROFESSOR MIKE CLEMENS
Biochemistry & Molecular Biology, University of Sussex
QUESTIONS REVIEWERS ASK

Aside from assessing the title, abstract, English language of the article and references, reviewers assess the scientific quality of the work.

Does the paper fit the standards and scope of the journal it is being considered for?
Is the research question clear?
Was the approach appropriate?
Is the study design, methods and analysis appropriate to the question being studied?
Is the study innovative or original?
Does the study challenge existing paradigms or add to existing knowledge?
Does it develop novel concepts?
Does it matter?
Are the methods described clearly enough for other researchers to replicate?
Are the methods of statistical analysis and level of significance appropriate?
Could presentation of the results be improved and do they answer the question?
If humans, human tissues or animals are involved, was ethics approval gained and was the study ethical?
Are the conclusions appropriate?

If the science is sound but the language is poor, some reviewers may suggest edits, whereas others might flag up to the editor that the paper needs an English language edit. If the language is so poor it is difficult to assess the science you might recommend the author improves the language and resubmit. There are English rewriting services available.

DO I NEED TO GET UP TO SCRATCH WITH MY STATS?

“When it comes to clinical trials and epidemiology papers, statistical literacy is an important issue.”

DR STEPHEN KEEVIL
Medical Physicist, King’s College London
Most experienced peer reviewers have ‘learnt on the job’. If you are reviewing for the first time, it is a good idea to ask an experienced reviewer with an analytical approach to be your mentor.

Research groups and medical departments often hold their own ‘journal club’ where they discuss a recent paper. This allows the group to keep up-to-date with scientific developments and develop skills to critically appraise research papers that will be useful when reviewing.

Some journals (eg. the *EMBO Journal, BMJ Open*) publish reviewers’ reports alongside papers which can be useful for inexperienced reviewers to look at.

Once a decision has been made, journals often let reviewers know whether they accepted or rejected the paper, and send them a copy of the other review(s). This allows you to see the assessments and opinion of other experts and whether there is anything you have missed in your own review. It can also help you judge whether you were too stringent for the journal or too lenient. It can sometimes take a few attempts to gain a sense of what the acceptance threshold is for a particular journal as each journal is different.

Papers can go through several rounds of peer review, when a paper is rejected, the author will in most cases submit it to another journal. The new journal editor will then send the paper out to new reviewers. There is concern amongst the scientific community that this leads to “wastage” of reviews as previous reviews are not always taken into consideration.
IS ANYTHING BEING DONE TO PREVENT “WASTAGE” OF REVIEWS?

“Cascading peer review (a.k.a. ‘waterfall peer review’) is when a paper that has been rejected after peer review, is passed to another journal along with the reviewers’ reports. The peer review process at the second journal can be kept relatively short because the Editor considers the reports from an earlier round of peer review, along with any new reviews. Variations on this process exist, according to the type of journal - but essentially reviews can “cascade” down through various journals.”

DAN MORGAN
Executive Publisher of Psychology & Cognitive Science

HOW THE VITAE RESEARCHER DEVELOPMENT FRAMEWORK CAN HELP YOU WITH PEER REVIEW

Being a successful researcher involves developing many skills including reviewing the work of others as part of the peer review process. This skill will help you in many employment destinations, not just research.
The Vitae Researcher Development Framework (www.vitae.ac.uk/rdfresearcher) is a guide to identify your strengths and priorities for professional and career development. It sets out the knowledge, behaviors and attributes of successful researchers and assists you in achieving higher levels of development.

The Framework is made up of four domains, which encompass:

- knowledge and intellectual abilities
- personal effectiveness
- research governance and organisation
- engagement, influence and impact

These are further broken down into a number of characteristics, which you would be developing through peer review including:

- reputation and esteem
- collegiality
- publication
- knowledge base
- critical thinking and analysis
- networking and responsiveness to opportunities
- reputation and esteem
- time management skills
- continued professional development

“As a researcher it’s easy to get stuck into only thinking about the knowledge and skills that are specific to your research field. The Researcher Development Framework emphasises broadening your horizons and identifying strengths and skills, such as those involved in peer reviewing, that will help you become a better researcher.”

DR DANIEL WEEKES
Research Associate, Kings College, University of London
Peer review varies widely depending on the research field in terms of what reviewers are looking out for and the time the process takes (in mathematics, peer review can take years whereas in biomedical subjects it can take just weeks).

In some fields, like physics, it is more common to put research online in a subject repository (such as ArXiv) before it is submitted to a journal. This allows the research to be circulated and commented on before it is subject to peer review – whereas within medicine there are ethical concerns about research being accessed before it has been peer reviewed.

We asked Tommaso Dorigo experimental particle physicist at CERN to describe the process in his field:

“In my opinion, in experimental High-Energy Physics (HEP), most scientific papers could well do without external review. HEP collaborations count dozens, and in a few cases thousands, of collaborators. Each one is responsible for what gets published and is entitled to take part in the review process before a paper is sent to a peer reviewed scientific journal. So a powerful internal screening blocks anything that is even remotely questionable before it reaches a journal.”

TOMMASO DORIGO
Experimental particle physicist at CERN

Some peer reviewed journals are tracked by Thomson Reuters and awarded an impact factor, calculated annually. Impact factor is a measure of the number of times the "average article" in a journal has been cited in a particular year.

Peer review varies widely depending on the research field in terms of what reviewers are looking out for and the time the process takes (in mathematics, peer review can take years whereas in biomedical subjects it can take just weeks).

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TOMMASO DORIGO
Experimental particle physicist at CERN
WHAT ARE THE DIFFERENT TYPES OF PEER REVIEW?

DR IRENE HAMES (Editorial Consultant and author of Peer Review and Manuscript Management in Scientific Journals) RUNS US THROUGH THE DIFFERENT TYPES OF PEER REVIEW

SINGLE-BLIND REVIEW

The reviewers know who the authors are, but the authors do not know who the reviewers are. The most common system in science disciplines.

☑️ This allows reviewers to provide honest, critical reviews and opinions without fear of reprisal from the authors.

☒ Lack of accountability, allows unscrupulous reviewers to submit unwarranted negative reviews, delay the review process and steal ideas.

DOUBLE-BLIND REVIEW

The reviewers do not know who the authors are, and the authors do not know who the reviewers are. Main form of peer review used in the humanities and social sciences.

☑️ Reduces possible bias resulting from knowing who the authors are or where they come from, work assessed on its own merits.

☒ Involves some effort to make sure manuscripts are anonymized, reviewers can often guess who the authors are (particularly if the authors have cited many of their own papers), information important for a complete critical appraisal is missing.
OPEN REVIEW

At its most basic, reviewers know who the authors are and the authors know who the reviewers are. It can also mean inclusion of the reviewers’ names and/or reports alongside the published paper, comments from others [subject community or wider public] at pre-publication stage, or various combinations of these.

☑️ Greater accountability and reduced opportunity for bias or inappropriate actions. Reviewers can be given public credit for their work.

☒ Potential reviewers may be more likely to decline to review. Revealing reviewer identity may lead to animosity from authors, damaged relationships and repercussions for job prospects, promotion and grant funding.

DO YOU THINK KNOWING THE NAME OF THE AUTHOR AFFECTS THE REVIEWER’S DECISION?

“It is probably impossible to ignore the effect of the author’s name, whether they be an unknown or a big-shot scientist. By acknowledging that potential impact, you can mitigate the most disturbing effects. Remember that your job as a reviewer is to judge the work, not the scientist.”

STEPHEN CURRY
Professor of Structural Biology, Imperial College London

IS THE DOUBLE-BLIND SYSTEM EFFECTIVE?

“Double-blind peer review can work effectively for some editors and journals. For others, however, it doesn’t. It’s been shown that reviewers can often – in around half of cases – identify who the authors are, and the internet and online searching have increased the chances of this happening. This is causing some journals in disciplines where double-blind review has been the norm to move to single-blind review. There are also concerns that some potential competing interests of authors and other factors that might be important in assessing work are not available in double-blind review.”

DR IRENE HAMES
Editorial Consultant and author of Peer Review and Manuscript Management in Scientific Journals
PEER REVIEW FOR FUNDING APPLICATIONS

Peer review is also used to assess scientists’ applications for research funds. Funding bodies seek expert advice on a scientist’s proposal to select which projects to fund.

“At Diabetes UK we use peer review to ensure that the research we fund will help to improve the lives of people living with diabetes. It helps us know why an area of research is important and needs further investigation and it also helps identify reasons why a research proposal, that at first seems a good idea, might not be suitable for funding.”

DR IAIN FRAME
Director of Research, Diabetes UK

Dr Liz Philpots thinks early career researchers should get involved in peer reviewing grant applications as well as journal papers:

“If it’s your area, put yourself forward for peer reviewing grant applications— and say [to your supervisor] I’d like to do this one. That’s the only way to get experience.”

DR LIZ PHILPOTS
Head of Research at the Association of Medical Research Charities

SHOULD REVIEWERS BE REWARDED?

“Based on the 2009 peer review survey results it is clear that reviewers would like to be rewarded. The question is how should they be rewarded? In the survey most reviewers indicated that they would like to receive payment in kind for their reviews. Publishers are keen to do this in a sustainable way and there are currently a variety of initiatives in place on journals, including giving certificates to reviewers or providing accreditation (CME/CPD points). Elsevier provides reviewers free access to its Abstracting and Indexing service Scopus. Also popular among reviewers is receiving an ‘Acknowledgement in the journal’, something more and more journals are now doing.”

ADRIAN MULLIGAN
Deputy Director, Research & Academic Relations, Elsevier
COULD JOURNALS REWARD REVIEWERS FINANCIALLY?

“I don’t think so. This may encourage some people to review papers for which they are not really qualified. However some other form of recognition of the work involved, such as free online access to papers published in the journal for a year, might be appropriate.”

PROFESSOR MIKE CLEMENS
Biochemistry & Molecular Biology, University of Sussex

Many journals provide recognition to reviewers by publishing their names in the journal as part of an annual list. Some journals send a certificate to congratulate and express their appreciation to their best reviewers, clinicians can claim CPD points for reviewing. However, journal editors have made the case that the many hours of important work peer reviewers contribute need to be recognised more formally by interview panels and research-assessment exercises.
Peer review is not a perfect system. It relies heavily on trust, and as scientists are human like the rest of us, there will always be cases of misconduct.

SO IS PEER REVIEW EFFECTIVE?

“Bad papers sometimes make it through peer review and the system is not set up to catch outright fraud. However, it acts as a useful first barrier to junk science and journalists should treat information from non-peer reviewed sources accordingly.”

JAMES RANDERSON
Environment and Science News Editor at the Guardian

“It’s a good thing scientists are mostly honest, because peer review offers the greatest possible temptation to steal ideas, to show favour to former students, to boost favoured theories, or to do down rivals. Honest they may be but they aren't saints, so we must expect all of these things to happen from time to time.”

NIGEL HAWKES
Straight Statistics

“Regardless of its weaknesses, peer review is something the scientific world cannot do without.”

PROFESSOR MAMMO MUCHIE
Editor of the African Journal of Science, Technology, Innovation and Development

Just as a washing machine has a quality kite-mark, peer review is a kind of quality mark for science. It tells you that the research has been conducted and presented to a standard that other scientists accept. At the same time, it is not saying that the research is perfect (nor that a washing machine will never break down).
Reviewers could potentially slow down the publication of a paper to enable them to get their paper out first. However, reviewers are given a deadline to submit their review. If they are very late then journals will invite an expedited review from a backup reviewer or consider the reviews they already have in-hand at an editors’ meeting to minimize the delay for the authors.

One criticism of peer review is that it “shuts down new ideas” as research that goes against the status quo may be rejected by reviewers. We put this issue to the experts:

“Perhaps we do. It is easy to find plausible reasons to reject a paper, especially at the highly competitive end of the market. If a reviewer has a vested interest or a conflict of interest this is rarely disclosed. Indeed, any ‘expert’ in the field must be a rival by definition, and conflicted by definition. Yet we trust their judgements.”

DR MICHAEL CURTIS
Editor-in-Chief of the Journal of Pharmacological and Toxicological Methods

“Reviewers are trusted to deliver an opinion but the editor knows this to be subjective and so will carefully consider this when making a final decision on a paper. And journals rarely accept papers based on only one review.”

COLLETTE TEASDALE
Development Editor - Economics Journals, Routledge Journals, Taylor & Francis Group

“Rather than shutting down new ideas, the process of peer review should mean that they are carefully considered and subject to close scrutiny before being released to a wider audience. Often the processes of peer review itself can specifically enhance a paper and the ideas it seeks to communicate.”

COLLETTE TEASDALE
Development Editor - Economics Journals, Routledge Journals, Taylor & Francis Group
New research that goes against current thinking might take longer to pass peer review, but if it is scientifically sound, it will eventually be published.

“Fundamental physics sometimes advances with the presentation of ideas which may sound crazy at first. This exposes the field to being hijacked by deranged minds with their own “theory of everything” in their pocket. It can be difficult for a reviewer to know whether a study is worthy of publication and so there is a risk that reviewers decide on the basis of their personal biases and turn down good work, or let crazy papers pass.”

TOMMASO DORIGO
CMS experiment at CERN

We often hear about cases of fraud going undetected. But can peer review ever really detect fraud?

“There have been numerous cases where highly original and controversial ideas have been blocked for years before they have been accepted, published and become popular.”

PROFESSOR MAMMO MUCHIE
Editor of the African Journal of Science, Technology, Innovation and Development

“If a fraudster makes up data carefully, detection is very difficult. However, made up data often include impossible enumeration. It is astonishing how stupid fraudsters can be. I have seen: published photographs recoloured and relabelled as new data; blots that have been touched up; numerical data that defy the laws of mathematics; non-use of randomization; an absence of blinding; and wildly unequal group size. Underpowered studies with meaningless statistical analysis, are also all too common. Mostly this is fraud by ignorance, but to present such works as meaningful experimental data is fraud nevertheless; it should be detected by peer review but it clearly escapes detection in many cases.”

DR MICHAEL CURTIS
Editor-in-Chief of the Journal of Pharmacological and Toxicological Methods
CAN PEER REVIEW DETECT PLAGIARISM?

“Unfortunately, the peer review process often doesn’t pick up plagiarism as this would require the reviewer to know about every research paper published on the subject area (and remember them!). However, journals use a plagiarism checker that produces a report highlighting the similarities with published papers. Reviewers can carry out their own similar check using etBlast, a free database where they can paste the abstract and see which papers are similar. This process is also useful to help reviewers see where the paper fits within published literature, as well as how novel a paper is.”

ELIZABETH HAY
Managing Editor, RCOG Journals

The Committee on Publications Ethics (COPE) is an international forum for editors of peer reviewed journals who discuss all aspects of publication ethics. They have developed best practice flowcharts for editors on how to handle cases of research and publication misconduct including plagiarism and research fraud as well providing guidance on how editors can responsibly carry out peer review.

A SELF-CORRECTING PROCESS

If someone sets out to falsify data, there is sometimes no way of knowing this until the paper is published and others in the scientific community scrutinise and try and repeat the work. Publication of a peer reviewed paper is just the first step: once a paper is published, findings and theories must go on to be re-tested and judged against other work in the same area. Some papers’ conclusions will be disputed or superseded after further research is published. In a sense, long-term, peer review is a self-correcting process.

If a researcher discovers there is a mistake in their published paper, the online version of record cannot be altered in any way, but a correction (corrigendum) is published to appear alongside the paper online.

If other researchers disagree with aspects of a published paper, or have identified flaws, they can write a letter to the journal editor. Some journals ask the authors to respond to the letter and publish the correspondences, which is a way of continuing the scientific debate. Some journals also have rapid response comments attached to papers online.
After publication, if a paper is found to be fraudulent or plagiarised, or researchers realise they made a mistake in their calculations that invalidates the paper, the journal publishes a retraction which appears alongside the paper online. These can be tracked on Retraction Watch. If editors are concerned about the validity of a paper and there is an investigation underway, they will publish an expression of concern.

Pre-publication peer review is the conventional process of papers being sent out for peer review before they are published in a journal.

Post-publication peer review is when a paper is scrutinised, replicated and commented on by experts after it is published. New web technologies allow readers to rate papers, and add comments and notes to online articles for readers to see.

The internet has created novel ways of reviewing research both pre and post peer review. Some researchers have started to use blogs, wikis and other Web 2.0 technologies to communicate their own research to other scientists in the field as well as share their thoughts on the quality and conclusions of other research papers.
“I think it is important for science journalists to be as open as possible about the sources for their stories. I don't think it is necessary to state as a matter of course that a journal is peer reviewed (that is normally implicit), but I think it is often useful to say if a story is based on work from a non-peer-reviewed journal or work that has not been subjected to peer review.”

JAMES RANDERSON
Environment and Science News Editor at the Guardian
“Peer review is not a guarantee that the science is right, just that it seems to have been done properly. So whether I report the status of research or not depends on the content. If some distinguished cosmologist tells me - without benefit of peer review - that in his opinion the universe went through a phase that resembled custard before splashing into sticky globules that coalesced into galaxies, I might very well make a story out of it. Right or wrong, such a conjecture affects no one. On the other hand, if someone claimed a successful treatment for multiple sclerosis without benefit of a peer reviewed publication, I'd not touch it at all because it would be cruel to raise unfounded hopes.”

TIM RADFORD
Freelance journalist

“Many of my editors - and many of the people that I write for - don't understand the difference between research that has been peer reviewed, and research that hasn't so I tend not to include those terms in my writing. However I, personally, certainly do consider whether research has been peer reviewed or not when considering how much credibility to give to claims.”

CLAIRE COLEMAN
Freelance journalist who often writes about beauty treatments for the Daily Mail

PEER REVIEW MATTERS

Peer review may have its limitations, but it is also a remarkable process which relies on the trust and co-operation of the scientific community and acts as a quality control ensuring that published research is valid, significant and original. The process is essential for the dissemination and advancement of scientific knowledge. Without peer review, how would we weigh up claims and know what to believe?

In a survey of over 4000 researchers, most (84%) believed that without peer review there would be no control in scientific communication

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3 Results from the 2009 Peer Review Survey: Sense About Science, with support from Elsevier carried out one of the largest ever peer review surveys of over 4000 authors and reviewers: http://www.senseaboutscience.org/pages/peer-review-survey-2009.html
Reviewing is a role that is integral to the scientific community and so it is important that early career researchers get involved in the process early on.

“One of the reasons I like to review papers is that it makes me feel like an important part of the academic community, and that my opinion about what is (or isn’t) good science actually matters.”

JAMIE MCCLELLAND
VoYS

“Reviewing for journals is my chance to stop bad science being published and improve the quality of good science papers which deserve to get published!”

MARGARET HESLIN
VoYS

“If the results in a paper have important consequences for the public, it is essential that the work is reviewed by peers to check that the conclusions are reliable.”

DR DEIRDRE HOLLINGSWORTH
Epidemiologist, Imperial College London

“Peer review is important because it helps people make decisions about what to believe, what to treat with scepticism and what to trust. When research work has been scrutinised and critically assessed by experts before publication it helps prevent the release of work that is unsound, inadequate or has been wrongly interpreted. Its role is to ensure the scholarly record is as sound as possible. It isn’t, however, a guarantor of absolute truth – it does sometimes go wrong and there are shortcomings - but it is considered by many to be crucial to the reputation and reliability of scientific research.”

DR IRENE HAMES
Editorial Consultant and author of Peer Review and Manuscript Management in Scientific Journals
4. FURTHER INFORMATION

SENSE ABOUT SCIENCE PUBLICATIONS:

All are available as free downloads from www.senseaboutscience.org

I Don’t Know What To Believe

Peer review Survey 2009 Final Results

Peer review and the Acceptance of New Scientific Ideas

Peer review Education Resource http://www.senseaboutscience.net/

OTHER GUIDES TO PEER REVIEW:

Peer review: a guide for researchers Research Information Network
http://www.rin.ac.uk/our-work/communicating-and-disseminating-research/peer-review-guide-researchers


BMJ training materials for reviewers:
http://www.bmj.com/about-bmj/resources-reviewers/training-materials

USEFUL RESOURCES FOR REVIEWING

To find published papers with similar abstracts: etBlast: http://etest.vbi.vt.edu/etblast3/
Clinical Trials registration information (all clinical trials should be registered before the first patient is enrolled): http://www.icmje.org/faq_clinical.html
The Declaration of Helsinki; international ethical principles for medical research http://www.wma.net/en/30publications/10policies/b3/
Committee on Publication Ethics: http://publicationethics.org/
Guidelines for research to be published in a biomedical journal, flowcharts and checklists for e.g. systematic reviews, meta-analyses observational studies, and randomized controlled trials: http://www.equator-network.org/
International prospective register of systematic reviews:
http://www.crd.york.ac.uk/prospero/
REFERENCES:


Effect of using reporting guidelines during peer review on quality of final manuscripts submitted to a biomedical journal: masked randomised trial BMJ 2011; 343 doi: 10.1136/bmj.d6783 (Published 22 November 2011)

THANK YOU

Julia would like to thank all the contributors and the following VoYS members: Mark Ainslie, Marianne Baker, Emma Bell, Dave Bosworth, Mark Brook, Blanka Collis, Iain Darby, Lewis Dean, Jaime Earnest, David Howey, Margaret Heslin, Jamie Horder, Jenny Kent, Andrew Melbourne, Jamie McClelland, Diana Bowler, Philippa Shelton, and Katherine Stapleton.

Join VoYS!

The Voice of Young Science network consists of hundreds of early career researchers who want to stand up for science in public discussions. VoYS members tackle misconceptions, challenge pseudoscience and respond to misinformation in all kinds of media.

VoYS members also encourage other early career researchers to get involved, sending the message that it is important for scientists to stand up for science in public discussion and that you don’t need to wait until the end of your career to do so.

This guide is the third in the ‘Standing up for Science’ series of VoYS publications: Standing up for Science 1: A guide to the media for early career researchers Standing up for Science 2: The nuts and bolts

Further information about VoYS and their publications can be found here: www.senseaboutscience.org/pages/voys.html
Acknowledgements

This publication is part of the VoYS programme supported by:
What your CV says about you

Susan Chubinskaya, PhD
Associate Provost, Academic Affairs
Objectives

- To generate accomplishments
- To present yourself for advancement in writing and in person
- To prepare your CV (effective) for internal and external use
- To prepare for annual evaluation
- To plan a career/leadership path
The unexamined life is not worth living.
To know oneself makes for power, self-control and success. Individuals encounter difficulty in life because they do not fully comprehend their abilities, limitations or the full range of their personalities. They need a psychological mirror enabling each person to see the self as it really is, including its strengths, weaknesses, and potentialities.

Socrates
What is so important about my CV???

- It is your introduction to a new person, job, organization

- And as they say, you only get one chance to make a good first impression

- So today we are going to talk about your "ContinuouslyupdatedCV"

“If the CV of the person you last interviewed is exactly the same as my CV, then we must have got it off the same website.”
The CV is a snapshot of the individual’s entire professional life, and therefore, should accurately reflect all major activities relevant to the profession, throughout the individual’s career. This includes everything, from prior faculty appointments, to committees and assorted responsibilities. Inaccuracies jeopardize credibility!!!
• CV written for **external** use
• CV written for **internal** use
• Executive Summary, *companion* to a reformatted CV
• Cover letter - matching your competencies and experiences **to their needs**
Therefore, when planning a change internally or externally:

- Need to re-conceptualize how to present yourself
- Need to determine which documents to develop and what to include in them
- Need to prepare ways to present yourself
- Need to continue to develop your stories of accomplishments
• Differs depending on the sector you are in and the position to which you aspire
• Thus, **purpose** and **audience** are guides
• Clarity, accuracy, relevancy are critical
• Sections clearly defined, information provided in reverse chronology including publications and presentations
• Your name **highlighted**
• Can use words like “recent” - “selected” or “relevant” (for special purpose CV only)
Curriculum Vitae

RMC format is specific for P&T, but content is the same for any purpose

Must include:

- Education and training
- Faculty, hospital, other professional appointments
- Honors/Awards
- Service (includes all types, e.g., university, clinical, professional, and scholarly service)
- Teaching (be sure to include mentoring/advising)
- Scholarly activity
  - Grants, contracts, and awards
  - Other funding
  - Publications
  - Abstracts
  - Presentations – even if you were not the one presenting
Areas of Excellence

- **CON**
  - Criteria defined in tracks

- **RMC**
  - Teaching Excellence
  - Research/Scholarly
  - Clinical Service
  - Administrative Service

- **CHS**
  - Teaching
  - Scholarship
  - Operational activities (direct/indirect patient care)
  - Professional/Institutional/Community Service

Teaching and Research/Scholarly activities are critical to the mission of the Institution!!!
1. Teaching

a. Evidence that an educational exercise developed by the candidate serves as a model for other institutions (i.e., letters from colleagues stating this point, published teaching tutorials, novel teaching approaches and/or courses/lectures developed by the candidate adapted by other institutions, etc).

b. Classroom teaching/lectures/teaching sessions/rounds
c. Course development/directorship
d. Mentorship of students/residents/fellows/trainees/nurses
e. Teaching awards.
f. Visiting professorships at other academic institutions.
g. Invited lectureships by professional societies.

h. Textbooks and review monographs, or reviews published in peer review journals.

i. Original papers in peer review journals based upon teaching or course development in areas related to medical school or postgraduate teaching.

k. Development of novel educational resources with supporting documentation (i.e., description in letters of endorsement or letter from the Department Chairperson).

l. Achievements of former trainees.

m. Membership in national, international, or interinstitutional educational activities.
Research and/or scholarly activity is the other primary criterion for senior faculty appointment. Research includes: organized scientific effort to extend knowledge, mission-oriented investigations or experiments aimed at the discovery and interpretation of facts, the revision of accepted hypotheses or laws in the light of new facts, or the practical application of such new or revised hypotheses or laws as they apply to biomedical problems and as they are disseminated to the scientific/medical community. Scholarly activities are defined as the synthesis of knowledge and technology and its presentation to others.

Excellence in research is determined by:

a. The candidate’s publications which should demonstrate evidence of creative high quality and significant work. Candidates who are proposed for appointment or promotion on the basis of research and/or scholarly activity are required to submit copies of three or more of their publications, though COSFAP encourages the submission of written evidence of scholarship from all candidates for senior faculty rank regardless of the primary reason for appointment or promotion. The publications chosen should be those considered by the candidate to be his/her most important contributions. In choosing the reprints for submission, the candidate should keep in mind that COSFAP considers that publications from the last 5 years provide the best picture of the candidates continued productivity and potential for further scientific contributions.

b. Independence of research accomplishments. In cases where the candidate’s bibliography contains many multi-authored articles, documentation of the independent contribution of the candidate should be provided. This documentation may be done by first authored original research articles, or a delineation of the candidates unique contributions to the research team (when the author has very few first authored manuscripts).
c. External **funding** to support independent research programs. This needs to be documented in detail (funding agency, type of the grant, years, dollar amount, role on the project, etc).

d. Issue of a **patent** or development of **computer programs**. This needs to be documented in detail.
Scholarship

- Activity in professional societies: elected positions
- Elections to prestigious scientific societies via peer-review process
- Appointments as editor, reviewer, and referee
- Consulting activity
- Research funding (if applicable)
- Patents, procedures and methods
- Publications – peer-reviewed articles & book chapters, peer-reviewed abstracts
  - Your contribution, significance of work and publication impact factor
- Presentation of scholarly papers: invited, keynote, podium, posters at international, national, and regional conferences/symposiums, seminars
- Extramural review courses: taught, directed, developed

Note regarding electronic publishing:

Burden of demonstrating quality and significance (judged by some criteria) is on you
1. Complete citations by category
   - Peer-reviewed publications
     • Reports of Original Work
     • Case reports
     • Review Articles
   - Editorial/Commentaries
   - Letters to the Editor
   - Book Authorships, Editorships, and chapters
   - Published Abstracts (must have a reference that can be looked up)
   - Non-peer-reviewed publications
   - Other (please specify)

2. Indicate level of participation if multiple authors

3. Include articles “in press”

4. DO NOT include articles “to be submitted” or “in preparation”

5. Number each entry
List separately

- Podium presentations
- Poster presentations/Exhibits
- Other (e.g. videos)
- Invited lectures/presentations

International
National
Regional
Local
University
Service

Activities not directly related to teaching, research, or patient care…

You know what it is when you see it!

Examples:
- Committees
- Task forces,
- Lay education
- Community
- Prof. organizations

No matter your skills, there's something you can volunteer to do.

©T. McCracken mchumor.com
CV Tips

• Dates in a separate column – to the right
• List items in reverse chronology within each category
• Format the pages for easy reading
• Emphasize/format new sections consistently
• Add sections if some activities do not fall into the standard ones
  – As long as they are clear, no problem!
    • The committees will never penalize you for providing MORE information!!!)
More CV Tips

- Number the pages
- Number all long lists of items
- Highlight your name (bold, underline)- the reader will “find” you immediately, especially when there are multiple authors
- Annotate all papers and grants: if you played a major role in it, but this is not immediately obvious (you are not 1st or Sr. author, or not the PI), the annotations explaining your contribution to the work will get you more credit for it!
And even more CV writing tips…

• Should contain accurate information; dates should be as accurate as possible
• Should be up-to-date
• Represent the style of the institution
• Consistent in info, style, font, arrangements, readable
• Clear; explain abbreviations
• Good formatting and presentation are essential
• Avoid typos!
CURRICULUM VITA

NAME IN FULL, Degree.

Date of Birth:
Citizenship

EDUCATION (include years attended and degrees granted)

☐ Graduate or Professional
☐ Postgraduate

ACADEMIC APPOINTMENTS (starting from the last one)

CERTIFICATION AND LICENSURE

HONORS AND AWARDS

SOCIETY MEMBERSHIPS

TEACHING

☐ Rush University (courses, types of students/residents, contact hours, frequency)
☐ Other institutions:
☐ Mentorship to students/residents/trainees/fellows (names and years of service)
☐ Membership on student thesis committees (name and years of service)

CONSULTING POSITIONS

COMMUNITY SERVICE

CLINICAL SERVICE

COMMITTEE AND ADMINISTRATIVE SERVICES

SCIENTIFIC AND SCHOLARLY ACTIVITIES

☐ Membership or Offices in Professional Societies (terms)
☐ Reviewer for Funding Agencies
☐ Reviewer for Professional Journals
☐ Patents
☐ Invited Presentations at Regional, National, and International Meetings
☐ Oral Presentations at Regional, National, and International Meetings
☐ Invited Seminars and Lectures
Name of the applicant

☐ Funding History of Peer-Reviewed Grants (NIH, Professional Foundations) including
  type of the grant, role on the project, name of the agency, dollar amount, duration
  ○ Past
  ○ Current
  ○ Pending or Applied for

☐ Other extramural agencies including industry

BIBLIOGRAPHY
☐ Original full-length manuscripts (published, in press, or submitted)
☐ Book chapters
☐ Books Edited
☐ Peer-Reviewed Abstracts
☐ Other Abstracts
☐ Any other on-line and/or audio-visual materials

Most scientists regarded the new streamlined peer-review process as “quite an improvement.”
Bottom Line

• Provide as much and detailed information as possible…
• You will save the committee from:
  – Guessing
  – Make their work easier, and
  – They will be happy with you

Trust me…
YOU WANT THEM TO BE HAPPY AND HAVE LESS WORK!!!
“Most of the shadows of this life are caused by standing in one’s own sunshine”

Ralph Waldo Emerson
Answering Ads

• Match your accomplishments and skills to the job requirements
• Be convincing; show enthusiasm
• Customize wherever possible
• Use “T” format as a launching pad
Your recent ad in *Science* for research faculty, Department of Neurology asks for requirements which closely match my experience and skills:

<table>
<thead>
<tr>
<th>Their Requirements</th>
<th>My Experience/Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Develop competitive research program</td>
<td>• Co-PI on RO1 grant and PI on institutional grant in neuroscience</td>
</tr>
<tr>
<td>• MD or PhD, tenure track</td>
<td>• MD, board certified in Neurology, 8 years teaching experience</td>
</tr>
<tr>
<td>• eligible as Assistant/Associate professor</td>
<td>• Significant research in Alzheimer’s</td>
</tr>
<tr>
<td>• Post doc in neuroscience and an interest in neurobiology of adult onset neurodegenerative disorders</td>
<td>• Team builder and player; creative</td>
</tr>
<tr>
<td>• Collaborative, innovative</td>
<td></td>
</tr>
</tbody>
</table>
Susan Chubinskaya, PhD
Associate Provost, Academic Affairs
Phone: 312-942-6306
Fax: 312-563-6328
Email: susanna_chubinskaya@rush.edu
Website: http://www.rushu.rush.edu/academic-affairs
Department Email: academicaffairs@rush.edu

* Some materials were provided by Dr. Roberta Sonnino, Vice Dean of Faculty Affairs and Professional Development, Wayne State University School of Medicine
ENGAGING THE ADULT LEARNER IN ONLINE EDUCATION

Janet Engstrom, PhD, APN, CNM, WHNP-BC
Professor and Acting Chair, Women, Children, and Family Nursing
Rush University
Outline for This Presentation

• Theoretical underpinnings for adult education in the online setting

• Standards for online education

• Characteristics of good teaching

• Practical application of the theories and standards
Theories of Learning

• Adult Learning Theory

• Community of Inquiry (CoI)
Adult Learning Theory and Principles

Malcolm Knowles proposed that adults learn differently than children

Identified 6 characteristics of adult learners

- Internally motivated and self-directed
- Bring life experiences and knowledge
- Goal oriented
- Relevancy oriented
- Practical
- Like to be respected
Adult Learning Theory and Principles

Knowles recommended learning approaches that are

- Problem based
- Collaborative
- Emphasize equality between the teacher and learner
Knowles’ Theory and Online Learning

Online learning has great potential to be

- More self-directed
- More problem based
- Much more collaborative
- Builds on previous learning
- Emphasizes equality between the teacher and learner – “guide by the side” vs. “sage on the stage”
- Has the potential to build a learning community
Community of Inquiry (CoI)

CoI was introduced by Pierce in the basic sciences, expanded by Dewey in education, and then further elaborated by Lipman in education.

CoI proposes that

- Knowledge is always embedded in a social context
- Inquiry is problem based
- Inquiry always occurs within a community
Community of Inquiry (CoI)

CoI dispelled the notion that
- Knowledge was fixed
- Education was about knowledge transmission
- Teachers were the authorities and the transmitters of knowledge

Col proposes that
- Knowledge is ambiguous, uncertain, and changing
- Knowledge acquisition involves learning about processes and relationships
- Education is a process of inquiry guided by the teacher
CoI and Online Education

Garrison, Anderson, and Archer (2000) took the CoI and applied it to online learning

Research demonstrated that computer based learning had the potential to create a CoI
Social Presence

Teaching Presence

Cognitive Presence

Educational Experience
Social Presence

Social presence is characterized by
- Open communication
- Effective communication
- Group cohesion
- Encouragement of collaboration

Social presence changes over the course
Teaching Presence

Teaching presence is characterized by
  - Direct instruction
  - Facilitating discourse

Demonstrated by
  - Focusing discussion
  - Sharing personal meaning
Cognitive Presence

Cognitive presence is characterized by
- Exploration
- Integration
- Resolution

• Demonstrated by
  - Information exchange
  - Connecting ideas
  - Applying new ideas
STANDARDS FOR ONLINE EDUCATION
Standards and Education

• Education quality and outcomes are now being assessed routinely
• Standards for teaching have been developed and are now being used
• Standards for online teaching are particularly rigorous
Quality Matters Standards

- Course Overview and Introduction
- Learning Objectives (Competencies)
- Assessment and Measurement
- Instructional Materials
- Course Activities and Learner Interaction
- Course Technology
- Learner Support
- Accessibility and Usability

https://www.qualitymatters.org
Quality Matters requires that critical course components must be aligned:

- Learning Objectives (competencies)
- Teaching Methods
- Resources and Materials
- Learner Engagement
- Course Technology
- Learning Activities
- Assessment Methods

https://www.qualitymatters.org
<table>
<thead>
<tr>
<th>Standards</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Overview and Introduction</strong></td>
<td></td>
</tr>
<tr>
<td>1.1 Instructions make clear how to get started and where to find various course components.</td>
<td>3</td>
</tr>
<tr>
<td>1.2 Learners are introduced to the purpose and structure of the course.</td>
<td>3</td>
</tr>
<tr>
<td>1.3 Etiquette expectations (sometimes called “netiquette”) for online discussions, email, and other forms of communication are clearly stated.</td>
<td>2</td>
</tr>
<tr>
<td>1.4 Course and/or institutional policies with which the learner is expected to comply are clearly stated, or a link to current policies is provided.</td>
<td>2</td>
</tr>
<tr>
<td>1.5 Minimum technology requirements are clearly stated and instructions for use provided.</td>
<td>2</td>
</tr>
<tr>
<td>1.6 Prerequisite knowledge in the discipline and/or any required competencies are clearly stated.</td>
<td>1</td>
</tr>
<tr>
<td>1.7 Minimum technical skills expected of the learner are clearly stated.</td>
<td>1</td>
</tr>
<tr>
<td>1.8 The self-introduction by the instructor is appropriate and is available online.</td>
<td>1</td>
</tr>
<tr>
<td>1.9 Learners are asked to introduce themselves to the class.</td>
<td>1</td>
</tr>
<tr>
<td><strong>Learning Objectives (Competencies)</strong></td>
<td></td>
</tr>
<tr>
<td>2.1 The course learning objectives, or course/program competencies, describe outcomes that are measurable.</td>
<td>3</td>
</tr>
<tr>
<td>2.2 The module/unit learning objectives or competencies describe outcomes that are measurable and consistent with the course-level objectives or competencies.</td>
<td>3</td>
</tr>
<tr>
<td>2.3 All learning objectives or competencies are stated clearly and written from the learner’s perspective.</td>
<td>3</td>
</tr>
<tr>
<td>2.4 The relationship between learning objectives or competencies and course activities is clearly stated.</td>
<td>3</td>
</tr>
<tr>
<td>2.5 The learning objectives or competencies are suited to the level of the course.</td>
<td>3</td>
</tr>
<tr>
<td><strong>Assessment and Measurement</strong></td>
<td></td>
</tr>
<tr>
<td>3.1 The assessments measure the stated learning objectives or competencies.</td>
<td>3</td>
</tr>
<tr>
<td>3.2 The course grading policy is stated clearly.</td>
<td>3</td>
</tr>
<tr>
<td>3.3 Specific and descriptive criteria are provided for the evaluation of learners’ work and are tied to the course grading policy.</td>
<td>3</td>
</tr>
<tr>
<td>3.4 The assessment instruments selected are sequenced, varied, and suited to the learner work being assessed.</td>
<td>2</td>
</tr>
<tr>
<td>3.5 The course provides learners with multiple opportunities to track their learning progress.</td>
<td>2</td>
</tr>
</tbody>
</table>
Quality Matters Standards

Quality Matters Standards and Assessment Rubric can be obtained at these web sites:

Standards and Overview:
https://www.qualitymatters.org/rubric

Assessment Rubric:
CHARACTERISTICS OF EFFECTIVE TEACHING
Characteristics of Effective Teaching

Knowledge of the content
Best Practices

• Encourage contact between students and faculty
• Develop reciprocity and cooperation among students
• Encourage active learning
• Give prompt feedback
• Emphasize time on task
• Communicate high expectations
• Respect diverse talents and ways of learning

http://www.lonestar.edu/multimedia/SevenPrinciples.pdf
Characteristics of Effective Teaching

Organization
Organization
Organization
Organization
Characteristics of Effective Teaching

Consistency

Consistency

Consistency

Consistency
Characteristics of Effective Teaching

Communication

Communication

Communication

Communication
Characteristics of Effective Teaching

Passion
Characteristics of Effective Teaching

Be Nice!
PRACTICAL APPLICATION OF THE THEORIES AND STANDARDS
Open your Course Early

• Open the course early, even a day helps!

• Send materials ahead of time
Start Your Course with a Welcome Message

Place a message such as, “Welcome to …..

Message can be placed in announcements

• Send the welcome to the students’ email
Tell the Students Who You Are

Tell them a little about your background
- “I have been a nurse for 39 years. I am also a nurse-midwife and….

Tell them a little about your research
- “I am a researcher with the Rush Mothers Milk Club research team and we study…

Tell them about your teaching
- “I love teaching and this is my favorite course…”
<table>
<thead>
<tr>
<th>Week Start Date</th>
<th>Online and On Campus Classes</th>
<th>Topics</th>
<th>Required Reading</th>
<th>Assessment of Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>Epidemiology 101</em> (Friis)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>Principles of Epidemiology in Public Health Practice</em> (3rd ed.) CDC (Free Online Resource)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>Statistics for Nursing: A Practical Approach</em> (2nd ed.) (Heavey)</td>
<td></td>
</tr>
</tbody>
</table>
| **1 9-1-14**    | Online Class Tuesday 4 pm  | Introduction to Epidemiology  
Definition of Epidemiology  
Key Epidemiologic Concepts  
History and Trends  
Core Epidemiologic Functions  
Nurses’ Role in Epidemiology  
Florence Nightingale: Epidemiologist | Chapter 1 p. 1-18  
Lesson 1 Sections 1-4 | Assignment #1  
*Individual Assignment*  
Due Sunday 9-7-14 at 11 pm CT (5% of final course grade) |
| **2 9-8-14**    | Online Class Monday 4 pm | Measuring Health Outcomes  
Types of Variables  
Levels of Measurement  
Principles of Measurement  
Reliability and Validity  
Epidemiologic Case Definitions  
Florence Nightingale and Measurement | Lesson 1 Section 5  
Lesson 2 Section 2 | Assignment #2  
*Individual Assignment*  
Due Sunday 9-14-14 at 11 pm CT (5% of final course grade) |
Expand the Navigation Panel
Create Weekly Modules

- Section your course into modules
- Give your modules a meaningful name
- Always present the module components in exactly the same order
Be Organized

• Organization of the course is essential for students to be able to understand the flow of ideas in the course

• Organization is essential for students to find what they need

• Organization is essential so that students don’t overlook assignments
Be Consistent

• Consistency helps students understand the flow of ideas and materials in the class
• Consistency helps students find what they need
• Consistency helps students avoid missing assignments
Module Format

• Week number and name of topic
• Description of the content
• Learning objectives
• Key concepts
• Required reading and websites
• Online class or recordings information and link
• Weekly assignment instructions and link
Reveal the Modules One Week at a Time

Module 1: Introduction to Epidemiology
*Starts September 1, 2014*

Module 2: Measuring Health Outcomes
*Starts September 8, 2014*

Module 3: Managing Data
*Starts September 15, 2014*

Module 4: Descriptive Statistics
Availability: Item is not available. It will be available after Sep 19, 2014 12:00 PM.
*Starts September 22, 2014*

Module 5: Displaying Data
Availability: Item is not available. It will be available after Sep 26, 2014 12:00 PM.
*Starts September 29, 2014*
Control the Clicks

• Make a 3 click maximum
• Click on the part of the course (e.g., Course Modules)
• Click on the Weekly Module
• Click on links to recordings, assignments
Module 1: Introduction to Epidemiology
Starts September 1, 2014

Module 2: Measuring Health Outcomes
Starts September 8, 2014

Module 3: Managing Data
Starts September 15, 2014

Module 4: Descriptive Statistics
Availability: Item is not available. It will be available after Sep 19, 2014 12:00 PM.
Starts September 22, 2014

Module 5: Displaying Data
Availability: Item is not available. It will be available after Sep 26, 2014 12:00 PM.
Starts September 29, 2014
Module 1: Introduction to Epidemiology

Description

This module introduces the science of epidemiology and examines the role of epidemiology in nursing practice. The history of epidemiology is reviewed and current trends are described. Core epidemiologic concepts and functions are explored and applied to nursing practice. The role of the Centers for Disease Control and Prevention in protecting the nation's health is examined.

Learning Objectives

1. Identify and explain the key terms in the definition of epidemiology.
2. Differentiate the terms "the distribution and determinants of health-related states and events."
3. Differentiate descriptive and analytic epidemiology.
4. Summarize the major trend in the development of epidemiology as a science.
5. Compare the epidemiological focus on population health to the primary care focus on individual health.
6. Discuss the current trends in epidemiology.
7. Identify the core functions of epidemiology and apply those functions to nursing and advanced nursing practice.
8. Describe the role of the Centers for Disease Control and Prevention in protecting the nation's health.
Key Concepts

Definition of Epidemiology

Epidemiology is the study of the distribution and determinants of health-related states and events in specified populations and the application of that knowledge to the control of health problems (Centers for Disease Control and Prevention (CDC), 2006).

The definition of epidemiology contains 6 key terms: study; distribution; determinants; health-related states or events; specified populations; and application. Of particular importance is the focus on populations rather than individuals. Also notice that epidemiology focuses on health states and health events, not just on disease. Finally, epidemiology focuses on the control or prevention of health problems.

The definition of epidemiology points to two major branches of epidemiology. The first branch is Descriptive Epidemiology, which focuses on the distribution of health related states and events. The second branch is "Analytic Epidemiology" which focuses on the determinants of health related states and events.

History and Trends in Epidemiology

Epidemiology's origins are rooted in epidemics of infectious diseases. Think about the name -- epidemiology was originally defined as the "study of epidemics." Although infectious diseases continue to be an important area of interest, over the last century, the science of epidemiology has expanded to include chronic diseases as well as trauma and injury. In more recent decades, the focus has shifted to a greater emphasis on prevention. Indeed, the focus on prevention was so important the Centers for Disease Control added the words "and Prevention" to their name about 25 years ago. Finally, epidemiology also focuses on bioterrorism. Watch this very brief introduction to the science of epidemiology: Epidemiology: Past Present and Future
**Required Reading**

Friis, R. H. (2010). *Epidemiology 101*. Sudbury, MA: Jones & Bartlett. **Read Chapter 1.**


**Class Sessions**

The class sessions for this course are will help you understand the content and will also help you complete the homework assignments and prepare for the exams.

There are 2 ways that you can attend class:

- **Attend “Live” Class in the Online Classroom:** The online class will meet Tuesday at 4 pm. The link to the online classroom is below. Please plan to login into the classroom at least 30 minutes before the start of the course to make sure that all of your software is working correctly. If you have problems call the BlackBoard Help Line at 312-942-CLAS.

- **Watch the Recorded Class:** The link to the recording will be posted when the recording from the online class becomes available - usually about 24 hours after the online class is taught. The PowerPoint presentation from the class will also be posted below.
Weekly Assignment

The assignment for this week involves three tasks:

1. Complete the Personal Information survey. (Worth 10% of the grade for this assignment)
2. Introduce yourself on the Discussion Board. To complete this task, do the following: (Worth 20% of the grade for this assignment)
   a. Go to the Week 1 Discussion Board
   b. Introduce yourself in the section that matches your area of study (e.g., GEM, Anesthesia, Public Health, etc).
   c. Create a new thread on that Discussion Board and put your name and program in the title (Greeting from Jane Smith, Advanced Public Health Nursing Student)
   d. In the body of your posting, tell us a little about yourself.
3. Complete homework questions about the definition and functions of epidemiology. (Worth 70% of the grade for this assignment)
   ◦ This assignment must be completed individually, without help from another person.
   ◦ You can use books, papers, and the internet to complete the assignment.
   ◦ For questions that require a short written answer, please respond using sentences that are written using proper grammar, spelling and punctuation.
   ◦ Please answer the questions in your own words. Do not use direct quotes in your answers.
   ◦ You do NOT need to use citations.
   ◦ You can access the homework to view the questions and print a copy to use while you complete the reading and visit the required websites. However, you can only submit the homework for grading one time. So, if you enter the assignment to look at the questions, do not press the submit button. Rather, click on the Save a Draft button.

The assignment is due Sunday night at 11 pm Central Time.
Printable Version of the Module

Enabled: Statistics Tracking
Attached Files: Module 1 – Introduction to Epidemiology – Fall 2014.pdf (79.362 KB)

NSG 522: Class Week 1
      Suggested

mp3 Recording of Module 1 Class
      Attached Files: 2014-09-02.1408.5.73AD52C085DB8493EA642B5FAD3A03.64K.mp3 (Source).mp3 (36.218 MB)

Click on the link to listen to the Module 1 Class.

PowerPoint for the Online Class
      Attached Files: Module 1 – Introduction to Epidemiology – 9-2-14.pdf (1.505 MB)

Below is the PPT for the Module 1 Class.

Task 1: Personal Information Survey

Task 2: introduction on the Discussion Board

Task 3: Assignment #1
Tell Students how to Approach the Readings and Course Materials

Tell them what they need to print, what they need to read lightly.....
Encourage Students to Make a Course Notebook or Paper File

• Students still need hard copies of some course materials and they need help keeping them organized

• Recommend use of a notebook with dividers for the main sections of the course
Communicate With Students

- Send individual notes to students
- Send group notes
- Use the announcements
- Use the discussion board
- Give feedback on assignments
- Frequent contact is imperative the first week or two
- Answer questions quickly
- Respond to emails quickly and use student’s name in the message
- Call students when needed
Use the Course Announcements to Communicate with Students

• Send reminders, especially for exams

• Correct misinformation or misunderstandings

• Resolve inconsistencies in course resources

• Inform them about resources such as tutoring, student counseling, or supplementary course materials

• Notify them of events, especially things like review sessions, due dates, and professional or social events
Use the Announcements

• Always send announcements to the student’s email

• Send an announcement at least once a week… a course update, summarize the events of the past week…

• Send frequent announcements.
NSG 522: Course Update

Posted on: Friday, September 12, 2014 7:57:57 PM CDT

Dear students,

Well... its Friday and you have made it through the first 2 weeks of classes! Congratulations, especially to those of you who are in your first term at Rush. The first 2 weeks are the hardest!!! Once you get through the first couple of weeks you fall into a rhythm and develop your routines and, before you know it, you will be graduating!!

Remember that the Module 2 assignment is due Sunday night at 11 pm.

And, Module 3 has been posted but you have plenty of time to work on that!!

We are still grading Module 1. We will finish that up this weekend and get you the grades as soon as possible. We apologize for the delay but we have so enjoyed reading your introductions that it has taken us much longer than expected to finish up!

Since it is Friday, we thought that you might enjoy reading a short piece on "Friday at the Frontier Nursing Service." The Frontier Nursing Service was a historic nursing service that used family nurses trained as nurse–midwives to provide care in the rural mountains of Kentucky, one of the most impoverished and undeserved regions of the country. When the service was started in 1925, there were no roads and no electricity. There was no school system and no system for health care. Reading your personal introductions made us think about the Frontier nurses -- we were struck by how many of you had dogs in your lives and how many of you have been so adventuresome in moving to Chicago or beginning a distance education program -- you are all very brave! So were the Frontier nurses!! This short piece is actually a page from the diary of one of the nurse–midwives. You will see how those brave nurses care for families and the family’s animals. Please read this... it will make you feel great about being a nurse!! Plus, if you are a dog lover, well... you will see!! [Friday at the Frontier Nursing Service](#)

OK.. go have a nice weekend!

Dr. E
Discussion Board

• Introduce yourself
• Have students introduce themselves
• Respond publically to a few of the introductions
• Respond privately to student’s introductions
• Encourage students to use the discussion board
• Be present on the discussion board but don’t dominate
Use the Discussion Board for Simulated Activities

Post a discussion question in the assignments for a particular unit

- A woman says that she hear that IUDs cause abortions… how would you respond to her question.

Have classmates evaluate, augment and/or edit each other’s work
Control Yourself When it Comes to Readings and Web Sites

• Respect the student’s time and computer resources

• Pick the best and only the best
Use the Library

• Show the students how to access the library

• Directly link them to resources in the library
Courses are Built, not Created

• Start small

• Add things, improve, modify a little each time the course is taught
Open an Idea Box in each Module That Only You Can See

• Put all of your great thoughts here

• As you teach the units, add notes here with your ideas of how to improve the unit the next time that it is taught

• Add anything (ideas, references, and websites) that might be useful to the module so that it is there when you go to prepare the module for the next time it is taught
Use Interactive Technologies

• Use BlackBoard Collaborate
• Record the sessions
• Convert the sessions to mp3 and mp4 files
Learn Teaching and Grading Efficiencies

There are many “quick” features in BlackBoard that save time and typing!!

Many of these features can increase communication and increase consistency
## Use the Automated Grading Rubric Feature

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Levels of Achievement</th>
<th>Correct and Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Identifies the Core Epidemiological Functions Correctly</strong></td>
<td>Contains Multiple Incomplete or Incorrect Elements</td>
<td>50 %</td>
</tr>
<tr>
<td>Weight 5.00%</td>
<td>Contains Some Incomplete or Incorrect Elements</td>
<td>80 %</td>
</tr>
<tr>
<td></td>
<td>Contains Minimal Incomplete or Incorrect elements</td>
<td>90 %</td>
</tr>
<tr>
<td></td>
<td>Correct and Complete</td>
<td>100 %</td>
</tr>
<tr>
<td><strong>Addresses Florence Nightingale's Work as an Exemplar of Each Core Epidemiological Function</strong></td>
<td>Contains Multiple Incomplete or Incorrect Elements</td>
<td>50 %</td>
</tr>
<tr>
<td>Weight 60.00%</td>
<td>Contains Some Incomplete or Incorrect Elements</td>
<td>80 %</td>
</tr>
<tr>
<td></td>
<td>Contains Minimal Incomplete or Incorrect elements</td>
<td>90 %</td>
</tr>
<tr>
<td></td>
<td>Correct and Complete</td>
<td>100 %</td>
</tr>
<tr>
<td><strong>Summarizes Lessons Learned from the Exercise</strong></td>
<td>Contains Multiple Incomplete or Incorrect Elements</td>
<td>50 %</td>
</tr>
<tr>
<td>Weight 10.00%</td>
<td>Contains Some Incomplete or Incorrect Elements</td>
<td>80 %</td>
</tr>
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<td></td>
<td>Contains Minimal Incomplete or Incorrect elements</td>
<td>90 %</td>
</tr>
<tr>
<td></td>
<td>Correct and Complete</td>
<td>100 %</td>
</tr>
<tr>
<td><strong>Summarizes the Contributions of Each Member of the Team</strong></td>
<td>Contains Multiple Incomplete or Incorrect Elements</td>
<td>50 %</td>
</tr>
<tr>
<td>Weight 10.00%</td>
<td>Contains Some Incomplete or Incorrect Elements</td>
<td>80 %</td>
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<td></td>
<td>Contains Minimal Incomplete or Incorrect elements</td>
<td>90 %</td>
</tr>
<tr>
<td></td>
<td>Correct and Complete</td>
<td>100 %</td>
</tr>
<tr>
<td><strong>Writing Quality: Grammar, punctuation, and style</strong></td>
<td>Contains Multiple Incomplete or Incorrect Elements</td>
<td>50 %</td>
</tr>
<tr>
<td>Weight 10.00%</td>
<td>Contains Some Incomplete or Incorrect Elements</td>
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<td></td>
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<td></td>
<td>Correct and Complete</td>
<td>100 %</td>
</tr>
<tr>
<td><strong>APA Formatting</strong></td>
<td>Contains Multiple Incomplete or Incorrect Elements</td>
<td>50 %</td>
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<tr>
<td>Weight 5.00%</td>
<td>Contains Some Incomplete or Incorrect Elements</td>
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<tr>
<td></td>
<td>Correct and Complete</td>
<td>100 %</td>
</tr>
</tbody>
</table>
Take Notes While Grading
• Use notes for improving teaching and learning methods

• Keeping a list of responses in a Word document and cut and paste responses into the feedback

• Summarize the strengths and common misunderstandings in an announcement and send it out once grading is completed
THANK YOU!
Principles of Interprofessional Education

Developing and Promoting an Interprofessional Culture at Rush
What This Presentation Will Cover

- The need for interprofessional education
- Definitions of interprofessional education
- What is and what is not interprofessional education
- National trends and models of interprofessional education
- Measuring and evaluating interprofessional education
- What is the evidence based argument for interprofessional education and teams?
- Rush accomplishments in interprofessional education and practice
- The CAIPE –charting a new direction in Interprofessional Education
- Opportunities and ideas for further interprofessional transformation at Rush
Why The Need for Interprofessional Education and Practice?

Demographics
- The aging of the population - 20% of US population will be over 65 by 2050; coupled with increased longevity
- Racial and ethnic diversity; growing immigrant populations

Population Health
- Increased rates of chronic illness and disability
- Social determinants and environment affecting health including access, disease risk, adherence and literacy

Care Delivery and Cost
- Affordable Care Act and emphasis on new alignments and models of health care
- Patient Centered Medical Home
- Accountable Care Organizations
- Medicaid and Medicare Managed Care
The Need for Interprofessional Education and Practice (Continued)

- Patient safety - Medical errors cost thousands of lives in US hospitals every year.
- Electronic health records and other communication and documentation tools require collaboration and integration of knowledge.
- Tele-medicine and “virtual” models of care require interprofessional integration and coordination of care.
- Academic medical centers and other educational institutions recognizing and responding to students wanting interprofessional experiences.
Founded in 2007, the Jefferson Center for InterProfessional Education (JCIPE) is one of the premier interprofessional education centers in the U.S. Our center is dedicated to improving interprofessional care (IPC) through implementing and evaluating patient-centered education throughout the Thomas Jefferson University curriculum. We offer robust trainings and educational opportunities, provide innovative teaching models and evidence-based practices to help support emerging priorities in health care.
JOIN US

MAY 15, 2014

Dedication Ceremony of the DeWitt C. Baldwin Institute for Interprofessional Education at Rosalind Franklin University
It Begins with Education - What is the Definition of Interprofessional Education?

Interprofessional education occurs when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes.

World Health Organization
Criteria for Determining Interprofessional Education

• Planning: Interprofessional activities, whether teaching or patient care, are planned with the intention to fully involve professionals from two or more disciplines. To that end, the design and development of such activities should involve professionals from multiple disciplines.

• Participants: Interprofessionalism requires the involvement of students or professionals from two or more professions interacting with each other for learning and/or patient care.
Process: In addition to participants working together, interprofessional activities engage the participants in learning about each other’s disciplines and from each other. In clinical care, this requires an understanding of the skills of each professional on the team, sharing of decision-making across multiple disciplines, and collaborating on achievement of patient goals.

Product: The purpose of interprofessionalism in healthcare is to enable effective collaboration and/or to improve health outcomes. Interprofessional activities should include a plan for measuring these outcomes.
What Interprofessional Education Is Not

- Students from different health professions in a classroom receiving the same learning experience without reflective interaction among students from the various professions.

- A faculty member from a different discipline leading a classroom learning experience without relating how the professions would interact in an interprofessional manner of care.

- Participating in a patient care setting led by an individual from another profession without sharing of decision-making or responsibility for patient care.

- Any observational, volunteer, or other activity in a clinical, community agency, or other setting which brings students together without intentional learning experiences focused on interprofessional collaboration.
The Structure and Function of Interprofessional Health Care Teams
New Policies and Principles Adopted by the AMA House of Delegates

1. That our American Medical Association (AMA) define “team-based health care” as the provision of health care services by a physician-led team of at least two health care professionals who work collaboratively with each other and the patient and family to accomplish shared goals within and across settings to achieve coordinated, high-quality, patient-centered care. (New HOD Policy)

2. That our AMA advocate that the physician leader of a physician-led interprofessional health care team be empowered to perform the full range of medical interventions that she or he is trained to perform. (New HOD Policy)

3. That our AMA advocate that all members of a physician-led interprofessional health care team be enabled to perform medical interventions that they are capable of performing according to their education, training and licensure and the discretion of the physician team leader in order to most effectively provide quality patient care. (New HOD Policy)
Core Competencies for Interprofessional Collaborative Practice

Sponsored by the Interprofessional Education Collaborative*

Report of an Expert Panel
May 2011

*IEPC sponsors:
American Association of Colleges of Nursing
American Association of Colleges of Osteopathic Medicine
American Association of Colleges of Pharmacy
American Dental Education Association
Association of American Medical Colleges
Association of Schools of Public Health
Specific Roles/Responsibilities Competencies:
RR1. Communicate one’s roles and responsibilities clearly to patients, families, and other professionals.
RR2. Recognize one’s limitations in skills, knowledge, and abilities.
RR3. Engage diverse healthcare professionals who complement one’s own professional expertise, as well as associated resources, to develop strategies to meet specific patient care needs.
RR4. Explain the roles and responsibilities of other care providers and how the team works together to provide care.
RR5. Use the full scope of knowledge, skills, and abilities of available health professionals and healthcare workers to provide care that is safe, timely, efficient, effective, and equitable.
RR6. Communicate with team members to clarify each member’s responsibility in executing components of a treatment plan or public health intervention.
RR7. Forge interdependent relationships with other professions to improve care and advance learning.
RR8. Engage in continuous professional and interprofessional development to enhance team performance.
RR9. Use unique and complementary abilities of all members of the team to optimize patient care.
Core Competencies for Interprofessional Collaborative Practice
Sponsored by the Interprofessional Education Collaborative*
*IPEC sponsors:
American Association of Colleges of Nursing
American Association of Colleges of Osteopathic Medicine
American Association of Colleges of Pharmacy
American Dental Education Association
Association of American Medical Colleges
Association of Schools of Public Health
Below are the guidelines to have your course listed with an IPE designation in the UCSF course catalog.

At UCSF, courses submitted for consideration of interprofessional status in the course catalog must meet all of the following criteria:

• The course must specify an explanation for the request for interprofessional status.
• The course must include learners from at least two schools and these should be specified. )
• The prerequisites, if any, for the course should not be specific to one school.
• The course must be the result of a participatory collaboration among faculty representing two or more professions/schools.
• At least one of the course objectives should be related to interprofessionalism.
Principles of Successful Team Work and Team Competencies

Version 2.0
Rush University Medical Center
Geriatric Interdisciplinary Team Training Program
Revised August 2008
Team Principles for GITT

The team should have explicitly stated team goals.

The patient and family are at the center of all team activities and are active team members.

Professional roles must be clearly defined and understood.

All team members should contribute to team function through constructive individual behaviors, including leadership.
Team Principles Continued

There must be effective team communication across all work settings.

The team must have tools or strategies for the effective management of conflict.

The team should have explicit rules about participation and decision making.

The team must be adaptable, responding to new challenges and conditions as they develop over time.
Knowing what Other Disciplines Do

- Pharmacists make home visits
- Speech language Pathologists assess for tube feedings
- Physician Assistants diagnose, treat and prescribe
- Audiologists assess risks for falls
- Occupational Therapists assess patients’ homes for safety risks and other hazards
- Social workers help patients get free or reduced cost medications
- Dietitians can help patients with depression
National Trends and Models in Interprofessional Education

- Creating a vision and commitment for academic institutions to commit to train students to learn and work interprofessionally.
- Modeling and demonstrating in practice what students are learn in classroom and other educational experiences.
- Evidence based outcomes demonstrating interprofessional education prepares students and practitioners to contribute to and improve the performance and productivity.
- Preparing students for the health care complexities and challenges today and the future.
Introducing...
The National Center for Interprofessional Practice and Education

Our Vision:
To strengthen interprofessional education and advance the aim of improving health of the population, enhancing patient care and controlling costs

Our Goal:
To close the gap between higher education and practice communities by rigorously aligning their needs and interests.
Our Strategy:
We will engage higher education and health system leaders in a “nexus” to incubate innovative ideas, define the field and guide interprofessional education program development and research.

The Nexus:
The “nexus” is the shared ground, shared conversation and shared language necessary to create true collaboration between education and practice.

For more information, contact:
Barbara F. Brandt, Ph.D., Director brandt@umn.edu
What is the Nexus?

The National Center for Interprofessional Practice and Education is discovering and sharing ways to improve health, enhance patient care and control costs by integrating health professions education and practice in a transformative Nexus.

The Nexus is the shared ground, shared conversation and shared language that creates true collaboration between education and practice.

In the Nexus, we engage higher education and health system leaders to test new ideas and drive sustainable national change in both health systems transformation and health professions education.
The Triple Aim – Institute for Health Care Improvement

- Improving the patient experience of care (including quality and satisfaction)
- Improving the health of populations
- Reducing the per capita cost of healthcare

Improving the U.S. health care system requires simultaneous pursuit of three aims: improving the experience of care, improving the health of populations, and reducing per capita costs of health care. Preconditions for this include the enrollment of an identified population, a commitment to universality for its members, and the existence of an organization (an “integrator”) that accepts responsibility for all three aims for that population. The integrator’s role includes at least five components: partnership with individuals and families, redesign of primary care, population health management, financial management, and macro system integration.
Team STEPPS

- Team Structure – goals and vision – accountability, roles and responsibility
- Leadership – utilize resources to maximize performance, permission to speak freely, balance workload
- Situation Monitoring – include patient and family in communications
- Mutual Support - timely and constructive feedback to resolve conflict
- Communication – provide clear, specific and timely information - Use SBAR (Situation, Background, Assessment, Recommendation), call outs, check-backs and handoff techniques
Specify Teamwork Skills

- Skills are general categories of behavior you want to train

- Teamwork is too complex to train in a single scenario
  - Need to focus on a subset of competencies
  - There are four core skills in TeamSTEPPS

Team Strategies & Tools to Enhance Performance & Patient Safety
The Team Development Measure (With permission - Peace Health, Ron Stock, MD)

1. Team members say what they really mean
2. Team members say what they really think.
3. Team members talk about other team members behind their back.
4. All team members participate in making decisions about the work of the team.
5. All team members feel free to share their ideas with the team.
6. All team members feel free to express their feelings with the team.
7. The team practices tolerance, flexibility, and appreciation of the unique differences between team members.
8. The team handles conflicts in a calm, caring, and healing manner.
9. Regardless of the topic, communication between the people on this team is direct, truthful, respectful, and positive.
10. The team openly discusses decisions that affect the work of the team before they are made.
11. In this team, members support, nurture, and care for each other.
12. The team has agreed upon clear criteria for evaluating the outcomes of the team's effort.
13. As a team, we come up with creative solutions to problems.
14. In the team, there is more of a WE feeling than a ME feeling.
15. There is confusion about what the work is that the team should be doing.
16. There is confusion about how to accomplish the work of the team.
17. Roles and responsibilities of individual team members are clearly understood by all members of the team.
18. All team members place the accomplishments of the team ahead of their own individual accomplishments.
19. The goals of the team are clearly understood by all team members.
The Case for Interprofessional Teams in Practice

Accountable Care Organizations (ACOS), the Centers for Medicare & Medicaid Services (CMS) announced positive and promising results from the first performance year of the Pioneer Accountable Care Organization (ACO) Model. This model is part of the Affordable Care Act’s efforts to realign payment incentives, promoting high quality, efficient care for Medicare beneficiaries. Costs for the more than 669,000 beneficiaries aligned to Pioneer ACOs grew by only 0.3 percent in 2012 whereas costs for similar beneficiaries grew by 0.8 percent in the same period. 13 out of 32 pioneer ACOs produced shared savings with CMS, generating a gross savings of $87.6 million in 2012 and saving nearly $33 million to the Medicare Trust Funds. Pioneer ACOs earned over $76 million by providing coordinated, quality care. Program savings were driven, in part, by reductions that Pioneer ACOs generated in hospital admissions and readmissions.
Acute care transitions intervention designed to encourage patients and their caregivers to assert a more active role during care transitions may reduce rehospitalization rates. Intervention patients had lower rehospitalization rates at 30 days (8.3 vs 11.9, \( P = .048 \)) and at 90 days (16.7 vs 22.5, \( P = .04 \)) than control subjects. Intervention patients had lower rehospitalization rates for the same condition that precipitated the index hospitalization at 90 days (5.3 vs 9.8, \( P = .04 \)) and at 180 days (8.6 vs 13.9, \( P = .046 \)) than controls. The mean hospital costs were lower for intervention patients ($2058) vs controls ($2546) at 180 days (log-transformed \( P = .049 \)).
The Bridge Program

EVIDENCE BASE
Results from a June 2009 – March 2010 randomized controlled trial (n=740) at Rush University Medical Center include: lower readmission rates, greater understanding of the discharge plan of care, increased understanding of the purpose of taking prescribed medications, increased attendance of post-discharge physician appointments, greater understanding of patient understanding of their responsibilities of managing their own health, decreased patient stress, and decreased caregiver stress. The Bridge Model has been recognized as evidence-based by the Administration for Community Living.
RECENT FINDINGS
According to a monitoring report published by Mathematica on behalf of the Centers for Medicare and Medicaid Services (CMS), the Bridge Model reduced readmissions by 24.7% in 1,390 patients served at Rush University Medical Center from May 2012 through July 2013. This resulted in approximately $245,000 in CMS savings per Bridge Care Coordinator per year.
Rush Initiatives and Programs in Interprofessional Education and Practice

- Geriatric Interdisciplinary Team Training 1995-present - over 4000 student and professional participants; 50+ faculty
- Virtual Integrated Practice – improving collaboration and communication through “virtual” teams - 2000-2006
- BRIGHTEN (Heart) 2007-present – team based intervention for older adults with depression – funded consecutively by Retirement Research, HRSA and NHLBI
- The Bridge Program – 2009-present: Care coordination for prevention of hospital readmissions. Over 3000 patients have participated
Rush IPE Initiatives Continued

- Interdisciplinary Studies in Palliative Care - 2005-Present online and simulation lab based course addressing palliative and end of life issues from a team perspective - over 1500 students have participated
- Interdisciplinary Teams in PACE (Program for All Inclusive Care for the Elderly) – online course on team skills for national geriatric organization – over 60 PACE Programs - 700 enrollees.
- Decisional Capacity: Online course – Guiding clinicians in helping patients and families assess and make decisions with care preferences and needs,
- IPEPA – 2013 Interprofessional aging to pediatrics. Focus on team skills and collaboration across the life span.
- BMO Harris Grant – 2013 – Focus in care improvement, across and quality in partnership with the Medical Home Network
Announcing a New Online Interdisciplinary Course for PACE Programs

The National PACE Association, in partnership with Rush University Medical Center, is pleased to offer this online interdisciplinary focused training program for PACE sites to train new staff to learn the importance of interdisciplinary care and become effective team members. The course is designed for both new and existing PACE sites.

- The online course combines both academic learning components with experiential activities. Rush University Medical Center has over thirteen years of experience providing geriatric interdisciplinary education and over 2000 students and professionals have participated in Rush team training classes.

- Course resources include six online modules, a preceptor module, PACE organizations for on-site training, PACE technical assistance centers, and mentors with experience in effective team building.

- The course also includes content specific to PACE sites that have begun operations in rural communities.

For more information about the PACE Interdisciplinary Course, contact:

**Venise Lewis**, National PACE Association,
venisel@npaonline.org (703-535-1517)

or **Stan Lapidos**, Rush University Medical Center,
stan_lapidos@rush.edu (312-942-2753)
Online Course on Capacity Assessment of Older Adults
The 21st century is bringing about vast changes in the demographics of the United States. Notably, the population is aging at a rapid rate, incidence of chronic illness and dementia is increasing, the disability population is aging, the nature of medical choices is changing due to evolving medical technology, and healthcare delivery systems are becoming increasingly complex. These trends bring healthcare clinicians up starkly against a growing challenge:

THE RISING TIDE OF PATIENTS WITH DIMINISHED DECISIONAL CAPACITY

Program Information:
This curriculum will provide a practical framework for clinicians to better understand the process of capacity assessment and the clinician’s role.

Learning Objectives:
• Determine the need to evaluate your patients capacities
• List the ten key tenets of capacity assessment principles and practices
• Evaluate a patient following the specified process
• Identify different capacities and situations
• Assess when to conduct an evaluation yourself and when to refer
• Describe the process of working with courts in guardianship proceedings

• For more information, please visit: www.rush.edu/decisionalcapacity
• Generously funded by The Retirement Research Foundation

For more information or to enroll, contact Michelle Hochwert at 312-942-0417 or Decisional_Capacity@rush.edu
Rush University faculty and clinicians have formed a council addressing challenges, focusing on opportunities and devising strategies for furthering interprofessional opportunity and transformation at Rush.
Purpose

- The Center for Applied Interprofessional Practice & Education (CAIPE) is a group of faculty and clinicians dedicated to applying the principles of interprofessionalism as embodied in Rush’s mission, vision, and values.
- We have come together as
  - **CATALYSTS** for changing the culture of professionalism
  - **CONVENERS** of thought leaders and stakeholders, and
  - a **CLEARINGHOUSE** for interprofessional change tools and resources across the Medical Center.
CAIPE Members

Cathy Catrambone, PhD, RN, FAAN
Beth-Anne M. Christopher MS,RN, CNL
Sheila Dugan, MD
Erin Emery, PhD
Robyn L. Golden, LCSW
Diane Gallagher, RN, MSN
Mary Grantner, MA
Tricia Johnson, PhD
Wrenetha Julion, DNP, RN
Lois Kazmier Halstead PhD, RN
Kathryn S. Keim, PhD, RD, LDN
Stanley Lapidos, MS
Evan Marlatt, HSM student
Robert Medairos, M2
Joanne Miller, PhD, APN, GNP-BC
Anne M. Murphy, JD
Melinda Noonan, DNP, RN, NEA-BC
Jan Odiaga DNP CPNP
Anthony Perry, MD
Steven K. Rothschild, MD
Christina Shin, PA Student
Sharon Sholiton, MD
Rosemarie Suhavda, PhD, ARN
Karen Tessler, PhD, CC-SLP
Clayton Thomason, JD
Susan Vanderberg-Dent, MD
Alison Weston, AB
Where Do We Go From Here? Some Ideas For Promoting Interprofessional Education and Opportunity

- Introduce Rush students to interprofessional values, concepts and principles as part of orientation process.
- Immerse students in interprofessional team observations and experiences and activities at Rush.
- Connect student classroom learning to comparable clinical activities and experiences.
- Expand extracurricular social and education events focusing on interprofessional issues such as the Robert T. Crane Preparatory school proposal.
Where Do We Go From Here Continued

- Give fold out cards to all Rush students and clinicians containing brief descriptions of what every profession and occupation does on the patient care team.
- Add a training module on interprofessional team skills to the required Rush LEAP courses for all Rush employees.
- Identify and consolidate courses which are interdisciplinary in content and clinical learn activities and observations.
- Building on what some disciplines already do, promote a discipline of the week or month highlighting the knowledge and skills a particular profession or occupation does for the patient and family care team.
- Support and advocacy from senior leadership in academics and clinical care for interprofessional education and practice initiatives.
Our team was used to dealing with all kinds of crises: Handling a last-minute wedding was not one of them. While having more than one opinion on a medical team regarding how best to manage a patient is fairly routine, we received no push back from anyone as we started to make arrangements for the wedding. Soon the whole medical team was involved. We sent a letter to the court to expedite the marriage certificate. A pastor and harp player were booked. The hospital cafeteria baked a chocolate cake, and the nurses brought in flowers. In just a few days, we were ready.
My job was to make sure our patient’s pain was controlled while also avoiding the confusion that is a side effect of narcotic medications. But almost miraculously, she didn’t need pain medications for hours and was fully aware of everything that was going on. Looking at the bride and groom from her hospital bed, she seemed more comfortable than I had seen her before. The whole day had an unreal feel to it; everything felt like it slowed down. The sun shone through the windows and glistened on the bags of fluid. For once in the hospital, there were tears but no pain. It felt as if, after all these years of chasing our patient down, even the cancer took a break.

NY times, 3/20/2014  Haider Javed Warraich, MD
Health Care As A Calling

Patients get the best care when no single power is ascendant, rather than when there is the “perpetual rub” between doctor, nurse and administrator.

Florence Nightingale
PATTY IS OUR NEW "PROCESS MANAGER."

PATTY DOESN'T KNOW HOW TO DO ANYTHING.

SHE ONLY KNOWS HOW TO DO THINGS BETTER!

PROCESS!

FOR EXAMPLE, THIS MEETING IS POORLY MANAGED BECAUSE YOU HAVE NO PROCESS.

AND THIS INTERN OBVIOUSLY HAD NO PROCESS FOR DECIDING WHETHER TO ATTEND.

OKAY, PATTY IS ANNOYING.

ALL IN FAVOR OF GETTING RID OF HER.

YOU LASTED LONGER THAN TIMMY THE "FACILITATOR."
This brief guide has been written to help health care providers understand the fundamentals of effective team work. It is based on the work of many authors, some in the medical field, but also some from other industries. The principles have also been drawn from the extensive experience of faculty in the Rush Geriatric Interdisciplinary Team Training Program, or GITT. GITT was originally funded from 1995-1999 through a grant from the John A. Hartford Foundation of New York; the project was directed by Dr. Denis Evans, with project management by Stanley Lapidos.

Since 1995, over 2,000 trainees have participated in GITT: Physicians, Nurse Practitioners, Nurses, Physical and Occupational Therapists, Ethicists, Chaplains, Social Workers, Pharmacists, Audiologists, specialists in Speech and Communication Disorders, and others. Their input has also informed this guide. We hope that you will find this helpful in your work on interdisciplinary health care teams as well.
Introduction:

The following list of principles describes eight essential elements needed for effective interdisciplinary team collaboration. The list is not all-inclusive: many books and articles have been written about teams, and include other valuable concepts. This document provides a summation of key principles of interdisciplinary teaming.

1. The team should have explicitly stated team goals.
2. The patient and family are at the center of all team activities and are active team members.
3. Professional roles must be clearly defined and understood.
4. All team members should contribute to team function through constructive individual behaviors, including leadership.
5. There must be effective team communication across all work settings.
6. The team must have tools or strategies for the effective management of conflict.
7. The team should have explicit rules about participation and decision making.
8. The team must be adaptable, responding to new challenges and conditions as they develop over time.

Each of these principles is described further on the pages which follow. Examples are given to illustrate both good team function and also potential problems in each area. By applying these principles, you should be able to answer five critical questions about your team:

✓ What is the purpose of this team?
✓ Who are the members of the team?
✓ How does each member participate and contribute?
✓ How does the team process information and reach decisions?
✓ How does the team respond to new challenges and change over time?
Principle #1: **EXPLICITLY STATED TEAM GOALS**

A team can only work effectively when all team members understand their shared purpose and goals. Although all of the teams in the GITT project focus on improving the health care of the elderly, the purpose and goals differ significantly from site to site.

*Ideally...*
- Team members agree on the purpose and goals, or else work together to resolve disagreements.
- Team goals are realistic and achievable. If not, team members agree to narrow the goals to a workable size.
- The purposes of meetings, discussions, individual efforts, and other team activities are understood to relate to the goals of the team.

*Problems to watch for...*
- You are unclear about the purpose or goals of the team.
- Signs of confusion about the team’s purpose, such as arguments about what the team is supposed to be doing or if there are frequent changes in the direction of projects.
- Frustration regarding a lack of progress, or a feeling that the team is floundering.
- Feeling that a project is too big or inappropriate.

*Team Competencies: You should be able to...*
- Clearly state the purpose and goals of your team.
- Listen effectively to the views of other team members regarding team purpose and goals.
- Effectively work with other team members to clarify or modify team purpose.
- Recognize if the team’s purpose is too broad or unrealistic.
- Identify if the purpose or goals truly require the effort of an interdisciplinary team, or could be effectively addressed by an individual or smaller group.

**EXERCISE:**
What do you think the purpose and goals of your team are? Ask various members of your team what they think. How similar/different are the views?
Principle #2

PATIENT AND FAMILY AT THE CENTER

A health care team brings together professionals of varied backgrounds, knowledge, and skills. In some instances, approach to patient care and clinical decision-making may also vary among team members. The common element for all of the professionals in a GITT team is the goal of improving the health and well being of patients and their families.

The patient must be more than simply the glue which holds the team together. Patients must be active members of the team. Their experience of their lives and illness must be elicited and central to team discussions; their goals and objectives for their health care must inform team decision-making.

Ideally...
• The patient and/or their family members regularly participate in team discussions.
• Team members are concerned with the patient’s experience of illness, and actively elicit the goals which patients have for their lives.
• Team members can accurately state the patient’s goals and priorities.
• The team acknowledges issues of cultural values and socio-economic factors in the care of the patient.
• The team acknowledges and addresses the stresses and concerns of family and other caregivers.

Problems to watch for...
• The concerns and beliefs of patients and family members are not acknowledged during team discussions.
• Patient and family-members are disparaged or discounted by team members during team meetings.
• Decisions are reached without patient or family input.
• Patients and families are not aware of the decisions or plans of the team.

Team Competencies: You should be able to...
• Actively engage patients in discussions of goals setting.
• Identify cultural factors which can impact on patient and family interaction with the team.
• Identify ethical dimensions of patient care which can impact team process and decisions.
Principle #3

CLEARLY DEFINED PROFESSIONAL ROLES

An interdisciplinary team brings together professionals with various backgrounds and skills, usually to address problems which are too complex for one person (or one discipline) to address alone. Every member of your team – social worker, nurse practitioner, occupational therapist, physician, pharmacist, etc. – brings unique knowledge, experience, and skills. The whole point of an interdisciplinary geriatric team is to effectively tap into everyone’s talents, and build upon them. In order for this to happen, everyone has to understand their own clinical responsibilities, and those of other team members.

Ideally…
• Everyone has formally designated roles; all members know what is expected of them, as well as of the other team members.
• Everyone understands which roles belong to one individual, and which are shared. For shared roles (e.g. home safety assessment, or mental status examination), there is a clear and fair process for determining which team member will assume responsibility at any given time.
• The team makes use of each member’s unique knowledge and skills.
• Everyone is involved in the team activity, with no one feeling left out or taken advantage of.

Problems to watch for…
• Roles and duty assignments that result from a “pecking order.” (E.g. the physician always tells the nurse to keep notes during meeting.
• Confusion over who is responsible for what actions.
• Certain tasks that repeatedly “fall through the cracks.”
• Certain team members consistently being assigned tedious or onerous tasks.

Team Competencies: You should be able to…
• Identify and describe your role on the team, as well as that of every other member.
• Recognize when a team member is not being used effectively, has an unclear role on the team, is being excluded or taken advantage of.
• Engage other team members or facilitate team discussions to ensure that each member makes a contribution.

EXERCISE: Pair off with another professional on your team. Describe what you think their role is, and let them describe your role. Do you agree with each other’s assessments?
Principle #4

CONSTRUCTIVE INDIVIDUAL BEHAVIOR

Teams should encourage and reinforce members using skills and practices which make team discussions more productive. Clear norms of conduct which are set at the outset can help reduce conflicts later on, as well as ensure that teams stay on track in achieving their goals.

There is no one perfect individual team behavior. In fact, many different types of behavior are necessary for effective teaming. Facilitation behaviors can help ensure that all needed information is brought out in a meeting, or that the entire agenda is covered. Clarification can help assure that team members understand each other. If the team appears to be forming a consensus based on emotion or opinion rather than clinical facts, challenging the team may be a critically important behavior. The effective team member can step back from the team and recognize when certain leadership behaviors are needed.

Ideally, each team member should be able to...
- Initiate discussions
- Elicit further information or opinions
- Clarify or elaborate on ideas
- Summarize discussion points which have been made and check for consensus
- Act as a gatekeeper, keeping dominant members in check
- Reflect insightfully on value-laden or controversial issues
- Ease tensions in the group, when necessary, and facilitate processing of difficult or controversial areas.
- Compromise, and be creative in resolving differences
- Express the group’s consensus and test to confirm (e.g. “I hear several people saying that we should encourage Mr. Brown to apply for guardianship of his father; does everyone agree with that?”)
- Aid the team in agreeing on standards for discussions and decision-making
- Refer the team back to specific documentation or data
- Offer both positive and negative feedback in a fair manner
- Accept both praise and criticism

(Continued on page #7)
CONSTRUCTIVE INDIVIDUAL BEHAVIOR  (Continued)

Problems to watch for...
- Failure to use discussion skills listed above
- Reliance on one person ("the leader") to manage the discussion; no shared responsibility for facilitating the discussion
- Team members repeating points, unsure if anyone heard them the first time
- Discussions that are stuck; inability to conclude a discussion on one topic and move on to the next
- Frequent digressions from the topic
- Discussions in the hallway after the meeting are more free and candid than those during the meeting

Team Competencies: You should be able to...
- Know the indications for using specific team behaviors
- Effectively utilize a wide repertoire of constructive individual team behaviors
- Recognize dysfunctional team processes
- Function as facilitator, using all of the skills listed for each team member above

EXERCISE:
Think about your last team meeting. Which of these discussion skills did you observe? Were there any problem behaviors? Which behaviors could you use to reduce the impact of these problems at your meeting?
Principle #5
EFFECTIVE TEAM COMMUNICATION

A team is only as good as its ability to communicate. Team members must be able to pass information to each other accurately and in a timely manner. Such communication is not limited to discussions during team meetings; communication must occur between team members working with the patient at different times, or in different clinical settings. Progress notes, telephone consultations, e-mail messages, and other strategies can supplement and strengthen the team process.

Ideally...
- Team members speak with clarity and directness.
- Members should be succinct, avoiding long anecdotes or examples.
- Team members should make greater use of verifiable observations than personal opinion during discussions.
- Members should avoid using the technical jargon of one discipline whenever possible; if a condition is best described in technical terms, however, members should make sure that everyone on the team understands those terms.
- Members should listen actively, and show a willingness to learn from others.
- Members should share both information about patients and technical knowledge.

Problems to watch for...
- Poor speaking skills: rambling, mumbling, speaking too softly, etc.
- Members are overly cautious or tentative, as if afraid to express an idea or opinion.
- There is tension during the meeting, but this is never acknowledged or addressed directly. Conflicts are denied, ignored, or dealt with indirectly.
- Opinions are expressed as facts.
- "Plops": a statement that receives no acknowledgement, comment, or response.
- Bullying statements, or negating another team member's opinion.
- Anger, sarcasm, disruptiveness.
- Defensiveness, withdrawal from a discussion.

Team Competencies: You should be able to...
- Prepare for meetings, ready to convey needed clinical information clearly, succinctly.
- Listen to and acknowledge the information provided by other team members.
- Interject expert information, when appropriate, demonstrating a willingness to teach or mentor other team members.
- Ask specific questions to clarify discussion, and to learn from other disciplines.

EXERCISE: After your next team meeting, take a moment to identify new information you gained from the team discussion. Did others gain new information from you? Do you feel that your observations were heard by the team?
Principle #6
CONFLICT MANAGEMENT STRATEGIES

Many people mistakenly view conflict as a bad thing for teams. In fact, conflict is necessary for teams; if everyone agreed with each other on a course of action, there would be relatively little gained by sitting around talking about cases. Our different training, life experiences, and technical knowledge will frequently lead to disagreements. If these conflicts are managed effectively, using tools of conflict resolution, they can improve patient care and team function.

Ideally...
• Team members speak up when they disagree with the observations or opinions of other team members.
• Disagreements are expressed clearly, and grounded in verifiable observations or other evidence, rather than opinion.
• Disagreements are expressed directly, without personal attacks on others.
• The team listens carefully to team members who disagree, seeking first to understand the viewpoint of those who disagree.
• Collaboration, or integrated problem solving is the most frequently used response to disagreements. The needs and goals of both parties are important, and both are committed to finding "win-win" solutions.

Problems to watch for...
• Failure to acknowledge and address disagreements ("Pseudo-consensus")
• Scapegoating of a member who disagrees with the team
• Withdrawal from a discussion by one or more team members
• Members who are too quick to accommodate others, to put aside their opinion
• Anger, sarcasm, disruptiveness, defensiveness
• Disagreements which never are resolved or concluded.

Team Competencies: You should be able to...
• Utilize a repertoire of responses to conflict, including competing, withdrawal, negotiation, accommodation, and collaboration
• Describe the advantages and disadvantages of each type of response to conflict, and be able to list the indications for using each type of response.
• Express disagreements in a direct, non-confrontational manner.
• Listen carefully and not defensively to others who disagree with you, seeking to understand their viewpoints.

EXERCISE:
Is there a certain team member you often find yourself in disagreement with? What are the causes of your disagreements? How does that team member perceive you? What do you learn from your interactions with that team member?
Principle #7: EXPLICIT TEAM RULES ABOUT PARTICIPATION & DECISION-MAKING

There are many different types of work groups; teams are unique however in that every team member is responsible for helping the team achieve its goal. Since everyone has a stake in the team's achievements, everyone should participate in discussions and decisions, share commitments to the project's success, and fully contribute their talents. A well-functioning team must make establish this premise from the beginning, and regularly remind team members of their responsibilities to the group.

In addition, the team must establish its process for reaching decisions. In a well-functioning team, no one can walk away saying "Well, I never agreed to that plan in the first place." Teaming requires mutual accountability for outcomes. Clear, well-defined decision making procedures are therefore mandatory.

Ideally...

- In most discussions, all team members make contributions.
- The team recognizes the different knowledge and skills of different members, and draws on the expertise of all members in care planning for patients/clients.
- Team members are all responsible for actively eliciting the ideas and involvement of other members of the team.
- Team members discuss how decisions will be made. In most GITT teams, decisions will be made by consensus, but the team should identify situations in which a vote might be needed.
- When critical decisions are to be made, each member is polled for their opinion.
- The team regularly tests for consensus ("This seems to be our agreement..... Is there anyone who feels unsure about this choice, or would like to express a different point?")

Problems to watch for...

- Team members with too much influence; team members with too little influence
- Conformity, in which team members automatically agree on everything
- Members who speak only at certain times or certain topics
- The team concedes to opinions which are presented as facts, without supporting data
- Decisions are made by one or two members, with others deferring to their expertise or opinion
- Too frequent recourse to "majority rules" or other quick approaches in order to bypass or avoid strong discussions about disagreements
- Decisions by default: members just withdraw, and silence is interpreted as consent

(Continued on page #11)
EXPLICIT TEAM RULES  (Continued)

Team Competencies: You should be able to...

- Describe methods such as brainstorming and nominal group technique, which can be used to ensure balanced group participation.
- Describe steps to elicit contributions from quiet or reluctant team members.
- Describe steps to check dominating, or overbearing team members.
- Recognize when your team does not have a clear, effective process for reaching decisions.
- Identify problems in decision-making, and provide constructive feedback to the team.
- Provide team leadership as a “diplomat”—seeking input from all team members, and as a “quality controller” -- making sure that all members participate in the decision-making process.

EXERCISE:
Think about a controversy that your team addressed recently. Was every member heard from? Was there balanced participation? If there were team members who said very little, go back and ask them how they feel about the decision which was reached.

At the end of a meeting in which a difficult decision was reached, give feedback (both positive and negative) to your team about its process.
Principle #8

ADAPTABILITY

Principles are not laws. These principles have been provided to promote good team function, but not to stifle your creativity or expression. In geriatrics, you will confront a wide range of complex clinical problems. A well functioning GITT team must be prepared to occasionally move beyond the boundaries of established procedures and processes in order to experiment with new ways of doing things. Sometimes this will be precipitated by new, unanticipated patient care problems. Other times this will be precipitated by a change in the team’s mission or goals. Environmental factors in one’s community or workplace will cause teams to change over time. Even without these precipants, it is a good idea for the team to challenge itself by brainstorming new ideas and to try creative new approaches to established problems.

We also wanted to emphasize adaptability because the fact is that in many health care settings, you will not encounter true interdisciplinary collaborative teams. Most health care systems remain dominated by strict hierarchies. Teams may not exist where you work. If a team approach is used at all, it may be run by a single strong leader, or have little resemblance to the GITT team in which you have been trained. This is not important. What is important is that the same principles which we have outlined and which you use during the training process can be adapted and applied to whatever setting in which you work in the future.

We hope that wherever you work in health care, you will find the knowledge and skills gained during the GITT program will help you to provide more creative and effective and compassionate care for your older patients and their families.

GOOD LUCK AND SUCCESSFUL TEAMING!!!

The word collage on the cover was produced with WORDLE, a free on-line program for designing “word clouds” from any text that you provide. You can try it yourself at www.wordle.net
CALLING ALL GRADUATE STUDENTS IN THE COLLEGES OF NURSING, MEDICINE, AND HEALTH SCIENCES

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Enhancing Primary Care Through Community-Based Teams
Online Course on Capacity Assessment of Older Adults

The 21st century is bringing about vast changes in the demographics of the United States. Notably, the population is aging at a rapid rate, incidence of chronic illness and dementia is increasing, the disability population is aging, the nature of medical choices is changing due to evolving medical technology, and healthcare delivery systems are becoming increasingly complex. These trends bring healthcare clinicians up starkly against a growing challenge:

THE RISING TIDE OF PATIENTS WITH DIMINISHED DECISIONAL CAPACITY

Program Information:
This curriculum will provide a practical framework for clinicians to better understand the process of capacity assessment and the clinician’s role.

Learning Objectives:
1. Determine the need to evaluate your patients capacities
2. List the ten key tenets of capacity assessment principles and practices
3. Evaluate a patient following the specified process
4. Identify different capacities and situations
5. Assess when to conduct an evaluation yourself and when to refer
6. Describe the process of working with courts in guardianship proceedings

Generously funded by The Retirement Research Foundation

For more information or to enroll, contact Michelle Newman at 312-942-0417 or Decisional_Capacity@rush.edu

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The course director, planners, faculty and reviewers of this activity have no relevant financial relationships to disclose.
**RUSH GERIATRIC INTERDISCIPLINARY TEAM TRAINING PROGRAM**

*Winter Quarter, 2014*

GITT classes will be held 2:00-3:30 P.M. (unless otherwise noted) on Wednesdays in the Academic Facility, Room 960 (except 1/22 - ACFAC 985)

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<th>Date</th>
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<tr>
<td>1/8</td>
<td>2-3:30 PM</td>
<td>Introductions of participants. Overview of interprofessional team principles and practices and team exercises: Presenters: Steven Rothschild, M.D., Stan Lapidos, MS</td>
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<tr>
<td>1/15</td>
<td>2-3:30 PM</td>
<td>Medicare, health insurance, managed care, policy issues in health care and innovations in team care. Presenters: Robyn Golden, LCSW, Stan Lapidos, MS</td>
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<tr>
<td>1/22</td>
<td>2-3:30 PM</td>
<td>The role of the interpreter on the patient care team: Working with patients from different cultural and language backgrounds. Presenters: Ricardo Kirgan and Rush Interpreters Services</td>
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<tr>
<td>2/5</td>
<td>2-3:30 PM</td>
<td>Presentations by Geriatric Fellows</td>
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<td>2/12</td>
<td>2-3:30 PM</td>
<td>Assessment and treatment of depression in older adults; Presenters: BRIGHTEN Interdisciplinary Team: Psychology fellows, interns</td>
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<tr>
<td>2/19</td>
<td>2-3:30 PM</td>
<td>The Bridge Program: Coordinating patient care from hospital to home: Presenters: Madeleine Rooney, LCSW, Marcia Kissane, RN, BSN</td>
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<tr>
<td>2/26</td>
<td>2-3:30 PM</td>
<td>Medication management in older adults and medical error prevention: Presenters: Julie Jun, Pharm.D., Ann Wehmeyer, Pharm. D.</td>
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<tr>
<td>3/5</td>
<td>2-3:30 PM</td>
<td>Interdisciplinary team management of stroke patients. Presenters: Dr. Ravi Kasi Department of Physical Medicine and Rehabilitation; representatives from social work, occupational therapy, speech language pathology and physical therapy.</td>
</tr>
<tr>
<td>3/12</td>
<td>2-4:30 PM</td>
<td>Palliative care and the role of the interprofessional team. A case exercise. Presenters: Steven Rothschild, M.D.</td>
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Stan Lapidos – GITT Coordinator: 312-942-2753
stan_lapidos@rush.edu
Elements of “Decisional Capacity”

- Ability to understand relevant information
- Ability to appreciate the situation and its likely consequences
- Ability to manipulate information rationally [i.e., to reason]
- Ability to evidence a choice

Medical Assessment

1. What are the individual’s medical diagnoses, prognoses and history, including sensory deficiencies, which may be relevant to capacity?
   - Conditions that may affect cognition: dementia, CV conditions, pulmonary, renal, or endocrine diseases, severe nutritional imbalances, dehydration, delirium.
2. Do the patient’s medical conditions affect capacity?
   - A medical condition does not in and of itself indicate diminished decisional capacity. Look further.
   - Functional limitations do not indicate diminished decisional capacity.
3. Are medications contributing to symptoms and is this effect correctable?
4. To what extent are the medical factors contributing to diminished capacity reversible?
   - Waxing and waning of chronic conditions.
   - Disease-to-disease, disease-to-drug or drug-to-drug interactions.
   - Reversibility of depression, anxiety, psychoses, schizophrenia, delirium.
5. Is there presence of psychiatric illness?

Functional Assessment

1. What can the patient do and not do physically?
   - Activities of daily living (ADLs) = eating, bathing, dressing, toileting, grooming, transferring, walking.
   - Instrumental activities of daily living (IADLs) = using telephone, laundry, meal prep, housework, household finances, shopping, medications, managing transport.
2. What can the patient do and not do cognitively?
   - Cognitive functioning assessment tools
   - Ask specific questions about task at hand. For finances – What is an ATM? What is a check? A CD? Loan? What is the change from buying a 37 cent item with a dollar?
3. To what extent is psychological functioning impaired?
   - Is patient nervous, fidgety, anxious, depressed? Does it make a difference (positive or negative) if someone is there with the person?
   - If condition seems chronic, refer to mental health professional.
8. Consider underlying factors such as stress, grief, depression, pain, malnutrition, health literacy.

9. Find ways to support capacity.
   - Allow extra time.
   - Talk at a slower pace.
   - Suggest the patient bring a support person.
   - Break information down into more easily managed segments.
   - Paraphrase and summarize at key points.
   - Elicit patient’s goals and focus on key information in this light.
   - Address hearing loss:
     - Minimize background noise.
     - Look directly at patient.
     - Use writing to supplement key points.
     - Ask family for tips on how best to communicate.

10. Seek collateral information, dig deeper for an informed assessment through medical records, specialists, thorough patient interviews and discussion with others (with consent).

Capacity Assessment for Guardianship

- Check elements of your state’s legal definition of “incapacity” for guardianship:
  - Medical condition
  - Cognitive impairment
  - Functional ability
  - Risk of harm
- Check for specific court form, or write letter covering the basic elements.
- Specificity is important! It can directly affect your patient’s fundamental rights.
- List areas in which person retains capacity. May allow for a limited guardianship order, in which the person does not lose all rights.
- Check for reversible conditions or limiting factors that might be mistaken for loss of capacity.
- Check for less restrictive alternatives to guardianship:
  - Is there capacity for a health care advance directive?
  - Is there capacity for a financial power of attorney?

Be prepared to testify in court as an expert witness.
- Make assessment report detailed and thorough.
- Meet with direct examination attorney beforehand.
- Expect rebuttal and identify possible points to be raised.

Undue Influence

- Psychological process by which a perpetrator deceptively gains control over the victim’s decision-making. Often compared to brainwashing or techniques used by cults. Used to commit financial or sexual exploitation.
- Diminished capacity can make a person more vulnerable to undue influence.

Online Course on Capacity Assessment of Older Adults

- Approved for 4 credits of CME, CEU, or CNE
- Aimed at physicians; useful for other health care clinicians and professionals
- Sponsored by Rush University Medical Center and the American Bar Association Commission on Law and Aging
- Entire curriculum is downloadable and can be read in a PDF version
- Generously funded by The Retirement Research Foundation

For more information or to enroll, please contact decisional_capacity@rush.edu or visit www.rush.edu/decisionalcapacity

Environmental Assessment

1. What is the nature and level of risk?
   - The higher the risk, the higher level of capacity needed ("sliding scale of capacity").
   - Risk may be physical, psychological, economic.
   - If risk is low, even patients with dementia can have capacity for specific tasks.

2. What environmental factors or barriers reduce capacity?
   - Physical barriers – excessive noise, glare, poor arrangement of furniture, overly-stimulating environment.
   - Life changes – grief, loss of physical ability, change in job or income, fatigue, depression.
   - Low education, cultural or language barriers, low health care literacy.
   - Elder abuse, neglect, exploitation.

3. What supports or accommodations could maximize capacity?
   - Ask "Does the person have capacity with support?"
   - Social supports

4. Is there evidence of undue influence?

Key Capacity Assessment Principles and Practices

1. Start with a presumption of capacity.

2. Assess the ability to make the decision, not the outcome. Examine the decision-making process, not whether a decision is "good."

3. Recognize and address "ageism." Age does not determine mental status.

4. Capacity is task specific and situation specific. There may be capacity for some tasks or decisions but not others. The higher the risk, the greater the functioning and understanding must be.

5. Diminished capacity may be reversible and temporary, e.g., delirium.

6. Don't confuse communication challenges with diminished capacity.

7. Culture counts. Recognize there are widely differing views about illness, healing, autonomy, family involvement.
How to provide effective feedback to students

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Dept of Pediatrics
Rush Medical College
Objectives:

During this session, we will:

- Identify opportunities to provide our learners with timely and specific feedback
- Recognize the characteristics of effective feedback
- Describe a variety of methods for providing feedback, as described in the health professions education literature
- Practice strategies for giving feedback in a variety of situations
Roadmap:

- Feedback – what and why?
- Learn from others
  - Literature
  - Learner Voices
- How to make our feedback more effective
- Hurdles and Challenges
  - Logistical barriers
  - Educator barriers
  - Learner barriers
- Feedback sandwich
  - Newer (and better) options
- Models
- Practice!
Learning a skill...requires feedback
Feedback is...

- an informed, objective appraisal of performance, that is shared in order to improve future performance in the same activity
Feedback involves “feeding back” information into a system:

- Mechanical
- Human
- Educational
Feedback..

- Is formative and objective; it presents information
- Is not the same as praise ("Great job!") nor criticism ("You missed that completely")
- Is not the same as evaluation, which is summative and describes a final judgment about performance

"Effective clinical learning in the health professions requires a model for constructive, non-evaluative performance appraisal, neither embarrassing praise nor humiliating criticism, that is shared with learners, to promote acquisition of the complex skills required for patient care"

Ende, JAMA 1983
The performance cycle:

1. Set clear expectations
2. Observe learner skills
3. Opportunity to incorporate and adjust
4. Evaluate performance
5. Provide feedback

This cycle represents the continuous process of performance improvement.
Why is feedback important?

- Learners (all human beings) do not consistently or accurately identify their own strengths and weaknesses

- Particularly in the healthcare professions, training employs a system of gradually diminishing supervision

- Opportunities for feedback are key to improving clinical skills as learners move from supervised to independent practice

- Feedback supports both the learner’s skill development and the appropriate care of patients

(Davis, DA 2006, Miester 2010)
Multiple ways in which feedback is provided:

- **Timing:**
  - Spontaneous, "on the fly", "in the moment"
  - Structured, formal, **scheduled**

- **Modality:**
  - **Verbal**
  - Written
  - Electronic
**The Feedback Challenge…**

- Had individual feedback sessions with each student, which was helpful.
- Did not provide positive feedback, and was intimidating.
- I asked what I could work on and was given the feedback - nothing.
- Feedback? What feedback?

...
What can we learn from the literature?

- “Feedback in Clinical Medical Education” (Ende, *JAMA*, 1983)
  - Supervisor and learner should work toward a common goal
  - Use descriptive language and address specifics, not generalities
  - Address actions, rather than intentions or interpretations
  - Learner should be actively engaged in the process

- Mismatch between learner and provider perceptions re: feedback
  - In all areas, significantly lower ratings by students v faculty regarding: quantity, specificity, timeliness, relevance, attention to student feelings (129 faculty, 76 medical students, single institution)

  (Gil, D *Academic Medicine*, 1984)
Does feedback affect performance?

- Few RCTs re: impact of feedback on performance:
  - Surgical knot-tying (33 students, 2006, RCT). Students who received specific feedback improved sig compared to those who received “general compliments”. Avg satisfaction rating sig higher in the group who received compliments

- “What are the features and characteristics of feedback that influence physicians’ clinical performance?” (BEME series systematic review 2012):
  - Reviewed all publications 1966-2003, 41 studies met inclusion criteria, limited scope to those involving MDs (residents/faculty)
  - 70% demonstrated a positive effect of feedback on physician performance, which correlated with two characteristics – source of the feedback, and duration of the observation cycle

(Boehler ML, 2006, Veloski 2006)
What can we learn from the literature?

- Benefits accrue to supervisors by providing feedback to learners
  - Promotes personal and professional development
  - Enhance supervisors’ communication and interpersonal skills
  - Provides a sense of personal satisfaction by facilitating the development of another clinician

- Emphasis on the role of feedback in the development of meaningful relationships between learners and supervisors

(Clynes and Raftery, 2008)
Learners’ Voices: what makes feedback effective?
Learners’ Voices: what makes feedback effective?
Learners’ voices: what makes feedback effective?

- IMG_0414.MOV
Learners’ voices: what makes feedback effective?

- [IMG_0418.MOV]
How to make feedback more effective: 3 elements

- **What** is communicated with the learner
- **When** and **where** you are communicating with the learner
- **How** you are communicating with the learner
Effective feedback:

- is specific and objective, describes observed behaviors, and focuses on behaviors that can be changed
- is regulated in quantity (don’t overwhelm the system. What is the most important message right now?)
- provides a balanced message of positive and constructive observations to the learner
- Is labeled as “feedback”
Move from this.....to this:

- You know, I’d like to see you do a better job in clinic. You just haven’t been able to see patients as well as the other (students/residents/trainees). The other faculty feel the same way as I do. And you’ve been late a bunch of times. I’d like to see you do this better before it’s time to write your evaluation.

- Have a minute? I’d like to give you some feedback about your performance in clinic this week (today/month/rotation). Your enthusiasm about seeing patients is palpable – it really helps with team morale. On the other hand, your notes are often completed late, which makes it hard for others to follow up with your patients. What’s your take on this?
When and where you are communicating with the learner

Effective feedback

- Follows clear expectations for performance
- is timely; occurs close enough to the clinical experience for the learner to remember the events accurately
- allows adequate time for the learner to incorporate new behaviors and improve performance before evaluation
- is provided in an appropriate setting
Move from this......to this:

- So, let’s have you start seeing patients. Come back and present to me after you see the patient in Room D.

- Feedback at end of the day?

- Feedback in front of the patient? Other learners?

- The patient in Room D is here with abdominal pain. Take about 15 minutes to do a focused history and physical, then come back and present to me with an assessment your leading diagnosis.

- Feedback before the next patient encounter

- Feedback in a less busy location
How you are communicating with the learner

Effective feedback

- actively engages the learner in reflection and self assessment
- is part of a process of bidirectional communication, which incorporates the learner’s perspective
- includes creating a plan for skill improvement, with input from both learner and supervisor
- is most valuable when provided in the context of a supportive learner-teacher relationship
- Your write ups lack detail. I need you to include more information about the patient history and each possible diagnosis you are considering.

- How do you think things have been going? (pause)

- How might you improve on this?

- Let’s put together a plan....

- How can I help you with this?
COMMUNICATION

MAKE SURE
YOU LISTEN

AS MUCH AS
YOU TALK

IS A
TWO-WAY
STREET
Providing effective feedback means getting beyond “I did it”
Why is this so difficult? (aka, what are the barriers to providing effective feedback)

- Logistical challenges:
  - Clinical responsibilities impact the ability of faculty to observe learner performance and devote time to feedback
    - Lack of direct observation: “observations are the currency of feedback”
    - Lack of reliable observations
  - Faculty providing “in the moment” feedback may not be familiar with learner expectations and may be uncomfortable providing constructive feedback
  - Faculty providing scheduled feedback may lack the opportunity to directly observe learner skills and must rely on transmitted reports, which may lack specifics and consistency
Why is this so difficult?
(aka, what are the barriers to providing effective feedback)

- Educator challenges:
  - Receive little training in how to provide feedback
  - Receive little feedback about their own skills providing feedback
  - May lack confidence in their ability to provide feedback
  - Concern that learners will be hurt by constructive feedback
  - Concern about their own reputation
  - Feel that learners disregard feedback and consider it of little value
  - **Human beings are more comfortable providing praise and encouragement and much less comfortable providing constructive feedback.**
Preparing for feedback...

- Identify an upcoming opportunity when you will be a “feedback provider”
- Prepare for that opportunity – and reflect on it afterwards
- Take advantage of opportunities to get feedback on your feedback skills
- Use colleagues and mentors as a resource
- Engage in faculty development opportunities
- Try alternate models
YOU'RE RIGHT, THIS IS THE KIND OF THING YOU NEED TO GIVE HIM FEEDBACK ON.

WHICH I RECOMMEND BE DONE IN A VERY DIRECT AND OPEN FASHION.

IN FACT, I THINK YOU SHOULD TALK TO HIM IN PERSON.

WHY -- IS FACEBOOK DOWN?
Consequences of “Vanishing Feedback”:

- No feedback provided at all!

- No meaningful feedback: well meaning supervisors provide vague generalities to fulfill the requirement of “providing feedback”

- Without feedback, students form their own impressions of their clinical performance (which may be accurate, or not)

- Weak performance - uncorrected – is perpetuated

- When evaluations identify sub-par performance, and learners did not get feedback, they may be angry or discouraged – and not motivated to improve
Models for providing feedback:

- PB&J: the feedback “sandwich”
- Gigante (2011): STOP acronym
- Cantillon and Sargeant (2008): Reflective feedback conversation
- Milan (2006): Readiness to change
PB&J: the old “feedback sandwich”

- Provides the learner with constructive feedback (the peanut butter) in between two servings of positive comments (the raisin bread)

- Strengths:
  - the learner may be more open to receiving constructive input about areas requiring improvement when provided in conjunction with positive feedback
  - the learner receives a both positive and constructive feedback, yet the session both starts and ends on an upbeat note

- Weaknesses:
  - one way flow of information
  - does not engage the learner in self reflection
  - the constructive comments may be diluted or masked by the double serving of positive feedback
  - no empirical evidence exists to support the efficacy of this approach.
What The “Feedback Sandwich” Really Sounds Like to Your Team


So...what you’re saying is?

MattMcWilliams.com/Sandwich
The “STOP” Model:

The “STOP” acronym for effective feedback:

- **S**pecific
- **T**imely
- based on **O**bserved behaviors
- **P**lan for improvement developed with the learner

(Gigante, 2011 “Getting Beyond Good Job: How to Give Effective Feedback”)
The “Reflective Feedback Conversation” Model:

- Educator asks learner to share concerns about recent performance
- Learner describes concerns; identifies what s/he would have liked to do better
- Educator provides observations related to performance, offers support, and asks learner to reflect on strategies for improvement: “Is there anything you can think of that might work better, make it easier, or improve it for next time?”
- Learner response/suggestions
- Educator responds, may add suggestions, checks for learner understanding

(Cantillon and Sargeant, 2008)
“Readiness to Change” Model:

- Addresses learner receptivity to the feedback process; may help supervisors target their approach, particularly in challenging feedback situations.

- Students may be at one of five stages of change:
  - Pre-contemplation (not aware of the problem/in denial)
  - Contemplation (aware but ambivalent about current behavior)
  - Preparation (ready to take action, sets goals)
  - Action (conducts activities to achieve their goals)
  - Maintenance (integrates new behavior into learner’s routine)

- Educator “diagnoses” learner’s stage of readiness and employs focused techniques to encourage desired changes.

Feedback practice:

In clinic, your student examines a child with a history of tactile fever and sore throat. His assessment and plan: URI, low likelihood of strep, let’s send him home. As his preceptor, you find tender enlarged lymph nodes and a sandpaper-like rash on exam, and instruct him to do a rapid strep test to make the diagnosis – which he does. He is impressed with your clinical acumen and moves on to see the next patient.
Feedback practice

- A very personable student struggles through a challenging month in an inpatient care unit. The other staff help out behind the scenes, picking up the slack with patient care decisions and management. You, his course director, receive several emails from faculty describing his weak performance. You sit down with him at the end of the month, and he is surprised to hear that he has barely passed the rotation.
Feedback practice

- Your graduate student/resident/advanced learner performs well on clinical rotations. She is friendly and patients like her! Her lowest clinical evaluation ratings are consistently in the area of knowledge base, and her test scores on the last several exams were below average. She is at risk for failing her upcoming licensing exam. When you try to broach the subject, she seems offended and replies, “Don’t worry – I’ll pass.”
Feedback given is not always the same as feedback received

(Clynes and Raftery 2008)

- Learners may not recognize feedback even when it is provided. When offering feedback, *be explicit*. Use the word “feedback.”

- Feedback incongruent with learner self perception can evoke a strong emotional response, which may make learners deny, distort or discount it.

- Consider the “teach back” technique: ask learners to close the loop by repeating back or summarizing what has been discussed.

Bing You and Trowbridge 2009; Gigante 2011; Borges 2006
Incorporate learner-centered reflection into the feedback process:

- Health professions educators have focused on several key educator-specific criteria for feedback (specific, timely)

- Next step: incorporate learner-focused educational principles into this process (use of open ended questions, focus on learner needs, development of learner reflection skills)

- Reflection promotes self assessment, personal growth, accepting and integrating feedback

- Long term goal: learners who are able to reflect and self assess, who will develop into effective self directed, life long learners

Bing You and Trowbridge 2009
Developing a culture of effective feedback:

- Feedback becomes easier to both give and receive with practice.

- Share responsibility for effective feedback:
  - Encourage learners to proactively solicit feedback from their supervisors
  - Establish routines to help clinical teachers regularly incorporate formative feedback into their work with learners
  - Recognize that integrating feedback is not a passive activity – it requires maturity and a commitment to skill improvement

- Prepare for and reflect on your own feedback opportunities

- Role model soliciting and providing feedback – faculty (and students!) who receive regular feedback are more likely to provide feedback to others.
Identify an upcoming opportunity when you will be a “feedback provider”:

Will feedback be: Scheduled/spontaneous? Verbal/written/electronic?

Have clear performance expectations been established with your learner?

Where will you provide feedback to your learner – is it private? Does it need to be?

Consider the timing of the feedback session relative to the performance reviewed. Will you provide feedback regarding recent performance, or a rotation/semester?

Will you be providing feedback based on direct observation or the collected input of other direct observers?

Consider the content of the feedback you are going to provide. Is it balanced? What is the single most important message you need to convey?

How are you going to engage the learner in this process?

What concerns do you have about your own skill in providing feedback? How might you address them?

Identify one aspect of this upcoming feedback encounter that you can enhance using the information and skills reviewed at today’s faculty development session:
References:


9) Dohrenwend, Anne. "Serving up the feedback sandwich" *Family Practice Management* 9.10 (2002): 43. (reviews the old standby)


12) Gigante, Joseph, Michael Dell, and Angela Sharkey. "Getting beyond "good job": how to give effective feedback." *Pediatrics* 127.2 (2011): 205 – 207 (short and sweet)


Adapting to New and Changing Continuing Education Requirements

Mary Grantner
Director
Tanya Friese
Continuing Nursing Education Manager
Interprofessional Continuing Education
Objectives

• Recognize the ongoing developments in continuing education (CE) requirements, especially for clinicians in specialty practices.
• Examine the purpose of CE requirements for healthcare providers.
• Utilize the CE landscape to improve practice and teaching.
To obtain continuing education credit you must...

- Be present for the entire session
- Complete an evaluation form
- Return the evaluation form to staff
- Certificate will be sent to you by e-mail upon request

Rush designates this live activity for 1 (one) AMA PRA Category 1 Credit™.

*Rush University Medical Center is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. Rush University Medical Center designates this live activity for a maximum of 1 AMA PRA Category 1 Credit(s)™. Physicians should claim only credit commensurate with the extent of their participation in the activity.*

*Rush University is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation. Rush designates this live activity for one (1) continuing nursing education credit.*

*Rush University is an approved provider for physical therapy (216.000272), occupational therapy, respiratory therapy, social work (159.001203), nutrition, speech-audiology, and psychology by the Illinois Department of Professional Regulation. Rush University designates this live activity for one (1) Continuing Education credit(s).*

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The Office of Interprofessional Continuing Education (IPCE)

Accredited by
Accreditation Council for Continuing Medical Education (ACCME)
American Nurses Credentialing Center’s Commission on Accreditation Standards (ANCC)
Illinois Department of Financial and Professional Regulation (IDFPR)
IPCE helps Rush’s faculty and clinicians develop and deliver accredited continuing education in all of the following professions:

*Medicine, Nursing, Nutrition, Occupational therapy, Physical therapy, Psychology, Respiratory therapy, Social work, and Speech Pathology/Audiology.*
CE requirements keep increasing/evolving for clinicians in all professions, but specialists in particular.

Sometimes I get the feeling they’re trying to get rid of us, don’t you?

Who is “they” and who is “us”?
And there’s a new twist called **Interprofessional Education**

- Occurs when learners from two or more professions learn *about, from, and with* one another.
- Rush has built “interprofessionalism” into its Strategic Plan.
- IPCE is part of formation of **RCI, Rush Center for Interprofessionalism**. Stay tuned.
Medicine CME requirements continue to evolve.

All ABMS member boards require MOC participation.

All boards require that physicians document:
- Licensure
- Lifelong Learning and Self-Assessment
- Cognitive Expertise
- Practice Performance Assessment
# Nursing CE requirements, state and ANCC

<table>
<thead>
<tr>
<th>Type of License/Certification</th>
<th>Term of License/Certificate</th>
<th>CE requirement</th>
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<tbody>
<tr>
<td>RN, LPN - Illinois</td>
<td>2 years</td>
<td>20 credits</td>
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| APN - Illinois               | 2 years                     | 50 credits     
APN holding more than 1 APN license is required to complete 50 contact hours total per license renewal period. |
| ANCC Specialty Certification | 5 years                     | 75 credits, 51% in specialty. |
| ANCC, APN/NP                 | 5 years                     | 75 credits, at least 25 in pharmacotherapeutics; 51% in specialty. |
Pharmacy specialty boards require MOC participation.

Pharmacist must document:
- Licensure
- Cognitive Expertise with BPS-qualified CE, OR re-certification exam. Pharmacists cannot claim CME credit.

As of now, we aren’t certified for pharmacy CE. Hopefully will be by 2016.
Increased CME requirements are due to:

**History**
Required in some form since 1949; as new Tx/Rx increase, so does need to “keep up.”

**Outside pressures**
Political pressure to assure independence; Public demands for certified expertise; Insurance & hospital requirements.
Increased CE requirements are due to:

**Changing practice environment**

CE relatively new for non-MD professions;
Demands for all to practice at “top of license.”

**External pressures**

ACA demands for/on primary care providers; Public demands for quality;
Insurance & hospital requirements.
The bottom line is the bottom line. You are expected to:

• Maintain your license;
• Increase/maintain quality;
• Build an interprofessional practice;
• Teach students in and about IP environment.
IPCE enters here.

• Qualify profession-specific CE;
• Qualify IP CE;
• Develop outcomes measures;
• Help deliver CE across multiple platforms.
Traditional CE/CME has added value.

IPCE can assist in multiple venues
- Traditional single lectures;
- Large multiple-day meetings;
- Online formats (recorded lectures or interactive courses);
- Sim Lab activities (i.e. Ebola training);
- Performance Improvement CME/CE
Performance Improvement CE can be granted for PI measures clinical departments already do.

By implementing a PI CE project, you will:
• Document your PI participation (present & future CE requirement);
• Engage in IP learning;
• Earn 20 CME or 15 nursing CE credits;
• Allow other clinicians on team to also earn CE (SW, RT, etc.)
All medical specialties require PI to some degree.

Component of ABMS boards MOC program.

All boards require that physicians document:
- Licensure
- Lifelong Learning and Self-Assessment
- Cognitive Expertise
- Practice Performance Assessment
Most nursing specialty boards require additional CE. Rumor is, PI component is coming.

Specialty certified nurses must document:

- Licensure
- Complete CE requirements over 5-year certificate (exact #’s vary)
- Verify 1000 hours of practice in specialty area OR re-certification exam.
ANCC accepts the AMA definition of PI:

“PI CME is a certified CME activity in which an accredited CME provider structures a long-term three-stage process by which a physician or group of physicians learn about specific performance measures, assess their practice using the selected performance measures, implement interventions to improve performance related to these measures over a useful interval of time, and then reassess their practice using the same performance measures. A PI CME activity may address any facet (structure, process or outcome) of a physician’s practice with direct implications for patient care.”
Working in Harmony:
Examples applicable to any/all professions

PROJECT DESIGN FOR PI
Any meaningful practice measure is acceptable, so long as group meetings and participation are documented.

**PLAN.** Identify project, metrics, and target *(Group PI Meeting #1)*

**STUDY.** Data Analysis *(Group PI Meeting #2)*

**ACT.** Action Plan *(Group PI Meeting #3)*
Have a reasonable sample size for each selected measure. (25 patients/cases is a good broadly accepted number.)

Proceed with 3-step reporting process.
1) **PLAN** - Select initial metrics and assess
2) **STUDY** - Implement improvement plan
3) **ACT** - Re-Assess performance
Report 1 from each individual participant must be filed with IPCE Office by end of 3rd month of project. 5 CE credits.
Report 2 from each individual participant must be filed with IPCE Office by end of 6th month of project. 5 CE credits.
Report 3 (final) from each individual participant must be filed with IPCE Office by end of 12th month of project. 5 CE credits.
Final Notes

• PI/QI is a trend that isn’t going anywhere, so earn credit while you’re at it.
• *Interprofessionalism* is literally our name.
• Online services available.
IPCE staff can all answer CE questions, so don’t hesitate to contact us.

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Planning Form and Continuing Education Frequently Asked Questions

The IPCE Planning Form was built to assure compliance with Accreditation Council for Continuing Medical Education (ACCME), the American Nurses Credentialing Center’s (ANCC) Commission on Accreditation Standards, and the Illinois Department of Professional Regulation. Rush is accredited by these bodies to provide continuing education.

Interprofessional? Sure. Won’t everybody benefit from sitting in on my course?

Interprofessional (IP) education has a specific definition developed by the World Health Organization and adopted by most educators in health care, including Rush. It’s simple: students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes.

The definition is perhaps deceptively simple. It does not mean learners from different professions sitting in the same room passively listening. It does mean that experts from different professions have worked together to plan and deliver educational content. It does mean that learners from different professions engage with the material and with one another.

It is entirely appropriate that some CE courses are profession-specific. But some can and should be better provided as IP courses. If you intend to offer your course for credit in more than one profession, be sure to have a content expert from that profession involved in the planning and/or in the delivery of the material.

What is a Regularly Scheduled Series (RSS)?

This is a set of courses that is planned as a series with multiple, ongoing sessions offered weekly, monthly, or quarterly. It is primarily planned by and presented to the accredited organization’s professional staff. Examples include grand rounds, tumor boards, journal clubs, and morbidity and mortality conferences. Any regularly scheduled series must comply with the planning and monitoring requirements demanded of any other continuing education course, even though you probably don’t know what all of the content of these activities will be at this point.

For the purposes of this application, you should prepare a set of general learning objectives for the whole series for the year. You should have a Course Director and Planning Committee in place, and the Planning Committee can consist of a faculty member you’ve already identified. You can include on this form any faculty you’ve already identified as presenters, and simply attach their required BIO/COI forms to this application.

Then, once your series has been qualified by the IPCE office, you will have to submit a set of learning objectives for each individual session, as well as the required documentation for all faculty (the BIO/COI form) not already submitted. Documentation of objectives and faculty for individual sessions must be submitted to the IPCE office five working days prior to the posting of any announcement for the activity. The objectives, faculty disclosures, and appropriate accreditation statements must appear on any announcement for the activity, as well as be displayed with the sign-in sheets for the activity. (Posting a flyer next to a sign-in sheet is sufficient.)

Any participant seeking credit for the activity must complete an evaluation of the activity. Once the IPCE office has received that week’s objectives, faculty disclosures, and approved the activity, you will be sent the evaluation form.

How do I choose “Activity type”?

This is straightforward if your course is being offered in a single format. If you are delivering a live lecture or workshop and the learner must be physically present to receive credit, it is a “Live Activity”. If you are offering a course available in print or on the Web, and the learner can access the material at his/her own pace, it is “Enduring Material”. An enduring material activity must have an “expiration date”, and determining that is up to the Course Director and/or Faculty. You
A Performance Improvement CE Project is an ongoing activity requiring that your practice group examine its own patient data, develop an improvement plan based on that data, and then re-examine that data at a set date. It is an ideal CE program for a practice that works in interprofessional or interdisciplinary teams, and requires a separate application. Contact IPCE for more information.

Evaluation of some type (a test or an evaluation/survey) must be completed for the learner to receive credit for any activity. The IPCE office will help you to create the appropriate evaluation and will manage the distribution of credits for learners based on evaluations.

**How do I write “general learning objectives” for RSS?**

As with any educational activity, you conduct these regular sessions with the intention of changing practice behavior. Therefore, you will need to think globally about what changes in behavior your series will try to accomplish over the course of the year. For example:

At the conclusion of this live activity, participants will be able to:
1. Access the results of new research, and assess their potential applications to the clinical practice of interventional radiology.
2. Improve basic knowledge and skills relevant to clinical practice.
3. Practice new interventional techniques in the treatment of patients.
4. Apply principles of critical thinking to ideas from experts and peers in interventional radiology to the assessment and treatment of patients.

This series is focused on providing the results of new research to the learners. The important distinction here is that the sessions will not simply hand out information to participants. Rather, the participants will be provided ways to use the information in practice.

Your series might not be focused on research. Regardless, you should think about your global objectives in terms of their application to practice.

**Gaps, Needs, and Objectives**

The learning needs of your audience are dependent upon your identification of gaps in practice. The ACCME makes the following distinction: “Provider identifies gaps between current practice or outcomes and desirable or achievable practice or outcomes... and the knowledge or skills that must be remedied to help close a practice gap” (ACCME guidelines, 2012)

Determining the cause(s) of the practice gap will allow you to identify your learners’ need(s). From needs in turn you can develop specific objectives for your activity, all leading directly back to the identified practice gap.

Educational objectives should be stated in terms of specific desired outcomes in practice. It might be more helpful to ask yourself when writing objectives “What do I want the learner to do when s/he leaves this course?”

**SAMPLE: Gap + Need = Objective:**

Course Director recognizes: Institution’s rate of myocardial infarction in patients with diabetes is above national average.

1. **Gap:** “Specific care aspects of diabetes that are being inadequately managed lead to a high risk of complications, and certain complications like myocardial infarctions are not being reduced because of poor diabetes control.”

2. **Need:** “Improved application of aspects of the American Association of Clinical Endocrinologists Medical Guidelines for Clinical Practice for Developing a Diabetes Mellitus Comprehensive Care Plan.”


3. **Learning objective:** "Incorporate nutritional medicine into individualized patient care plans, with pharmacologic intervention as necessary, to maintain a blood pressure of 130/80 mm Hg in patients with diabetes."
“Qualified Planners and Faculty/Presenters/Authors/Content Reviewers” – Who is disclosing what?

All Planners and Faculty (in essence, anyone with control over educational content) must complete a BIO/COI Form prior to the activity. These forms must be sent to the IPCE office along with your Planning Form.

A separate form need not be sent for each instance in which an individual faculty member presents an activity. As long as you have nothing new to disclose, your disclosure form is valid for one year and will be kept on file by the IPCE office. However, should you have some new financial interest to disclose, you must update your BIO/COI form.

While all activities need two planners, those planners can also be the course faculty. However, planners cannot review their own BIO/COI forms. Planners should refer their own forms to the IPCE office for review. All forms must be sent to the IPCE office for filing.

Disclosure of all relevant financial relationships with any commercial entity (including but not limited to pharmaceutical companies, biomedical device manufacturers, or other corporations whose products or services are related to the subject matter of the presentation topic) within the past 12 months are required from all individuals who participate in the development and/or presentation of the content of the activity at the time of submission of the application.

A financial relationship with a commercial entity does not automatically preclude your participation in an educational activity. However, the potential conflict of interest must be resolved prior to the activity. Resolution can include any number of steps including an independent review of your content, or a revision of your role in the activity.

So after I complete the disclosure to you, then what?

Learners must be informed of potential conflicts of interest (or the lack thereof) on the part of all planners and presenters. This information must be provided prior to the start of the activity. These disclosures should be included on flyers or promotional materials, and as the first item at the beginning of a document or slide set.

In addition, FDA guidelines require that any discussions regarding the utilization of FDA approved drugs or devices must be within approved regulations. If you discuss the utilization of FDA drugs or devices that are outside approved regulations, you must clearly delineate this for your audience.

What if I have nothing to disclose?

If the faculty, Course Director and Planners have nothing to disclose, then that should be stated on any promotional materials and at the beginning of the activity. The statement is just that simple: “The course director, planners and faculty of this activity have no relevant financial relationships to disclose.”

What sorts of credentials are needed for Faculty/Presenters/Authors?

All Faculty must be able to demonstrate expertise in the content area in which they are presenting. For Rush employees, “credentials” are simply the individual’s title or appointment. For Faculty who are not Rush employees, a current CV should be provided.

What do I do about “Evaluation”?

The participants must be actively involved in the educational activity. Involvement can be demonstrated with evaluation onsite. The standard IPCE evaluation form, in a Scantron™ format, will be sent to each Course Director, and can be revised in consultation with the IPCE office. More in-depth or detailed follow-up evaluation can be conducted, and should be developed in cooperation with the IPCE office.

For each individual session in a RSS, any participant seeking credit must complete the Scantron™ evaluation form and the sign-in sheet.

Participants should “receive something to take home for further reference.” For example, this can consist of outside reference materials in hand-outs or displayed on slides. All written or electronic materials developed for participants’ use must be in compliance with all United States copyright laws. Please visit the Rush University Library website, www.rushu.rush.edu, to review FAQs about Use of Copyrighted Materials for Rush University Courses.
Who gets all of these “Accreditation” announcements?

Appropriate accreditation statements, as reproduced on the Planning Form, must appear on any communications that refer to awarding continuing education credit or contact hours. This includes promotional materials, flyers and, of course, certificates.

How do we handle the money from “Commercial Support and Sponsorship”?

All unrestricted/independent educational grants for Rush sponsored activities will be managed by the IPCE office unless alternative arrangements have been agreed upon in advance. No commercial exhibits are allowed in any Rush-sponsored educational activity. You may have exhibitors in conjunction with an activity, but they must be kept physically separate from the learning space.

Any activity for which you do receive support requires that you complete the Sponsorship Agreement. Please contact the IPCE office to obtain the appropriate form. In addition, these types of support must be disclosed to participants prior to the start of the activity. These disclosures should appear along with the faculty's on flyers or promotional materials, and as the first item at the beginning of a document or slide set.

I've completed this very long form. Now what?

Send the completed form, all BIO/COI forms, and any applicable Sponsorship Agreement forms to the IPCE office at CE_Office@rush.edu. The office will review your application, assess payment due, and get back to you within five working days.

With the exception of RSS, the IPCE office must receive a copy of the content of your activity. This will be kept on file for accreditation records, and you'll be advised once the course is approved when submission of content is required.

Rush University Medical Center is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. Physicians should claim only credit commensurate with the extent of their participation in the activity.

Rush University is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

Rush University is an approved provider for physical therapy (216.000272), occupational therapy, respiratory therapy, social work (159.001203), nutrition, speech-audiology, and psychology by the Illinois Department of Professional Regulation.
How to Conduct Responsible Research & Address Conflict of Interests

(Teaching Academy Series)

Stephanie C. Guzik, MBA, BSN, RN, CHRC
Director, Research Compliance
FCOI Officer for Research
Research Integrity Officer RUMC
Shared Values

There is no one best way to undertake research, no universal method that applies to all scientific investigations. However, some important shared values for the responsible conduct of research that bind all researchers together, such as:

- **HONESTY** — conveying information truthfully and honoring commitments,
- **ACCURACY** — reporting findings precisely and taking care to avoid errors,
- **EFFICIENCY** — using resources wisely and avoiding waste, and
- **OBJECTIVITY** — letting the facts speak for themselves and avoiding improper bias.
Responsible Conduct of Research

“...as the practice of scientific investigation with integrity. It involves the awareness and application of established professional norms and ethical principles in the performance of all activities related to scientific research.”

Defined by the National Institutes of Health (NIH)
Rules of the Road

Illustrations by David Zinn
Four Basic Sources of RCR

- Professional Codes
- Government Regulations
- Institutional Policies
- Personal Convictions
Professional Codes

Comprehensive descriptions of responsible research practices can be found in:

• reports and policy statements issued by the National Academy of Sciences, the American Association for the Advancement of Science, the Association of American Medical Colleges, and Sigma Xi;

• guidance on responsible publication practices published in journals; and

• a few comprehensive professional codes.
Government Regulations

• 1966 Animal Welfare Act (PL 89-544),
• 1974 National Research Act (PL 93-348),
• 1985 Health Research Extension Act (PL 99-158)
• 1989, the Department of Health and Human Services (HHS) established the Office of Scientific Integrity (OSI) and the Office of Scientific Integrity Review (OSIR)
• 1992 Office of Research Integrity (ORI) was established
Agency Policies and Guidelines

• Executive Branch agencies have the authority to issue some policies as part of normal operation:
  o National Institutes of Health (NIH)-grant awards
  o Office of Research Integrity (ORI)-misconduct
  o National Science Foundation (NSF)
Institutional Policies

- Scientific Misconduct
- Conflicts of Interest
- Animal Safety/Welfare
- Grants Management
- Human Subject Protections
- Good Laboratory Practices
- Record/Specimen Collection and Retention
Personal Convictions

• Rules generally set minimum standards for behavior rather than strive for the ideal
• Rules will not resolve some of the personal conflicts and moral dilemmas that arise in research
• The rules of the road for research therefore need to be supplemented with good judgment and a strong sense of personal integrity
Responsible Conduct of Research
Content Areas

• Data Acquisition, Management, Sharing and Ownership
• Publication Practices and Responsible Authorship
• Mentor / Trainee Responsibilities
• Peer Review
• Collaborative Science
• Conflict of Interest and Commitment
• Research Misconduct
• Human Subjects
• Animal Welfare
Data Management Practices

Data Ownership

- Funders-Public, Private or Philanthropic
- Research Institutions- PI vs. AMC
- Data Sources- Foreign, Local, Collaborative

Before undertaking any work, make sure you can answer the following questions:

- Who owns the data I am collecting?
- What rights do I have to publish the data?
- Does collecting these data impose any obligations on me?
Data Management Practices cont

Data Collection

• Appropriate Methods
• Attention to Detail
• Authorization (IRB, IACUC, HIPAA)
• Record Keeping
  a. Data Protection
  b. Data Storage
  c. Data Retention
• Data Sharing
Publication Practices and Responsible Authorship

All forms of publication should present:

• a full and fair description of the work undertaken
• an accurate report of the results
• an honest and open assessment of the findings

In assessing the completeness of any publications, researchers should ask whether they have described:

• what they did (methods),
• what they discovered (results), and
• what they make of their discovery (discussion).
Contribution. Authorship is generally limited to individuals who make significant contributions to the work that is reported. This includes anyone who:

• was intimately involved in the conception and design of the research,

• assumed responsibility for data collection and interpretation,

• participated in drafting the publication, and

• approved the final version of the publication.
Aggravation-Free Authorship Tips

• Make sure that you choose collaborators with whom you can work well.
• Discuss authorship early, and keep doing so often as a project evolves. Put it in writing.
• When there are disputes, first try to talk it out amicably and understand the other person's point of view. For example, try to work out how the idea first came about.
• If you must approach your supervisor about an authorship decision that you don't like, keep the tone inquisitive, not accusatory. Explain that you want to understand how authorship was decided.
• If a contributor's authorship is in question, it can help to consider what the paper would have looked like without their efforts, and whether someone else could have made the same contribution.
• Familiarize yourself with your institution's or journal's authorship guidelines, or those of the International Committee of Medical Journal Editors. Use them to back up your case.
• Be prepared to compromise or share credit.
• If you can't agree among yourselves, engage a supervisor, trusted colleagues or an ombudsman to investigate the matter and make a recommendation.

http://www.nature.com/naturejobs/science/articles/10.1038/nj7417-591a
Mentor / Trainee Responsibilities

Common sense suggests that good mentoring should begin with:

• a clear understanding of mutual responsibilities,
• a commitment to maintain a productive and supportive research environment,
• proper supervision and review, and
• an understanding that the main purpose of the relationship is to prepare trainees to become successful researchers.
Collaborative Science

Collaborate with colleagues who have the expertise and/or resources needed to carry out a particular project (Simple or Complex)

In addition to effective communication, collaborative projects should have effective management plans that cover:

• financial issues
• training and supervision
• formal agreements
• compliance
Examples of Project Leadership Plans for Multiple PI Grant Applications

https://grants.nih.gov/grants/multi_pi/sample_leadership_plans.pdf
Conflict of Interest and Commitment

Defined:
“The situation of a person who finds that one of his activities, interests, etc., can be forwarded only at the expense of another of them”

Webster’s Clarification:
“Conflict of interest represents the potential for biased judgment, but is not an indicator of the likelihood or certainty that such judgment or compromises will occur.”

Cohen, J.J.

Acad. Med 76.2 (2001): 209-14
2011 Revised FCOI Regulation

- Revised Regulations on:
  - Responsibility of Applicants for Promoting Objectivity in Research for which Public Health Service Funding is Sought
  - Responsible Prospective Contractors

- Implementation by August 24, 2012
- Applies to each Notice of Award issued subsequent to compliance dates of final rule
COI- Applicability

Study Personnel Defined:

The principal investigator and any other study personnel who shares responsibility for the design, conduct or reporting of research...

Responsibility of Applicants for Promoting Objectivity in Research for which PHS Funding is Sought (42 C.F.R. Part 50, Subpart F)
Study Personnel

• Principal Investigator
• Secondary Investigator(s)
• Protocol Coordinator(s)
• Study Statistician(s)
• Student(s)
• Consultant(s)
• Sub grantee(s)
• Collaborator(s)
What is a Significant Financial Interest?

- SFI—Anything of monetary value, including salary or other payments for services, equity or other ownership interests, and intellectual property rights (42 CFR 50.603)

- Key Changes
  - $10k to $5K
  - Reimbursed or sponsored travel
  - Applicable to Senior/Key Personnel
What is a Financial Conflict of Interest?

- SFI that could directly and significantly affect the design, conduct or reporting of the research.
SFI Thresholds

**PHS (NIH, NSF)**
- Compensation >$5,000
- Equity Interest
- IP Rights - Yes

**FDA**
- Compensation >$25,000
- Equity Interest >$50,000
- IP Rights - Yes

**RUMC**
- Compensation >$5,000
- Equity Interest
- IP Rights - Yes
Examples of Financial COI

• Serving as a director/decision maker for a commercial sponsor

• Receiving equity interest in a commercial company
  – sponsor stock
  – stock options

• Receiving royalties

• Compensation for services as a consultant
Examples of Financial COI cont.

• Receiving lecture fees or honoraria from commercial sponsors

• “Profiting” from conducting research funded by a commercial sponsor

• Receiving “travel” expenses, including spouse and dependants

• Finders fees and milestone incentive payments for recruitment of subjects

• Unrestricted bonuses, gifts
What is (typically) not a COI

• A fair market wage for the time, effort and skill required to conduct the study
• Sponsor coverage of the actual cost of the study
• Income from non-profit organizations for lectures
• Income from service on federal and non-profit advisory or review panels
• Publicly traded diversified mutual funds
Question?

Is it possible to prevent potential financial conflicts of interest in clinical research from materializing into real conflicts?

Answer:

*In an imperfect world, conflicts of interest in clinical research cannot be totally prevented. They can only be minimized through appropriate education and management.*
Management of FCOI’s

“We must manage research scrupulously so that neither individual nor institutional financial interests result in danger to participants”

Ehringhaus and Korn, 
Issues in SCI. and Tech. 
Winter 2002-03
Management of FCOI’s- Institutions

• Review SFI’s and Determine if COI:
  – Manage
  – Reduce
  – Eliminate
  – Educate
Financial Conflict of Interest

The NIH is committed to preserving the public’s trust that the research supported by us is conducted without bias and with the highest scientific and ethical standards. We believe that strengthening the existing regulations on managing financial conflicts of interest is key to assuring the public that NIH and the institutions we support are taking a rigorous approach to managing the essential relationships between the government, federally-funded research institutions, and the private sector.

"The public trust in what we do is just essential, and we cannot afford to take any chances with the integrity of the research process." — Dr. Francis Collins, Director, NIH

2011 Revised Regulations:

The U.S. Department of Health and Human Services (HHS) has issued a final rule in the Federal Register that amends the Public Health Service (PHS) regulations on Responsibility of Applicants for Promoting Objectivity in Research for which PHS Funding is Sought (42 C.F.R. Part 50, Subpart F) and Responsible Prospective Contractors (45 C.F.R. Part 94). An Institution applying for or receiving NIH funding from a grant or cooperative agreement must be in compliance with all of the revised regulatory requirements no later than 365 days after publication of the regulation in the Federal Register, i.e., August 24, 2012, and immediately upon making the Institution’s Financial Conflict of Interest policy publicly accessible as described in 42 CFR part 50.604(a). Institutions must comply with the 1995 financial conflict of interest regulation until the Institution fully implements all of the regulatory requirements of the 2011 revised regulation.

- Federal Register Notice (08/25/2011) - (PDF - 369 KB) - Issuance of the Final Rule on Financial Conflict of Interest Regulations - Responsibility of Applicants for Promoting Objectivity in Research for Which Public Health Service Funding is Sought and Responsible Prospective Contractors.

- NHG Guide Notice (08/23/2011) - NHG Guide Notice to announce the publication of the Final Rule on Financial Conflict of Interest Regulations - Responsibility of Applicants for Promoting Objectivity in Research for Which Public Health Service Funding is Sought and Responsible Prospective Contractors.

- 09/30/2011 NHG Guide Notice (NOT-OD-11-121) - NIH Announces the Posting of Frequently Asked Questions (FAQs) applicable to the 2011 revised regulation on the Responsibility of Applicants for Promoting Objectivity in Research for which PHS Funding is Sought for All NIH-Supported Institutions (42 CFR Part 50 Subpart F).
Scientific Misconduct

Definition:
Fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results.

1) **Fabrication** is making up data or results and recording or reporting them

2) **Falsification** is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.

3) **Plagiarism** is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.

PHS Regulation 42 CFR 93
Finding Research Misconduct

A finding of research misconduct made under the reg requires—

• There be a significant departure from accepted practices

• The misconduct be committed intentionally, knowingly, or recklessly; and

• The allegation be proven by a preponderance of the evidence
Data Sharing and Management Snafu in 3 Short Acts (Misconduct?)

- [http://www.youtube.com/watch?feature=player_embedded&v=N2zK3sAtr-4](http://www.youtube.com/watch?feature=player_embedded&v=N2zK3sAtr-4)
Maneuvering Misconduct

Research misconduct policies provide guidance on responsible conduct in 3 areas.

1. Define misconduct in research
2. Outline procedures (reporting and investigating)
3. Provide protection for all parties (complainant, respondent, whistleblower)
References

ORI Introduction to the Responsible Conduct of Research by Nicholas H. Steneck, PhD; Illustrations by David Zinn

http://grants.nih.gov/grants/oer.htm
Questions?

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Stephanie_Guzik@rush.edu
312-942-1296
Examples of Project Leadership Plans for Multiple PI Grant Applications

For Multiple PI applications, a new section for Leadership Plans (PHS 398, Section I) must be included, unless the RFA announcement requests the information be provided in another section. There are no page limitations for Section I. Leadership Plans should address the following administrative processes and PI responsibilities:

- Roles/areas of responsibility of the PIs
- Fiscal and management coordination
- Process for making decisions on scientific direction and allocation of resources
- Data sharing and communication among investigators
- Publication and intellectual property (if needed) policies
- Procedures for resolving conflicts

Examples of Single Project Leadership Plans

Examples of Leadership Plans for single project applications (i.e., R01, R21, etc) are provided below. (Applicants should follow any special instructions in the specific RFA/PA to ensure the requested information and format is included.)

Example 1

PI#1 and PI#2 will provide oversight of the entire Program and development and implementation of all policies, procedures and processes. In these roles, PI#1 and PI#2 will be responsible for the implementation of the Scientific Agenda, the Leadership Plan and the specific aims and ensure that systems are in place to guarantee institutional compliance with US laws, DHHS and NIH policies including biosafety, human and animal research, data and facilities. Specifically, PI#1 will oversee aim 1 and be responsible for all animal research approvals. PI#2 is responsible for aims 2, 3, and 4 including the implementation of all human subjects research and approvals. PI#1 will serve as contact PI and will assume fiscal and administrative management including maintaining communication among PIs and key personnel through monthly meetings. He will be responsible for communication with NIH and submission of annual reports. The responsibilities of the contact PI will be rotated to PI #2 in even years of the grant award. Publication authorship will be based on the relative scientific contributions of the PIs and key personnel.

Example 2

PI#1 at Institution A will be responsible for the oversight and coordination of project management for aim 1 involving the molecular design and production of vectors expressing tumor specific antigens. PI#2 at Institution B will be responsible for aims 2 and 3 including the in vivo and in vitro testing of vaccines. Each PI will be responsible for his own fiscal and research administration.

The PIs will communicate weekly, either by phone, e-mail, or in person, to discuss experimental design, data analysis, and all administrative responsibilities. All PIs will share their respective research results with other PIs, key personnel, and consultants. They will work together to discuss any changes in the direction of the research projects.
and the reprogramming of funds, if necessary. A publication policy will be established based on the relative scientific contributions of the PIs and key personnel.

PI#1 will serve as contact PI and be responsible for submission of progress reports to NIH and all communication.

Intellectual Property

The Technology Transfer Offices at Institutions A and B will be responsible for preparing and negotiating an agreement for the conduct of the research, including any intellectual property. An Intellectual Property Committee composed of representatives from each institution that is part of the grant award, will be formed to work together to ensure the intellectually property developed by the PIs is protected according to the policies established in the agreement.

Conflict Resolution

If a potential conflict develops, the PIs shall meet and attempt to resolve the dispute. If they fail to resolve the dispute, the disagreement shall be referred to an arbitration committee consisting of one impartial senior executive from each PI’s institution and a third impartial senior executive mutually agreed upon by both PIs. No members of the arbitration committee will be directly involved in the research grant or disagreement.

Change in PI Location

If a PI moves to a new institution, attempts will be made to transfer the relevant portion of the grant to the new institution. In the event that a PI cannot carry out his/her duties, a new PI will be recruited as a replacement at one of the participating institutions.

Example 3

PI#1, PI#2, and PI#3 will serve as PIs for the project. PI#1 will be responsible for the gene expression studies. He will supervise Technician #1 for all microarrays. PI#2 will be responsible for the endothelial cell studies and flow cytometry studies proposed in the grant. She will supervise the Technician #2 at 50% effort for the flow cytometry studies and the post Doc for the endothelial cell studies. PI#3 will oversee all bioinformatics work in the gene expression and flow cytometry studies and will work with PI#1 and PI#2 on all data analysis. The PIs will form a Steering Committee (membership may include PIs, key personnel, consultants, etc) that will manage the oversight and coordination of project management, research administration, publications and data sharing, and integration of all resources needed for the project. The Institution will subdivide the award funds and each PI will be responsible for his own budget. The Steering Committee will oversee decisions on minor changes in research direction and have the authority to reallocate funds and resources between PIs. PI#1 will serve as Chair of the Steering Committee and be responsible for communication among PIs, including meeting schedules and agendas. The position of Chair will rotate among the PIs on a yearly basis. PI#2 will be designated the contact PI and be responsible for submitting all necessary documents to NIH, including IRB approvals, and annual progress reports.

Intellectual Property
The PIs will grant necessary access rights to the pre-existing patents and or the patents potentially generated within the frame of this project for the purpose of this research project to all the other PIs and key personnel on a non-exclusive royalty-free basis. Each PI shall take appropriate measures to ensure that he/she can grant these access rights. Right in any pre-existing intellectual property will remain the property of the party that created and/or controls it.

Conflict Resolution

If a potential conflict develops, the appropriate Departmental administrators representing the PIs shall meet and attempt in good faith to settle any dispute, claim or controversy arising out of or relating to the interpretation, performance or breach of this disagreement. However, if the Departmental administrators fail to resolve the disagreement within thirty business days, then such disagreement shall be referred for resolution to a designated senior executive of the parties who has the authority to settle the disagreement but who is not directly involved in the disagreement.

Change in PI Location

If one of the PIs moves to a new institution, attempts will be made to transfer the relevant portion of the grant to the new institution. In the event that a PI cannot carry out his/her duties, a new PI will be recruited as a replacement, subject to the approval of the Steering Committee and the Institution.
Protecting Patient/Student Privacy and the Organization’s Reputation

Social Media Discussion

February 17, 2015
Rush has cultivated a high social media profile that can be positively or negatively impacted by patient/student privacy issues.

Employees, students, and faculty must know and understand the right way to use social media and to separate personal and professional communications in order to safeguard Rush’s reputation.
Why Social Media Matters

• Thought leadership
• Marketing Rush programs/experts
• Sharing news about Rush
• Monitoring comments about Rush
• Hearing, addressing patient concerns
• Emergency communications
Rush Social Media Channels

- **facebook**  
  Rush: 45,300 likes, RushU: 4,700 likes*

- **twitter**  
  Rush: 11,700 followers, RushU: 211 followers

- **YouTube**  
  738 videos, 512,000 views

- **Rush InPerson**

- **Rush News Blog**

- **LinkedIn**

- **Instagram**

- **Pinterest**

- **Google+**

* Additional Facebook accounts for Rush University Alumni, Rush HR
** Additional Twitter account for College of Nursing
Rush Social Media Channels

Celebrating American Heart Month

Rush University Medical Center
Medical Center - Hospital

Rush University
College & University

RushU Medical Center

Rush University
@RushU

Rush University
@RushUniversity

Rush University
@RushUniversity

Rush University
@RushUniversity

Rush University
@RushUniversity
Social Media Audience

Rush University Medical Center

- Patients
- Potential patients
- Family
- Staff members
- Medical/health care community
- Students
- News media

Rush University

- Students
- Potential students
- Faculty
- Education community
- News media
• Healthcare has a substantial social media presence today…

• http://youtu.be/qLeNGykRAvU
Social Media Monitoring

- Meltwater, Google Alerts
  Monitors Facebook, Twitter, online news

- Twitter keyword monitoring
  E.g., “Rush Hospital,” “Chicago doctor,” “Rush nursing”

- Yelp review alerts
  Rush University Medical Center, Rush ED, Rush practices

- Facebook comment alerts

- YouTube comment alerts
What People Are Saying

Cancer doesn’t own me
@lovetofryhme

My four days at #rushhospital is over. I miss my nurses so much in #9N & @ Rush University Medical Center instagr.am /p/TWb57HyrWc/

Sarah Pasko
@stlthomas611

Big surgery day is finally here. Hoping that this will be a relatively quick hospital stay @RushMedical

Marienne Ignacio
@meowrienne

Shoutout to @RushMedical pediatric nurses. You guys are the best for taking care of my brother. Inspires me even more to become a nurse 😊

Rachel M. @RMinNYC

Seriously @RushMedical. You tell me to rush back for positive blood cultures then stick me in the waiting room. #notimpressed

heywardboyce
@heywardboyce

@RushMedical the doors to this elevator wouldn’t close and a nurse showed me you had to manually push them closed
What People Are Saying

Leticia Rodriguez
★★★★★
I have received medical care at Rush since March. My experience there has been phenomenal. Each and every doctor and staff member I have worked with has been very sensitive and accommodating to my many needs. They go above and beyond to ensure my comfort, even if that means they have to change how they do things or spend more time with me. I have never received so much personalized attention from any of my past medical providers. They say every difficult situation has a silver lining. I am blessed to say Rush is definitely one of mine! Thank you!

Knute Vikse
★★★★★
This hospital staff is top notch. They undoubtedly saved my wife and baby's life this morning when she experienced placental abruption. I don't have enough room here to tell the whole story, nor enough room to thank the Docs and nurses that were there. They were fabulous, patient, kind, and on their game. Thank you Rush Staff!!!

Jackie Parsons
★★★★★
Hats off to the nurses, surgeons, and staff at Rush Hospital. My father had surgery yesterday, and I have never felt so cared for. The attention, respect, and care you give your patients is amazing! Truly the best I've seen. A big THANK YOU from me and my family!

Karma K.
Chicago, IL
★★★★★
2/8/2015
Go here if you need any kind of specialist. Some of the docs lack bedside decorum but get past that. They didn't go to med school for 33 years to hold your hand. They know their shit and you will receive a quality diagnosis.

This hospital is one of the best in the nation for orthopedics and neurology.
The most gratifying aspect of Rush’s Facebook page is the positive feedback we get from patients and their families. Since it’s National Nurses Week, we’re sharing a few comments posted recently about the nursing staff at Rush.

"It's very hard for cancer patients to keep up their spirits, but the nurses there do their very best to keep you in a better mood while providing superb medical care. Ladies and the occasional gentleman, thank you all."

Meet Keisha Newsome, a patient care technician at Rush. "The most rewarding part of my job," she says, "is seeing my patients go home and be healthy."
What We Do With Feedback

Share With:

- Patient Relations (patient concerns, complaints, compliments)
- Legal Department
- Risk Management (complaints, threats)
- Compliance
- Human Resources (posts involving employees, job inquiries)
- Public Relations
- Security Services
Trust is Important

• Trust
  – in our medical services
  – in our people
  – In our customer service
  – in our academics

• Patients are more aware today of their privacy rights and report concerns regularly
  – To the Privacy Office
  – To Patient Relations
  – To the Rush Hotline
  – To the Office for Civil Rights
  – To The Joint Commission
  – Through Press Ganey
What is a Privacy Breach?

• “…means the acquisition, access, use, or disclosure of PHI in a manner not permitted under [HIPAA/HITECH], which compromises the security or privacy of the PHI…” [RUMC Policy, CC-G01, Incident Response for Privacy Breaches]

• A privacy breach can hurt our patients and our reputation

• All privacy incidents presumed a breach until a Risk of Compromise assessment is completed
Social Media Privacy

- http://youtu.be/c9pFMSKPXSk
What is a Privacy Breach?

- A Privacy Breach is reported to the affected patient(s) and the DHHS Office for Civil Rights
- The RUMC Privacy Office investigates and tracks all incidents including those involving social media
- All privacy incidents are followed by a Corrective Action Plan
- Top 5 reported breaches in Illinois (data source: www.hhs.gov/ocr)
  - Advocate Health: 4,029,530
  - Emergency Healthcare Physicians, Ltd.: 180,111
  - Cook County Health & Hospitals System: 32,008
  - Cook County Health & Hospitals System: 22,511
  - Walgreen Co.: 17,350
- Privacy breaches are reported by local and national media, creating concern and negative feelings among patients and families
Social Media Incident Trends

- Discussing patient information on Facebook/Twitter
- Taking a picture of a patient and posting it on Facebook/Twitter/Instagram
- Recording video of patients, students, or facilities on personal devices and posting on YouTube
- Taking pictures not intended for distribution which can contain background information or can be auto-copied to social media
- Discussing general work topics on various blogs and social media sites
- Posting files with patient or student information on cloud services that are not sanctioned by the institution
“On Facebook, 273 people know I’m a dog. The rest can only see my limited profile.”

Some recent examples from other health care providers

- A paramedic posted information on a social media site about a sexual assault victim. Although the victim's name was not disclosed, the paramedic detailed enough information in the post that the media was able to discover the identity of the victim and where she lived. The plaintiff filed a lawsuit against the paramedic and the emergency service he worked for due to privacy violations.

- A few nurses that work together in a hospital…department were fired for discussing patients on a social media site. Even though they did not post any identifying information, they still violated the hospitals HIPAA policy.

- A temporary employee posted a photo of a medical record with the patient's full name and date of admission to his social media page. Although other posters advised him that it was a HIPAA violation, he chose to keep the post up and even defended his reason for posting it saying "It's just a name..." among other things. The worst part of this story is that the employee was making fun of the patient's condition.

(from About.com: http://medicaloffice.about.com/od/privacyandsecurity/a/Social-Medias-Role-In-Privacy-Breaches.htm)
Social Media Support and Guidance

- Privacy of our patient and student information is “ground zero” – it must always be protected
- Privacy training materials posted on the HIPAA Privacy intranet site
- RUMC Social Media policy, OP-0362, Social Media
- Disciplinary Actions
3. You may not make public statements on behalf of Rush in letters to the editor, blog comments, discussion boards or any other social media forums for sharing thoughts and opinions. If, for some reason, you must indicate your association with Rush in a personal online communication, write in the first person, identify yourself by stating your first and last name, state your role at Rush, and use a disclaimer that makes it clear that you are speaking for yourself and not on behalf of Rush. You may use a disclaimer such as the following: “The postings on this site are my own and do not necessarily represent Rush’s positions, strategies or opinions.”

12. Be aware of your association with Rush in online social networks. If you identify yourself as an employee, student or contractor of Rush, ensure that your profile and related content is consistent with how you wish to present yourself with colleagues, classmates and clients. From time to time, Rush reserves the right to check employees’ publicly available online profiles and can act accordingly in response to content inconsistent with the terms of this policy.
Social Media Support and Guidance (cont.)

- **Social Media “Do’s” and “Don’ts”**
  - Do “Like” Rush on Facebook
    - Don’t post patient information on Facebook/Twitter/Instagram, etc.
  - Do contact Marketing and Communications to coordinate projects that involve image/sound recording of patients/students/employees/visitors
    - Don’t record information on personal devices or post on social media
  - Do use internal Rush sources, including management, Hotline, HR, etc. to report concerns about the workplace
    - Don’t discuss workplace concerns in social media forums
  - Do encourage friends, family, or acquaintances to visit official Rush social media sites
    - Don’t seek out “friends” who are patients or respond to such requests – both a privacy and safety issue

- **Summary** – always keep personal and professional communications separate
• This presentation is part of an awareness campaign on social media
  – Share this information – presentation will be posted online; contact the Privacy Office if you would like to schedule a presentation to your staff
  – Reinforce the separation of personal and professional communications
  – Reinforce that each of us is a representative of Rush at all times
  – Know who to call with an incident – RUMC Privacy Office – 312-942-4416
  – Coordinate with Marketing and Communications when projects require media support
Social Media Do’s and Don’ts:
Protecting Patient/Student Privacy and Rush’s Reputation!

- **DO** “like” Rush on “Facebook”

- **DON’T** post patient information on Facebook/Twitter/Instagram/etc.

- **DO** contact Marketing and Communications to coordinate projects that involve image/sound recordings of patients/students/employees/visitors

- **DON’T** record information on personal devices or post on social media

- **DO** use Rush internal sources including management, HR and Hotline in order to report concerns about the workplace

- **DON’T** discuss workplace concerns on social media forums

- **DO** encourage friends, family, or acquaintances to visit official Rush media sites

- **DON’T** seek out “friends” who are patients or who respond to such requests.

- **RECAP:** Always keep personal and professional communications separate

**Report Concerns to:** Your Supervisor/Manager; HIPAA Privacy and Security Office 312-942-4416; Rush Hotline: 1-877-787-4009
Publishing and reviewing professional literature

Thomas P. Bleck MD MCCM FNCS
Professor of Neurological Sciences, Neurosurgery, Internal Medicine, and Anesthesiology, Rush Medical College; Associate Chief Medical Officer (Critical Care) and Associate Vice President; and Director, Clinical Neurophysiology, Rush University Medical Center
Disclosures

• I am a current member of the ABIM Critical Care Subspecialty Exam Committee.
  – To protect the integrity of Board Certification, ABIM enforces strict confidentiality and ownership of exam content.
  – As a member of an ABIM exam committee, I agree to keep exam information confidential.
  – As is true for any ABIM candidate who has taken an exam for Certification, I have signed the Pledge of Honesty in which I have agreed not to share ABIM exam questions with others.
  – No exam questions will be disclosed in my presentation.
Standard disclosures

• Research support from NIAID, NINDS, AHA, Zoll, Edge
• Consultant for USAMRICD (nerve agent protection)
• Advisory committee member for Sage (study of allopregnenolone in RSE)
Editorial position disclosures

• 23 years as neuroscience editor of *Critical Care Medicine*

• Editorial board member for *Neurocritical Care* and *Annals of Intensive Care*

• Previous editorial board member for several other journals

• If you ask me for advice, keep in mind that I’ll naturally want you to submit your best work to these journals....
Publishing and reviewing professional literature

• This will be primarily about writing papers for publication in peer-reviewed journals
• Writing chapters is a different sort of exercise that is beyond the scope of this talk
• I have mostly published in the medical literature, but have a few nursing and administrative papers so I have some idea about how they differ
Why consider writing and reviewing together?

• When your are preparing your manuscript, try to envision how the reviewers will see your work.

• Anticipate their questions and concerns, so that all they can do is tell the editor how great your paper is.

• Get a colleague who is an experienced reviewer to go over your manuscript with you to see what the reviewers may find
Why do you want to write?

• You have something about which to tell the world
  – A case that you think hasn’t been seen before (or at least published before)
  – You’ve retrospectively studied a series of patients about whom you have something interesting to say
  – You’ve conducted a prospective study (with IRB approval, of course)

• Someone told you that you need to publish something for a promotion, tenure, or a new job
What type of paper are you writing?

• Case report
  – Very rarely published by major journals
    • Recent proliferation of case report journals
  – Remember to get permission to use photos, especially if the patient is in any way identifiable

• Review article
  – Invited reviews will still get peer review
  – Uninvited reviews are rarely published in prominent journals but may find acceptance in smaller ones
  – Consider getting a more senior author to collaborate

• **These are the typical ‘entry level’ papers for budding authors**
Types of review articles

• Standard review: you pick papers that help make your point

• Systematic review: you define how you attempted to find all of the relevant literature (MEDLINE, CINAHL, Scopus, Google, etc) and provide some rating of the evidence
Real evidence-based rating

• class 0: things I believe
  – class 0a: things I believe despite the available data
• class 1: RCCTs that came to the correct conclusion, and therefore their methodology was correct
• class 2: other prospective data
• class 3: expert opinion
• class 4: RCCTs that came to the wrong conclusion, and therefore their methodology was wrong
• class 5: what you believe that I don’t

Bleck BMJ 2000;321:239
What type of paper are you writing?

- Retrospective case series (with review of the literature) (did you need IRB approval to search for the cases in a database?)
- Prospective case series (always needs IRB approval to keep a database)
- Experimental study of some sort (prospective IRB if human, IACUC if animals)
Types of review papers

• Meta-analysis: the holy grail of the EBM priesthood. Often an attempt to shove several square pegs into a round hole.

• Requires an estimate of homogeneity of the trials being analyzed, which is promptly forgotten.
DISCREPANCIES BETWEEN META-ANALYSES AND SUBSEQUENT LARGE RANDOMIZED, CONTROLLED TRIALS

JACQUES LE Lorier, M.D., PH.D., GENEVIÈVE GRÉGOIRE, M.D., ABDELTIF BENHADAD, M.D., JULIE LAPIERRE, M.D., AND FRANÇOIS DERDERIAN, M.Sc.

Results We identified 12 large randomized, controlled trials and 19 meta-analyses addressing the same questions. For a total of 40 primary and secondary outcomes, agreement between the meta-analyses and the large clinical trials was only fair (kappa = 0.35; 95 percent confidence interval, 0.06 to 0.64). The positive predictive value of the meta-analyses was 68 percent, and the negative predictive value 67 percent. However, the difference in point estimates between the randomized trials and the meta-analyses was statistically significant for only 5 of the 40 comparisons (12 percent). Furthermore, in each case of disagreement a statistically significant effect of treatment was found by one method, whereas no statistically significant effect was found by the other.

Conclusions The outcomes of the 12 large randomized, controlled trials that we studied were not predicted accurately 35 percent of the time by the meta-analyses published previously on the same topics. (N Engl J Med 1997;337:536-42.)
• Meta-analysis is to analysis as metaphysics is to physics
Experimental studies

• Register clinical trials at clinicaltrials.gov
  • And remember to post the results there as well
• For these studies, draft the results tables before analyzing the data
• Consider drafting versions of the discussion for the likely outcomes before analyzing the data. This helps to avoid the urge to change your viewpoint after seeing the data.
CONSORT 2010 Flow Diagram

- Enrollment
- Assessed for eligibility (n= )
  - Excluded (n= )
    - Not meeting inclusion criteria (n= )
    - Declined to participate (n= )
    - Other reasons (n= )
  - Randomized (n= )
    - Allocated to intervention (n= )
      - Received allocated intervention (n= )
      - Did not receive allocated intervention (give reasons) (n= )
    - Allocated to intervention (n= )
      - Received allocated intervention (n= )
      - Did not receive allocated intervention (give reasons) (n= )
    - Follow-Up
      - Lost to follow-up (give reasons) (n= )
      - Discontinued intervention (give reasons) (n= )
    - Analysis
      - Analysed (n= )
        - Excluded from analysis (give reasons) (n= )
      - Analysed (n= )
        - Excluded from analysis (give reasons) (n= )
CONSORT 2010 Statement: Updated Guidelines for Reporting Parallel Group Randomized Trials

Kenneth F. Schulz, PhD, MBA; Douglas G. Altman, DSc; and David Moher, PhD for the CONSORT Group*

The CONSORT (Consolidated Standards of Reporting Trials) statement is used worldwide to improve the reporting of randomized, controlled trials. Schulz and colleagues describe the latest version, CONSORT 2010, which updates the reporting guideline based on new methodological evidence and accumulating experience.

Ann Intern Med. 2010;152.

For author affiliations, see end of text.
* For the CONSORT Group contributors to CONSORT 2010, see the Appendix, available at www.annals.org.

This article was published at www.annals.org on 24 March 2010.
Why Most Published Research Findings Are False

John P. A. Ioannidis

Summary

There is increasing concern that most current published research findings are false. The probability that a research claim is true may depend on study power and bias, the number of other studies on the same question, and, importantly, the ratio of true to no relationships among the relationships probed in each scientific field. In this framework, a research finding is less likely to be true when the studies conducted in a field are smaller; when effect sizes are smaller; when there is a greater number and lesser preselection of tested relationships; where there is greater flexibility in designs, definitions, outcomes, and analytical modes; when there is greater financial and other interest and prejudice; and when more teams are involved in a scientific field in chase of statistical significance. Simulations show that for most study designs and settings, it is more likely for a research claim to be false than true. Moreover, for many current scientific fields, claimed research findings may often be simply accurate measures of the prevailing bias. In this essay, I discuss the implications of these problems for the conduct and interpretation of research.
Traditional first aid in a case of snake bite: more harm than good

Uday Yanamandra,¹ Sushma Yanamandra²

DESCRIPTION
A 22-year-old man bitten by a snake reported to this centre 24 h after traditional first aid at the village. At presentation, he had no features of systemic envenomation. Local examination of the right lower limb revealed a clear delineation mark secondary to tight bands (tourniquet) (thin black arrows in figures 1 and 2), limb covered with cow dung and use of snake stoves. On washing the limb, fang marks (broad red arrow in figure 1) with multiple local incision/prickles/punctures below the knee in the bitten limb and blisters (figures 2–5) were noticed. Based on the history, he was administered bolus dose of Indian polyvalent antivenin before removing the tourniquet.

The patient developed features of septicemia, muscle spasm, dysphagia after 7 days of the bite.

Figure 1  Profile view of local signs in a case of snake bite after traditional first aid. Broad red arrow—fang marks. Thin black arrow—delineation marks at the site of the tourniquet.

Figure 2  Frontal view of local signs in a case of snake bite after traditional first aid. Thin black arrow—delineation marks at the site of the tourniquet.

Figure 3  Multiple blisters noticed on the affected limb.

Figure 4  Local oedema of the affected limb.

Figure 5  Multiple pricks/punctures and incision marks of the affected limb.

and later respiratory weakness requiring a prolonged ventilation. Gram stain of blister fluid suggested Clostridium spp. He was managed with antivenin, human antitoxin serum and intravenous dexamethasone/magnesium/methoxsalen.

Similar local signs can be seen in viperine bites.³ The sequence of clinical events though simulate...
Are you sure this case is novel?

• First, search MEDLINE
  – And save related PDFs for later study, and, hopefully, for your paper’s references.
• Second, look in a few relevant textbooks
• Third, Google or Bing
Where are you going to submit your masterpiece?

• With the availability of MEDLINE and similar indices, you want to be sure that someone searching about your topic will find your paper

• Don’t submit to predatory journals!
  • http://scholarlyoa.com/2015/01/02/bealls-list-of-predatory-publishers-2015/
Where are you going to submit your masterpiece?

• Are the journal’s impact factor and immediacy index important to you?
  – The journal impact factor is the average number of times articles from the journal published in the past two years have been cited in the Journal Citations Report year.
  – Also a 5-year impact factor
  – The Immediacy Index is the average number of times an article is cited in the year it is published.
This guide contains a full list of Databases organized by popularity, subject and title.

For questions about Library databases, please call (312) 942-5950, or email lib_ref@rush.edu. Off campus users will be asked for a proxy username and password. More information about off campus access.

* Please note that Krames is available on campus only.
H-index

• The **h-index** of an author is an index that attempts to measure both the productivity and citation impact of the published body of work of a scientist or scholar.

• The index is based on the set of the scientist's most cited papers and the number of citations that they have received in other publications.
To determine the h-index of a researcher, organize articles in descending order, based on the number of times they have been cited. Thus, if an individual has eight papers that have been cited 33, 30, 20, 15, 7, 6, 5 and 4 times, the individual's h-index would be 6. The first paper 33, gives us a 1 – there is one paper that has been cited at least once, the second paper gives a 2, there are two papers that have been cited at least twice, the third paper, 3 and all the way up to 6 with the sixth highest paper – the final two papers have no effect in this case as they have been cited less than six times (Ireland, MacDonald & Stirling, 2012).

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![Graph showing citation trends from 2007 to 2015](image_url)
Are these measures important?

• Sometimes weighed in decisions about promotion and grant funding; find out about this first

• My opinion: aim for a journal read by the audience you want to reach
  – People do still read journals
  – However, most people now find your paper by searching databases
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<td>1518</td>
<td>3.022</td>
<td>2.650</td>
<td>0.390</td>
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<td>22582</td>
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<td>3.204</td>
<td>1.925</td>
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<td>6465</td>
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<td>2.811</td>
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<td>0.302</td>
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<td>2.388</td>
<td>0.307</td>
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<td>15</td>
<td>PEDIATR CRIT CARE ME</td>
<td>1529-7535</td>
<td>3192</td>
<td>2.326</td>
<td>2.692</td>
<td>0.892</td>
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<td>MINERVA ANESTESIOL</td>
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<td>1699</td>
<td>2.272</td>
<td>1.905</td>
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<td>17</td>
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<td>2.191</td>
<td>2.510</td>
<td>0.514</td>
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<td>CRIT CARE RESUSC</td>
<td>1441-2772</td>
<td>598</td>
<td>2.154</td>
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<td>0.727</td>
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<td>1425</td>
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<td>2.037</td>
<td>0.549</td>
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The \textbf{h-index} of a publication is the largest number \( h \) such that at least \( h \) articles in that publication were cited at least \( h \) times each. For example, a publication with five articles cited by, respectively, 17, 9, 6, 3, and 2, has the h-index of 3.
Weighed and Measured

“Figures often beguile me, particularly when I have the arranging of them to myself; in which case the remark attributed to Disraeli would often apply with justice and force: ‘There are three kinds of lies: lies, damned lies, and statistics.’” —Mark Twain (Samuel Clemens) in Chapters from My Autobiography

ANNALS of Neurology

FIGURE 1: The h-index of papers published in five neurology journals during 2013, 2012, and 2011. The index increases each year, because papers published in 2011 on average have had 3 years to accumulate citations, while those published in 2013 on average have had just one year.

FIGURE 2: The h-index, corrected for number of papers published by each of five neurology journals, during 2013, 2012, and 2011. Although the top neurology journals publish very similar numbers of highly cited papers (Fig. 1), *Annals of Neurology* has a higher concentration of these publications.
So you’ve picked your target journal

• If it’s accepted by first journal to which you submitted it, maybe you’ve aimed too low….

• Once you’ve picked a few likely journals, download AND STUDY the instructions for authors.
  – There are often different instructions for different types of papers
Writing the damn paper

• Study the instructions for authors again
  – The instructions for CCM are five pages long; if you don’t follow them, you’re likely to be rejected.
  – Go to the submission web site and see how you will actually submit the manuscript

• Make an outline using the sections indicated by the instructions
Critical Care Medicine
Online Submission and Review System

Scope
Critical Care Medicine is the premier peer-reviewed, scientific publication in critical care medicine. Directed to those specialists who treat patients in the ICU and CCU, including chest physicians, surgeons, pediatricians, pharmacists/pharmacologists, anesthesiologists, critical care nurses, and other healthcare professionals, Critical Care Medicine covers all aspects of acute and emergency care for the critically ill or injured patient. Each issue presents critical care practitioners with clinical breakthroughs that lead to better patient care, the latest news on promising research, and advances in equipment and techniques.

Questions? To contact the journal with questions about the submission process or the publication of your paper, please click here.

Files & Resources
Instructions for Authors (PDF)
Creating Digital Artwork (PDF)
Copyright Transfer (PDF)
Writing Editorials for Critical Care Medicine (DOC)
Revision Guidelines (PDF)
Author Tutorial (PDF)
Reviewer Tutorial (PDF)
LWW Reviewer Guide
• Critical Care Medicine author tutorial:
Writing the damn paper

• Typical structure:
  – Title page
  – Abstract (usually structured; follow the directions!)
  – Introduction
  – Methods
  – Results
  – Discussion
  – Conclusions
  – References
Now it’s finished...

• No, it isn’t
  – Don’t rush to submit it unless you think you’re going to lose a race for the Nobel Prize
  – Put it down and don’t look at it for a day or two
  – Then read it like a reviewer would

• *Critical Care Medicine* reviewer tutorial:
  
Saga of my first paper

• Took care of a patient with a unique problem and treatment
  – As best I could tell by going though many years of the *Index Medicus* and reading several textbooks

• Wrote and rewrote the manuscript with my co-author and thought it was as clear and tight as possible

• Mailed it off to *Neurology*....
February 16, 1984

Thomas P. Bleck, M.D.
Departments of Neurological Sciences
and Internal Medicine
Rush-Presbyterian St. Luke's Medical Center
1753 West Congress Parkway
Chicago, Illinois 60612

RE: Disordered Swallowing Due to A Syrinx......#038

Dear Dr. Bleck:

Your interesting paper has been reviewed and a copy of the referee's comments is enclosed. If you revise your paper according to these suggestions we would be pleased to accept the paper for publication.

In re-submitting the paper, please write a letter describing the changes that have been made.

The red ink marks on the manuscript are mine and are suggestions to tighten the paper. Please be certain that they do not alter your intent. Please also understand that the total number of pages in each issue is fixed. If we could shorten each paper by only one page, we could publish one or two more papers.

N.B: Please do not exceed 5 typescript pages.

Before returning the manuscript to us, please make sure that the reference citations in the revised text correspond to the list of references at the end of the paper, and that all citations in added, deleted or transposed material have been accounted for.

Also, please make sure that all tables and figures accompanying your paper have appropriate titles or captions, and that all of them are cited in the text in numerical sequence.

Thank you for your cooperation.

Sincerely yours,

Lewis P. Rowland, M.D.

LPR:ss

Encl: 3 copies of manuscript
Reviewer's comments
Your interesting paper has been reviewed and a copy of the referee's comments is enclosed. If you revise your paper according to these suggestions we would be pleased to accept the paper for publication.

The red ink marks on the manuscript are mine and are suggestions to tighten the paper. Please be certain that they do not alter your intent. Please also understand that the total number of pages in each issue is fixed. If we could shorten each paper by only one page, we could publish one or two more papers.
• This manuscript has been in a file folder, untouched, since 1984

• Why does the white paper have this odd hue?
DISENGAGED SWALLOWING DUE TO A SYRINGE: CONSEQUENCE OF MINTING

By: Thomas P. Block, M.D.
Departments of Neurological Sciences
and Internal Medicine

and

Kathleen M. Shannon, M.B.
Department of Neurological Sciences

EDURO MEDICAL COLLEGE
600 S. Paulaia St.
Chicago, Illinois 60612

Presented in part at the 35th annual meeting of The American Academy of Neurology, San Diego, California, April, 1983.
Disturbed deglutition is common in diseases of the brainstem and lower cranial nerves. Little is understood of the mechanisms by which those disorders alter pharyngoesophageal motility. A 49 year old man had a seven year history of syringomyelia with syringobulbia. Esophageal motility studies showed inability to initiate swallowing, esophageal hypomotility, and absence of the lower esophageal sphincter. Following decompression of the syrinx by shunting, these abnormalities were corrected, and the patient once again was able to eat without aspiration.

We postulate that medullary dysfunction caused by the syrinx was responsible for the swallowing difficulties.
Among the protean manifestations of syringomyelia, sensory abnormalities and motor deficits related to the spinal cord lesion have properly received the most attention. When the syrinx extends into the brainstem, unusual combinations of symptoms may result. We recently cared for a patient whose presentation and course exemplified such a progression.

Medullary involvement by this disorder resulted in disturbance of normal pharyngo-esophageal physiology. In addition to emphasizing the normal central nervous system control of swallowing, the recognition of these alterations has direct therapeutic consequences.

CASE REPORT

The patient was a 40 year old man who first noted left hand paresthesias seven years prior to admission. This problem remained unchanged for five years until he noted neck pain on flexion, which radiated to both arms. Seven weeks prior to admission he reported numbness of the right flank, which progressed to involve the anterior right thorax. He also noted clumsiness of the right hand, a sensation of tightness in the right thigh, intermittent dysphagia, and a 15 kilogram weight loss. He was admitted to another hospital, where CT and nuclide brain scans, lumbar puncture, and an EEG were normal. An ECG was said to show a "pinched nerve" in the neck. An attempted upper gastrointestinal series resulted in barium aspiration and pneumonitis. Two weeks later he was transferred to our institution.

On admission, his physical examination revealed lateral gaze nystagmus, which was more pronounced on rightward gaze. His tongue deviated slightly to the right on protrusion, and was mildly atrophic on that side without fasciculation. The deep tendon reflexes were diminished in the left upper and right lower extremities. Pinprick sensation was decreased over the right lower thoracic and upper lumbar dermatomes. Vibration sensation was absent below the right iliac crest and the left ankle. There was mild diminution of proprioception in both feet.

Somatosensory evoked responses were indicative of bilateral pathology proximal to the brachial plexi. A lumbar puncture revealed a protein of 92 mg/dl and an IgG/albumin ratio of 0.21. Because of repeated aspiration, esophageal motility studies were performed. The patient was almost totally unable to voluntarily initiate swallowing. During reflexive swallowing the upper esophageal sphincter relaxed, but there were very few propagated esophageal contractions and almost no motility was noted. No pressure change indicative of a functioning lower esophageal sphincter could be identified.

Over the next several days, the patient progressively lost his gag reflex. Indirect laryngoscopy showed pooling of secretions in the upper esophagus and lower pharynx which spilled over into the glottic area during inspiration. Vocal cord motility was normal. He required endotracheal intubation and a feeding jejunostomy. A CT scan performed with attention to the posterior fossa revealed a cystic lesion anterior to and to the right
of the fourth ventricle in the lower pons and medulla. This lesion extended throughout the length of the cervical cord. Metrizamide myelography revealed diffuse widening of the cervical cord and the cervicomedullary junction. CT scanning revealed an increase in density in the cystic area six hours after metrizamide instillation, consistent with a syrinx.

At surgery, the cord was noted to be extremely widened, but without evidence of discoloration or tumor. A silicone catheter was placed in the cavity after needle aspiration confirmed the presence of fluid. The diameter of the cord visibly decreased during the procedure.

The patient was extubated two days postoperatively, and he was able to handle secretions well. On the eleventh postoperative day, esophageal motility studies showed normal initiation of swallowing with good esophageal peristalsis, and a normally functioning lower esophageal sphincter. Since discharge from the hospital, he has gained over 20 kilograms. His physical examination revealed only mild hyperesthesia over his shoulders, and his only complaint is of occasional mild neck stiffness.

DISCUSSION

Extension of a syrinx from the cervical spinal cord into the brainstem is a fairly common occurrence in the course of an uncommon disorder. Schiepel estimated that one-half of patients display cranial nerve abnormalities.

During their disease, trigeminal sensory disturbances were the most frequent disorder in that series (42% of 89 patients with cranial nerve impairment), followed by nystagmus (28%), palatal weakness (12%), wasted tongue (12%), and hoarseness (7%). The usual locations of the syringobulbic cavities include the descending trigeminal tract, the fiber tract connecting the inferior vestibular nuclei to the medial lemnisclus, and the area between the inferior olive and pyramid through which the hypoglossal nerve passes. These clinical findings are expectable on an anatomic basis.

Of particular interest in this case is the tendency for destruction of the solitary tract and the afferent fibers of the nucleus ambiguous. These areas have classically been associated with swallowing. Unilateral lesions, as in a lateral medullary infarction, may produce pharyngeal ataxia and nasal regurgitation. Data from animal studies suggest that the nucleus of the solitary tract is responsible for programming the motor sequence of swallowing. The nucleus ambiguous appears to contain motor neurons controlling the pharyngeal and laryngeal muscles and the esophagus.

The central mechanisms influencing motility in the esophagus, and affecting the lower esophageal sphincter (LES), are less well understood. Patients with amyotrophic lateral sclerosis and dystonic dystrophy often have esophageal motility resembling the patient described above, while those with a variety of other central and peripheral nervous system disorders...
disorders tended to retain LES function. Loss of esophageal peristalsis with diminished or absent LES pressure and gastroesophageal reflux have been documented in four patients with bilateral pontomedullary infarction. The pathways which mediate these effects are unknown. The vagi provide the main innervation of the esophagus, but loss of vagal function does not fully explain the findings in our patient or in the others cited above. Vagotomy in animals does not eliminate esophageal motility; the smooth muscle portion of the esophagus maintains peristalsis via peripheral mechanisms alone. Vagal stimulation can "modulate the occurrence, polarity, and speed (of peristaltic) propagation." Furthermore, vagal stimulation results in inhibition of the LES. The neurotransmitter responsible for this inhibition is neither adrenergic nor cholinergic, and appears to be vasoactive intestinal peptide (VIP).

Active inhibition of esophageal function appears to be necessary to explain the clinical findings. VIP, enkephalins, and prostaglandins play a regulatory role, and are likely to be altered in disorders of lower esophageal physiology. In particular, the effects of disruption of output from the nucleus ambiguus on both local and circulating peptides and prostaglandins deserve investigation.

The therapeutic implications of esophageal motility disturbances center around the risk of aspirating esophageal and gastric contents. Aspiration, probably occurring during sleep, may cause pneumonia even in patients with presumably normal pharyngeal protective mechanisms, when the LES is incompetent. This finding heightens the need for awareness of possible esophageal dysfunction, especially in patients who have lost their pharyngeal protective reflexes. In our patient, recognition of the motility disorder prompted placement of a temporary jejunostomy for feeding to diminish the risk of aspiration.

The reversibility of the motility disorder, as part of the patient's general clinical improvement following shunting, highlights the need for thorough diagnostic evaluation and active therapeutic intervention. In addition, we believe that awareness of the potential for gastrointestinal disorders in these patients will decrease the morbidity and potential mortality associated with their diseases.

Acknowledgements: John Schaffner, M.D., performed the esophageal motility studies. Kelvin Von Roenn, M.D., performed the neurosurgical procedure. Sally Sullivan prepared the manuscript.
At least the references were OK
Saga of my first paper

• After I calmed down, I realized that his version was clearer and more concise.
N2 Review Form

1. Please make a recommendation
   - Accept
   - Revise/Minor
   - Revise and Re-Review
   - Reject

2. Priority Score
   Priority scores are required. If you checked "Reject" above, you can check "Priority 5" below.
   - Priority 1 = Very Important, Outstanding (top 1-2%)
   - Priority 2 = Excellent and Important (top 10%)
   - Priority 3 = Good Work (top 20%)
   - Priority 4 = Competent but of Limited Importance
   - Priority 5 = Marginal and of Limited Importance

Will the priority improve if the manuscript is revised?
   - Yes
   - No
   - N/A
Will the priority improve if the manuscript is revised?
- Yes
- No
- N/A

3. Is this work original or confirmatory?

4. Are the methods sound and the conclusion supported by the data?
- Yes
- No
- N/A

5. Are all the figures necessary and of good quality?
- Yes
- No
- N/A

*If "No" please explain in the comments for authors*

6. Are all the tables necessary?
- Yes
- No
- N/A
Comments for the Editor (required)
Enter your CONFIDENTIAL comments for the EDITOR below or upload them (please do not insert comments below AND upload.) If you are using special characters, please upload the comments. If you have no comments enter 'None':
You may use special characters in your comments; click here to pop up a window containing the special character codes.

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Choose File

Please note: if you are uploading a Word or WordPerfect document, we recommend that you use only certain fonts, to ensure that the resulting PDF is as readable as possible. The fonts that will give the highest quality results are Times, Times Roman, Courier, Helvetica, Arial, and the Symbol font for special characters.
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Enter your comments for the AUTHOR below or upload them (please do not insert comments below AND upload.) If you are using special characters, please upload the comments. If you have no comments enter 'None':
You may use special characters in your comments; click here to pop up a window containing the special character codes.

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Choose this option if you haven't completed your review or if you want to proof your review before it is submitted. You can return to your "Active Reviews" queue and edit or complete the review at any time. If you have uploaded any of your comments they will enter the "Uploaded Reviews Under Conversion" queue; once the comments are converted to PDF the paper will return to your "Active Reviews" queue. You will be notified if there is a problem converting your file(s).
Guidelines

BMC Neurology considers the following article types: Case report, Database, Debate, Research, Software, Study protocol and Technical advance articles. The journal does not generally consider narrative review articles.

When assessing the work, please consider the following points:

1. Is the question posed by the authors well defined?
2. Are the methods appropriate and well described?
3. Are the data sound?
4. Do the figures appear to be genuine, i.e. without evidence of manipulation?
5. Does the manuscript adhere to the relevant standards for reporting and data deposition?
6. Are the discussion and conclusions well balanced and adequately supported by the data?
7. Are limitations of the work clearly stated?
8. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
9. Do the title and abstract accurately convey what has been found?
10. Is the writing acceptable?

Please make your review as constructive and detailed as possible in your comments so that authors have the opportunity to overcome any serious deficiencies that you find and please also divide your comments into the following categories:

Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)
Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

Once you have done this, there are also some questions for you to answer, including one that asks your advice on publication. Please remember that it is journal policy to publish work deemed by peer reviewers to be a coherent and sound addition to scientific knowledge and to put less emphasis on interest levels, provided that the research constitutes a useful contribution to the field. Further guidance on these points follows.
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4. Do the figures appear to be genuine, i.e. without evidence of manipulation?
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Table 1. List of subjects in the *Journal of Clinical Epidemiology* series on effective writing and publishing of scientific papers

1. How to get started  
2. Title and abstract  
3. Introduction  
4. Methods  
5. Results  
6. Discussion  
7. Tables and figures  
8. References  
9. Authorship  
10. Choice of journal  
11. Submitting a paper  
12. Responding to reviewers
Good luck with your paper, and if the review is not what you want, remember that there are a lot of other journals out there. As I alluded to previously in this series, the sweetest revenge when your paper has been turned down is to publish it somewhere else and have it become a mainstay of the field.

Saper CB. Academic publishing, part III: how to write a research paper (so that it will be accepted) in a high-quality journal. Ann Neurol. 2015 Jan;77(1):8-12.
Suggested readings

• Saper CB. Academic publishing, part I: peering into the review process. Ann Neurol. 2014 Feb;75(2):175-7
• Saper CB. Academic publishing, Part II: where to publish your work. Ann Neurol. 2014 Jul;76(1):1-4
• Saper CB. Academic publishing, part III: how to write a research paper (so that it will be accepted) in a high-quality journal. Ann Neurol. 2015 Jan;77(1):8-12.
For copies of slides, email me
tbleck@rush.edu
Teaching on the Fly: Working with Students without Compromising your Clinical Productivity

Rush University Faculty Development
Keith Boyd MD
Senior Associate Dean, Rush Medical College
April 21, 2015
The Big Picture

- Changes in the health care system are presenting new challenges to teaching in the health care setting
- We can apply the principles of adult education to address some of these challenges
- You have some good practices: Let’s hear about it
- Hopefully, you leave the session today with some new ideas
Dilbert on Power Point

AS YOU CAN CLEARLY SEE IN SLIDE 397...

GAAAAAH!

"POWERPOINT" POISONING.
The wisdom of the many far exceeds the (lack of) wisdom of the one...

So you need to participate!
Objectives

• Identify the changes in the health care system that are presenting new challenges to teaching
• Review strategies to address some of these challenges
• Share with your colleagues practices that you have developed to effectively teach students when you are under other pressures
• Leave the session today with some new ideas
Who is Here?

- College of Nursing
- College of Health Sciences
- Graduate College
- Medical College
Why are you here?
We have a Problem in Medical Education
“Despite its fundamental importance, the educational mission of most medical schools receives far less recognition and support than do the missions of research and patient care.”

Focus is More on Clinical Revenue

- Greater reliance on clinical revenue
- Increasing competition for research funding
- Medical Schools have responded by recruiting faculty dedicated primarily to patient care

Thomas PA et al. Acad Med 2004;79:258-264
Reminder: Different Learning Styles

*See it*  
Visual

*Say it*  
Auditory

*Do it*  
Kinesthetic
Modern Challenges to Teaching in Academic Medicine: What are they?

We Can Do It!
Modern Education: Challenges, 1

• Old ways are... old
  – Old: “Sage on the stage”
  – New: “Guide on the side”

• (waiting patients, generation of RVUs, multiple learners, etc.)

• Explosion of content
  – Teaching how to learn
  – Use of technology
Accelerating Growth in Technology

(condensed)
Modern Education: Challenges, 2

• We have lost the luxury of time
  – Focus on clinical productivity
  – Accountability for faculty time
  – Lack of reimbursement for teaching
  – Faculty being asked to do more

• Patients who have much shorter LOS

• Restrictions on what students can do with patients
Modern Education: Challenges, 3

• To learn by doing is still a good way to learn
  – Active participation
  – Synthesis and problem-solving
• Collaboration / Teamwork is fundamental
• Individuals have different learning styles
  – But we all need to adapt to all styles
  – … including the patient’s
• Teach students how to learn rather than just teaching content
  – Students must be life-long learners
Do Students Slow You Down?
Studies with Internal Medicine Residents

• R1 loss
• R2 even
• R3 gain
What Works to Address these Problems in your Experience?
What Works?

- Things related to the patient
- Things related to the student
- Things related to the institution
- Things related to your practice
Things Related to the Patient

• Ask patients if they have time to see a student
  – Select specific patients
  – Have student focus on area of the history based on the level of training or student’s deficits

• Summarize a patient’s chart before entering the room

• Review the charts of patients to be seen tomorrow (“Gap analysis”)
Presentations in the Exam Room: Results of 2 Studies with Residents

• Presentation in exam room vs. in conference room
  – Patients expressed a preference for in-room presentation
  – Patients felt their questions were answered more thoroughly with in-room presentation
  – No difference in patient satisfaction with the visit
  – Small number of residents preferred conference room
    • 10% of residents were less comfortable in the room
    • 10% of residents felt less autonomy

Things Related to the Student

• Have the student focus on one element
  – e.g.: the social history, the heart exam
• Assign independent study based on identified knowledge deficits
Learning Scripts

• Student raises question during session.
• If answer can be deferred (doesn’t impact immediate care), task of answering question is delegated to student.
• A “Learning Script” is written by the preceptor.
  – This is a contract with instructions.
  – Specific and focused clinical question.
• Student must present result at next meeting.
  – Teacher must ensure closure.
Things Related to the Institution

• Specific credit for effort faculty in teaching activities
Things Related to your Practice -- 1

• Have the student educate the patient
  – Specific topic at conclusion of visit
  – Develop educational fact sheet for the practice
• Talk while you are thinking
• Have students spend time with other office professionals
Things Related to your Practice -- 2

• Set aside time
  – Students don't need a lot of attention, but a little bit of special attention can go a long way

• Be a role model on how to learn
  – How do you get answers to questions?

• One minute preceptor
The “One Minute Preceptor”

AKA: The 5-Step Microskills Method

(Time efficient teaching in clinical practice)

Neher, J. O., Gordon, K. C., Meyer, B., & Stevens, N.
A five-step "microskills" model of clinical teaching.  
Journal of the American Board of Family Practice,  
The 5-Step Microskills Method

1. Get a commitment
2. Probe for supporting evidence
3. Reinforce what was done well
4. Give guidance about errors or omissions
5. Teach a general principle
1. Get a Commitment

Why?
Requires the learner to synthesize information
Quick measure of where the learner is at

How to get a commitment:
“What do you think is going on here?”
“What would you like to do next?”
“How do you think we can help this patient?”
2. Probe for Supporting Evidence

Why?
Assess learner’s knowledge / thinking process

Examples...
“What supports your diagnosis?”
“Why do you think it’s not...”
“Why did you choose that treatment?”
3. Reinforce What Was Done Well

Behaviors that are reinforced will be more likely to be repeated

Example:
“In approaching this adolescent patient with abdominal pain, you were very respectful and sensitive to the patient when asking about the possibilities of a sexually-transmitted infection.”
4. Correct errors / point out omissions

Describe what could be corrected (be specific) or what was omitted and how to correct this in future encounters.

Example:

“It was clear that angina was on your list of possibilities for this patient, but you forgot to ask the patient about her exercise tolerance.”
5. Teach a General Principle

Why?
Allows learning to be transferred to other situations.

Example:
“When ordering a rapid strep test, remember that 10-15% people are carriers of strep meaning they do not have an infection but will have a positive strep test.”
Jeremy and his mother from “Zits”

ALL I DID TODAY WAS EAT, SLEEP AND LIE AROUND.

WELL, WITH A LITTLE EFFORT YOU CAN MAKE TOMORROW A BETTER DAY.
HOW DO YOU IMPROVE ON PERFECTION?
Proposed Solutions from AAMC (and others)
AAMC Group on Educational Affairs

• Re-affirmed 5 education activity categories:
  – Teaching
  – Curriculum
  – Advising/mentoring
  – Leadership/administration
  – Learner assessment

• “The establishment of documentation standards for education activities provides the foundation for academic recognition of educators.”

  Simpson et al. Med Educ 2007;41:1002-9
Tracking Teaching Effort

Six broad rationales:
Mallon and Jones. Acad Med 2002;77:115-123

1. Develop rational method for distributing funds
2. Track resources spent on educational activities
3. Create transparency
4. Counteract the myth that faculty are not compensated to teach
5. Provide an incentive to faculty to participate in educational activities
6. Make the educational mission more visible
AAMC
Mission-Based Management Program

• Realign funds to match missions
• List all faculty educational activities
• Assign each activity a weight
• Include time to meet expectations
  – Preparation
  – Perform function
• Include factors for
  – Level of expertise
  – Relative importance of the activity
• Link compensation to quality of teaching rather than quantity
Teaching Academies


• Academies are:
  – dedicated to education
  – independent but supportive of existing departments
  – promote the scholarship
  – encourage curriculum innovation

• “Academies serve as powerful symbols of the importance and centrality of education.”
The importance of caring
The reasons why it has eroded
Measures that can strengthen caring provided by health professionals
Faculty development as a “Reward”

• Develop new teaching skills
• Learn how to use new technology
• Form an educational community
• Encourage scholarship
A Most Common Student and Resident Complaint:

“I didn’t get enough feedback.”
How Do You Provide Feedback?
Feedback Defined

- Specific comments about a student’s clinical performance intended to improve or correct deficiency and enhance progress toward mutually-accepted goals
Making Feedback Easy

1. Share the expectations
2. Work together to develop learning goals for the student which address gaps between observations and expectations
3. Allow self-critique; ask student how he/she feels expectations were met
4. Share your specific, objective observations
Hint: Ask for a Self-Evaluation

– Most people are harder on themselves than their evaluators are.
– Allows self-reflection.
– Allows the evaluator to judge the learner’s insight.
Ende’s 8 Rules for Giving Feedback

1. Teacher and student are allies with common goal.
2. Well-timed and expected.
3. Based on first-hand data.
4. Regulated in quantity and limited to remediable behaviors.
5. Descriptive non-evaluative language.
6. Specific, not general.
7. Include subjective data (reactions, impressions, etc.), but label it as such.
8. Deal with decisions and actions, not assumed intentions or interpretations (focus on the decision, not the decision-maker).

The World according to Calvin (and Hobbes)

Test:
1. When did the Pilgrims land at Plymouth Rock?

1620.

As you can see, I've memorized this utterly useless fact long enough to pass a test question. I now intend to forget it forever. You've taught me nothing except how to cynically manipulate the system. Congratulations.
They say the satisfaction of teaching makes up for the lousy pay.
Additional References

- Barchi RL, Lowery BJ. Scholarship in the medical faculty from the university perspective: retaining academic values. Acad Med 2000;75:899-905
- Mallon WT, Jones RF. How do medical schools use measurement systems to track faculty activity and productivity in teaching? Acad Med 2002;77:115-123
- Martin GJ et al. EVUs: Development and implementation at two different institutions. www.im.org/.../Documents/AIM%20Presentations/wkshp%20104-educational%20value%20units.pdf
- Schindler et al. Recognizing clinical faculty’s contributions in education. Acad Med 2002;77:940-1
- Yeh MM, Cahill DF. Quantifying physician teaching productivity using clinical relative value units. J Gen Intern Med 1999;14:617-621
Your Questions
Teaching on the Fly: Working with Students without Compromising your Clinical Productivity
Rush University Faculty Development
Keith Boyd MD, Senior Associate Dean, Rush Medical College / April 21, 2015

Objectives
- Identify the changes in the health care system that are presenting new challenges to teaching
- Review strategies to address some of these challenges
- Share with colleagues practices that you have developed to effectively teach students when you are under other pressures
- Leave the session today with some new ideas

We have a Problem in Medical Education: Educational Mission Undervalued
“Despite its fundamental importance, the educational mission of most medical schools receives far less recognition and support than do the missions of research and patient care.” Irby DM et al. Acad Med 2004; 79:729-36
- Focus is more on Clinical Revenue
- Greater reliance on clinical revenue
- Increasing competition for research funding

Medical Schools have responded by recruiting faculty dedicated primarily to patient care. Thomas PA. Acad Med 2004;79:258-264

Modern Education: Challenges
- Explosion of content / Teaching how to learn
- Use of technology
- Focus on clinical productivity
- Accountability for faculty time / Lack of reimbursement for teaching
- Much shorter LOS
- Restrictions on what students can do with patients
- To learn by doing is still a good way to learn / Active participation / Synthesis and problem-solving
- Collaboration / Teamwork

Individuals have different learning styles, but we all need to adapt to all styles... including the patient's
Teach students how to learn rather than just teaching content / Students must be life-long learners

Specific ideas for teaching on the fly
- Ask patients if they have time to see a student / Select specific patients
- Have student focus on area of the history based on the level of training or student's deficits
- Summarize a patient’s chart before entering the room / Review the charts of patients to be seen tomorrow
- Have the student focus on one element (e.g.: the social history, the heart exam) / Assign independent study based on identified knowledge deficits
- Have the student educate the patient: Specific topic at conclusion of visit / Develop educational fact sheet for the practice
- Have students spend time with other office professionals
- Set aside time: Students don't need a lot of attention, but a little bit of special attention can go a long way
- Be a role model on how to learn: How do you get answers to questions? / Talk while you are thinking

Institution: Specific credit for effort faculty in teaching activities

The “One Minute Preceptor” / AKA: The 5-Step Microskills Method (Time efficient teaching in clinical practice)
1. Get a commitment
2. Probe for supporting evidence
3. Reinforce what was done well
4. Give guidance about errors or omissions
5. Teach a general principle

AAMC Group on Educational Affairs Re-affirmed 5 education activity categories:
- Teaching, Curriculum, Advising/mentoring, Leadership/administration, Learner assessment

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- Realign funds to match missions
- List all faculty educational activities / Assign each activity a weight
- Include time to perform function, preparation, level of expertise, and relative importance of the activity
- Link compensation to quality of teaching rather than quantity


- Dedicated to education
- Independent but supportive of existing departments
- Promote the scholarship
- Encourage curriculum innovation

Just Spend Time with the Patient

Faculty development as a “Reward”

- Develop new teaching skills
- Learn how to use new technology
- Form an educational community
- Encourage scholarship

Feedback defined: Specific comments about a student’s clinical performance intended to improve or correct a deficiency and enhance progress toward mutually-accepted goals

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Transition to Retirement

Rick Davis, VP HR Operations

Patti O’Neil, Vice President, Assistant Professor, Chief Investment Officer & Treasurer

May 19, 2015
Transition to Retirement: Agenda

I. Retirement as Another Life Transition
II. Financial Preparation
   A. Retirement Plans & Investing
   B. The Government’s Role
III. Choosing Your Path
IV. Addendum: Resources

May 19, 2015
Transition to Retirement: Lifestyle Changes

May 19, 2015
What Does Retirement Mean to You?

• Excitement
• Celebration
• Freedom/Relaxation
• Uncertainty
• Fear
• Endings & Beginnings
W. Bridges’ *Transitions*

**Three phases of transitions:**

**Endings:** Letting go of the old ways and the old identity people had

**Neutral zone:** Realignments and repatternings take place

**New beginning:** Establish the new identify and new sense of purpose that makes the change stick

Change or Transition?

Change:
• Something old stops and something new begins
• Visible/Discernable
• Externally imposed
• Situational

Transition:
• Gradual adaptation, more re-orientation
• Psychological
• Internal adjustment
• Occurs over time
Phases of Retirement

- Remote
- Near phase
- Honeymoon
- Disenchantment
- Reorientation
- Stability
Losses/Changes

• Work identity
  – Relationships
  – Routine
  – Structure
  – Purpose
• Financial
• Other Relationships
Stages of Grief/Transition

- Denial
- Anger
- Bargaining
- Depression
- Acceptance
Successful Transitions to Retirement

• Plan Ahead
• Optimistic Attitude
• Remain Active
• Stay Connected
• Find Purpose
• Next Stages
Transition to Retirement: Financial Planning Decisions

May 19, 2015
Am I Ready and Able to Retire?

• For social reasons and personal fulfillment, some of us may never want to retire.

• For most, your personal finances, estate plan, and your health will play a more important role in determining the “WHEN” of the retirement decision.
Healthcare: A Key Factor

- If you are 65, you are already eligible for Medicare.
- If you are less than 65, you will need to provide for some form of health insurance to “bridge” you over to the age of Medicare eligibility.
- If a spouse continues to work, family coverage may be available.
- COBRA will provide coverage for up to an additional 18 months, but at much higher cost than the payroll deductions

Fidelity says that even with Medicare, the average retired couple will need to have an additional $250,000 saved for the costs of healthcare not covered by Medicare. (e.g., Medicare supplemental insurance, co-pays, deductibles, non-covered costs and long-term care)
How Much Do I Need to Retire?

FACTORS TO CONSIDER:

• Spending may increase in the first years of retirement due to better health and the desire to travel after years of work responsibilities.
• Social Security may provide you with about a third or less of the income you will need in retirement.
• What investments have you accumulated during a lifetime of work?
• Post-retirement employment – will you seek a 2nd career?

It is normal to need from 60% to 85% of pre-retirement income to keep the same standard of living in retirement.
Prepare a Post-Retirement Budget

Your retirement income is used to cover your basic monthly expenses; however, your income and savings may be impacted by the following:

Factors that can RAISE retirement costs:

• Do you have any outstanding debts?
• Family obligations such as wedding costs, college tuition
• Are you responsible for anyone outside your household? (e.g., an elderly parent)
• Will you or family member need assistance with chores due to physical limitations?
• Major repairs or home improvements?
• Will you need to purchase a new vehicle?
• More time for expensive hobbies and recreation. (e.g., golf, travel)
Prepare a Post-Retirement Budget

Factors that can LOWER retirement costs:

- Lower costs for commuting (e.g., gas, train/bus fares)
- Ability to downsize residence which may free up some funds for investment
- No need for professional attire (clothing costs should go down)
- Reduced family expenditures (kids are grown up and on their own)
- Reduction in lunchtime meals out
### Post-Retirement Budget - EXAMPLE

<table>
<thead>
<tr>
<th></th>
<th>Example 1</th>
<th>Example 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Income from working</td>
<td>$40,000</td>
<td>$80,000</td>
</tr>
<tr>
<td>Target Retirement Income (at 80%)</td>
<td>32,000</td>
<td>64,000</td>
</tr>
<tr>
<td>Anticipated from Social Security</td>
<td>16,000</td>
<td>32,000</td>
</tr>
<tr>
<td>@ approximately 40% of Pre-retirement Pay</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference from Investments/Part-time Work</td>
<td>$16,000</td>
<td>$32,000</td>
</tr>
</tbody>
</table>

How do we earn the extra $16,000 / $32,000?

The goal is to create a regular income stream from investments, Social Security and other sources.
Where Do I Get the Extra?

What are my current savings and Investments?

**SOURCES:**

- Savings Accounts/CD’s
- Retirement Plans at Rush and from former employers -- including the military
- Stocks and Bonds
- Cash from your residence:
  - Reverse Mortgage
  - Downsizing from your larger house to a townhome or condo

**Know Your Numbers! --- Some suggest having a portfolio 25 times larger than your first year’s withdrawal as a guideline.**
Other Financial Strategies

If your annual income needs are greater than your savings alone can generate, you may need to look at delaying retirement to save more, working part-time and/or strategies that allow for some of the principal to be spent as well as the returns.

• Annuities- can guarantee income for life and allow a withdrawal of both a portion of the returns and original principal, but there will often be nothing left over for heirs.

• Retirement savings can be used as a “bridge” to be expended until social security eligibility is reached. (Note: Delaying Social Security by 8 years from age 62 to 70 can add up to 8% per year to the monthly benefit)
If your annual income needs are greater than your savings alone can generate, you may need to look at delaying retirement to save more, working part-time and/or strategies that allow for some of the principal to be spent as well as the returns.

- Reverse mortgages can be considered to supplement withdrawals from savings or income from Social Security, but this requires a home with a fully paid off mortgage or at least a high proportion of equity.

NEXT STEP: Talk to a financial planner or independent advisor (non-commissioned).
Financial Planning and “Advisors”

Ask how your advisor will be compensated.
Some frequent methods include: commissions, annual asset-based fee, and hourly rate.

Typical Arrangements

• CPA’s (any of the above)
• Certified Financial Planner (CFP) (any of the above)
• Stock brokers and bank-based financial advisors (commissions or asset based)
• Insurance agent (commissions)
• Discount brokers with retail offices (e.g., Charles Schwab and Fidelity have salaried agents) -- many mutual funds can be traded/exchanged without a commission
CAUTIONS:

- Ask what the commission will be. The difference between a full-service broker and a discount broker can be $100’s on each trade.
- Ask if mutual funds have a front-end load or if it is a no-load fund.
- Ask for details on any variable annuity recommendations, annual costs and surrender charges can be very high!!
Transition to Retirement: Rush-Sponsored Retirement Plans

May 19, 2015
Your Retirement Benefits

Rush is committed to helping you save for a more secure retirement.

Depending on when you started your career at Rush, you may have benefits in the following plans:

Traditional Formula Retirement Plan
Cash Balance Formula Retirement Plan

Rush employees also have the opportunity to save pre-tax dollars in the 403(b) Retirement Savings Plan.

This presentation is intended to provide you with an overview of your retirement benefit plans.
Traditional Formula Retirement Plan

The Traditional Formula Retirement Plan was a career-average plan that provides a monthly benefit payable to you for your lifetime.

Each year, annual retirement benefit grew by 1.75% of that year’s compensation.

Early retirement at age 55

Unreduced retirement at 65

“Choice” participants are those who chose to remain in the Traditional Formula Retirement Plan as of December 31, 2002. Choice was offered to those having:

-- 25 or more years of service

-- Age 50 a 20 years service

-- Age 55 and 15 years service

“Choice” participants transferred to Cash Balance Formula Retirement Plan on 01/01/2012.
CASH BALANCE FORMULA

- Each year an employee works 1,000 hours or more, he accrues a benefit in the Cash Balance Plan. The benefit accrual is based on a “rolling” formula, which is calculated on the employee’s salary for that year.
- This “rolling” formula is based on “points,” which are determined by adding the employee’s age plus years of service.

<table>
<thead>
<tr>
<th>Points</th>
<th>Rush Contributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 34</td>
<td>2% of Pay</td>
</tr>
<tr>
<td>35 to 44</td>
<td>2.5% of Pay</td>
</tr>
<tr>
<td>45 to 54</td>
<td>3% of Pay</td>
</tr>
<tr>
<td>55 to 64</td>
<td>4% of Pay</td>
</tr>
<tr>
<td>65 to 74</td>
<td>5% of Pay</td>
</tr>
<tr>
<td>75 and above</td>
<td>6% of Pay</td>
</tr>
</tbody>
</table>
# Traditional vs Cash Balance Comparison

<table>
<thead>
<tr>
<th>Traditional Plan</th>
<th>Cash Balance Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-contributory</td>
<td>Non-contributory</td>
</tr>
<tr>
<td>Grows one way: annual accruals</td>
<td>Grows two ways: annual accruals and annual interest accruals</td>
</tr>
<tr>
<td>5 years to become vested</td>
<td>3 years to become vested</td>
</tr>
<tr>
<td>Benefits paid before age 55? NO</td>
<td>Benefits paid before age 55? YES</td>
</tr>
<tr>
<td>Form of payment: Monthly benefit</td>
<td>Form of payment: Monthly benefit (at retirement) or Lump Sum (at or before retirement)</td>
</tr>
<tr>
<td>Lump Sum available? NO</td>
<td>Lump Sum available? YES</td>
</tr>
</tbody>
</table>
403(b) Retirement Savings Plan

The Basics

• Beginning January 2003, employees who transferred to the Cash Balance Formula retirement plan began to receive a match on their contributions to the 403(b).

• “Choice” employees began to receive the employer match in January 2012.

• The match is 50% of the employee’s contribution, up to the first 6% of salary deferred.

• The 403(b) Retirement Savings Plan provides a tangible long-term value: RETIREMENT INCOME.
403(b) Retirement Savings Plan

How the Match works:

Rush will match 50% of your contribution, up to a maximum contribution of 6% of your pay.

EXAMPLE

Employee who earns $30,000 per year

6% of $30,000 = $1,800

50% of $1,800 = $ 900

Total retirement savings: $2,700.00

Minimum employee contribution is 1% of your salary. All contributions are made on a percentage basis, using whole numbers.

The maximum employee contribution for 2015 is $18,000. This maximum amount is subject to cost of living increases, and may change on an annual basis. In 2015, participants over age 50 may contribute an additional $6,000 to the plan, for a total of $24,000 in pre-tax retirement savings.
Questions ??

Fidelity Investments
403(b) and Retirement Plan Information
1-866-715-6183
http://netbenefits.fidelity.com

Rush University Pension Administration
Phyllis De Marco, Manager
1700 W. Van Buren, Ste. 152
Chicago, IL 60612
312-942-6237
Transition to Retirement: Social Security Retirement

May 19, 2015
How do you qualify for Social Security benefits?

• Work and pay social security taxes (FICA) to earn “covered credits”
  o 96% of workers are covered by Social Security
• Employee withholding rate for 2015 is 6.2% of income up to $118,500 (the wage ceiling)
• Employers pay the same amount
• You need 40 credits (10 years of work)
• Do not have to be earned in consecutive years
A B C’s of Social Security

How much will your retirement benefit be?

• Based on how much you earned during your working career
  o Top 35 years of earnings used in calculations

• Affected by the age at which you decide to retire
  o Full Retirement Age (FRA) is 66 (born 1943 – 1954)
  o Earliest possible retirement age is 62, but benefit reduced by 25% vs. FRA
  o Delayed Retirement up to a maximum of age 70 can increase benefits in two ways
    1. 8% added for each year you delay past full retirement age (born in 1943 or later)
    2. Higher lifetime earnings may mean higher benefit
### Some Tools from Social Security

#### Full Retirement and Age 62 Benefit By Year Of Birth

<table>
<thead>
<tr>
<th>Year of Birth</th>
<th>Full (normal) Retirement Age</th>
<th>Months between age 62 and full retirement age</th>
<th>A $1000 retirement benefit would be reduced to</th>
<th>The retirement benefit is reduced by</th>
<th>A $500 spouse's benefit would be reduced to</th>
<th>The spouse's benefit is reduced by</th>
</tr>
</thead>
<tbody>
<tr>
<td>1937 or earlier</td>
<td>65</td>
<td>36</td>
<td>$800</td>
<td>20.00%</td>
<td>$375</td>
<td>25.00%</td>
</tr>
<tr>
<td>1938</td>
<td>65 and 2 months</td>
<td>38</td>
<td>$791</td>
<td>20.83%</td>
<td>$370</td>
<td>25.83%</td>
</tr>
<tr>
<td>1939</td>
<td>65 and 4 months</td>
<td>40</td>
<td>$783</td>
<td>21.67%</td>
<td>$366</td>
<td>26.67%</td>
</tr>
<tr>
<td>1940</td>
<td>65 and 6 months</td>
<td>42</td>
<td>$775</td>
<td>22.50%</td>
<td>$362</td>
<td>27.50%</td>
</tr>
<tr>
<td>1941</td>
<td>65 and 8 months</td>
<td>44</td>
<td>$766</td>
<td>23.33%</td>
<td>$358</td>
<td>28.33%</td>
</tr>
<tr>
<td>1942</td>
<td>65 and 10 months</td>
<td>46</td>
<td>$758</td>
<td>24.17%</td>
<td>$354</td>
<td>29.17%</td>
</tr>
<tr>
<td>1943-1954</td>
<td>66</td>
<td>48</td>
<td>$750</td>
<td>25.00%</td>
<td>$350</td>
<td>30.00%</td>
</tr>
<tr>
<td>1955</td>
<td>66 and 2 months</td>
<td>50</td>
<td>$741</td>
<td>25.83%</td>
<td>$345</td>
<td>30.83%</td>
</tr>
<tr>
<td>1956</td>
<td>66 and 4 months</td>
<td>52</td>
<td>$733</td>
<td>26.67%</td>
<td>$341</td>
<td>31.67%</td>
</tr>
<tr>
<td>1957</td>
<td>66 and 6 months</td>
<td>54</td>
<td>$725</td>
<td>27.50%</td>
<td>$337</td>
<td>32.50%</td>
</tr>
<tr>
<td>1958</td>
<td>66 and 8 months</td>
<td>56</td>
<td>$716</td>
<td>28.33%</td>
<td>$333</td>
<td>33.33%</td>
</tr>
<tr>
<td>1959</td>
<td>66 and 10 months</td>
<td>58</td>
<td>$708</td>
<td>29.17%</td>
<td>$329</td>
<td>34.17%</td>
</tr>
<tr>
<td>1960 and later</td>
<td>67</td>
<td>60</td>
<td>$700</td>
<td>30.00%</td>
<td>$325</td>
<td>35.00%</td>
</tr>
</tbody>
</table>

1. If you were born on January 1st, you should refer to the previous year.
2. If you were born on the 1st of the month, we figure your benefit (and your full retirement age) as if your birthday was in the previous month. If you were born on January 1st, we figure your benefit (and your full retirement age) as if your birthday was in December of the previous year.
3. You must be at least 62 for the entire month to receive benefits.
4. Percentages are approximate due to rounding.
5. The maximum benefit for the spouse is 50% of the benefit the worker would receive at full retirement age. The % reduction for the spouse should be applied after the automatic 50% reduction. Percentages are approximate due to rounding.
Some Tools from Social Security

Social Security Administration provides tools to help you project your future benefits:

• Each year 3 months before your birthday, you would receive a statement from Social Security
  • Record of earnings / estimate of Social Security benefits
  • Will no longer be mailed after 2011 – but available on the SS website

• Use the Online Retirement Estimator tool
  • Convenient, secure and quick financial planning tool
  • Your data is already there – no need to manually enter
  • Create “what if” scenarios (change stop work dates)
Social Security Benefits and Work

Can you work after you begin receiving benefits without losing benefits?

• **Prior to full retirement age**
  - In 2015, you may earn up to the annual limit of $15,720 without a reduction in your benefit
  - For amounts earned over the limit, $1 in benefits will be reduced for each $2 in earnings

• **In the year you reach full retirement age**
  - If you earn over the limit, $1 in benefits will be reduced for each $3 in earnings

• **After full retirement age**
  - Your benefit will not be reduced regardless of what you earn
Applying for SS Benefits

WHEN is the right time for you to retire?

• Different for every individual depending on your circumstances
• Finances – It is normal to need 70-80% of pre-retirement income
• Social Security replaces only about 40%
• Health
• Family circumstances
• Job requirements
Applying for SS Benefits
If you have decided to retire and receive benefits, when do you apply for SS?

- Contact Social Security in advance to see which month is best to claim benefits (often January is best)
- You should apply for benefits about 3 months before the date you want your benefits to start
- If you need help deciding visit website for retirement planner

HOW and WHERE

- There are 3 ways to apply
  - Online at www.socialsecurity.gov
  - Toll free at 1-800-772-1213
  - Visit any Social Security office
Spousal Benefits

- **Surviving Spouse Benefits (widow or widower)**
  - Available at age 60 or age 50 if disabled
  - Can take spouses’ reduced benefit and then switch to full benefit at retirement age on their own benefit

- **Divorced Spouse Benefits**
  - Married 10 years - ex-spouse must be receiving benefits
  - Must be 62 and unmarried
  - Does not affect the amount you or your current spouse can get

- **Spouse Benefits (married)**
  - A spouse who has not worked or has low earnings can be entitled to as much as half of their retired spouse’s benefits
  - If you are at full retirement age and are eligible for a spouse’s and your own benefits, you may collect on the spouse’s and delay receiving your own benefits, which allows the benefit under your own record to grow
Transition to Retirement: Medicare Basics

May 19, 2015
Medicare

Medicare – a federal health insurance program for people age 65 and over and for many disabled people.

4 parts:

• **Part A** - Hospital Insurance (some of the costs of hospitalization, limited skilled nursing, and hospice care.

• **Part B** - Medical insurance (primarily covers doctor’s fees, most hospital outpatient services, and certain related services.)

• **Part C** - Medicare Advantage plans offered through Medicare (HMO plans, PPO plans, private fee for service plans, and special needs plans)

• **Part D** - Outpatient Prescription Drug Plan (voluntary prescription drug coverage)
Medicare Part A - Enrollment

Medicare Part A - Automatic Enrollment

- If you are already eligible for and receiving social security, you are automatically enrolled in Part A at age 65.
- When you apply for Part A / you are automatically enrolled in Medicare Part B unless you decline.
Medicare Part B – 3 Enrollment Periods

# 1. Initial Enrollment Period (IEP)

- 7 months long
- Starts 1st day of the 3rd mo. before turn age 65
- Ends last day of the 3rd month after you turn 65
- Will pay a higher premium if don’t enroll when first eligible. (permanent 10% premium increase for each 12 month period)

EXCEPTION: If you are covered under an employer’s group health plan as an active employee or the spouse of an active employee... COBRA & Special Retiree plan do not qualify as active plans.
Medicare Part B – Enrollment

#2. Special Enrollment Period (SEP) -- if you had group coverage past 65

- Begins the date you terminate employment or the date your medical coverage ends, whichever is earlier
- Ends 8 months later
- Watch for Certificate of Creditable coverage from insurance company to bring to SS when enrolling in Part B
- Remember that COBRA or Special Retiree Medical Plan do not qualify for this purpose

# 3. General Enrollment Period (GEP)

- Similar to employees’ open enrollment
- Jan 1 thru March 31 – coverage effective July 1
- If you missed your IEP and SEP and enroll during GEP, you will pay the permanent 10% premium increase for every 12 months you did not enroll.
Other Enrollments

Medicare (Part C) Advantage Plans – Coverage that incorporates Medicare Part A and Part B benefits into an HMO or PPO plan.

• These plans may often offer reduced deductibles and co-pays (“out-of-pocket costs”) of “traditional Medicare” in exchange for the use of a predefined network of healthcare providers.
• Enroll during your IEP or during open enrollment.

Part D (Pharmacy Plan)

• Same Enrollment period as Medicare Part B (7 months)
**MediGap Plans**

MediGap plans are provided by private insurance companies.

- Must follow federal and state laws and be clearly sold as “Medicare Supplement Insurance”
- Plans are standardized and identified by letters in most states
- Part A and Part B enrollment required
- MediGap Supplemental coverage pays all or a portion of Medicare deductibles and co-insurance

**“MediGap” Open Enrollment Period**

- Six Months long
- Begins the 1st month that you are 65 and also enrolled in Part B
- Cannot be denied a MediGap policy or charged a higher premium because of your current or past health problems
- Guaranteed Renewable each year
Transition to Retirement: Career Transitions

May 19, 2015
Making Life / Career Choices

What Path Will You Choose?

• Retirement?

• Career change?

• Transition to part-time work?

• Entrepreneurial track?
Making Life / Career Choices

My Pre-Retirement Planning “To Do” List

1. Define my next stage goals.
2. Assess my interests, passions and capabilities.
3. Develop a network of trusted advisors.
4. Take steps to improve or better manage my health.
5. Plan my retirement budget.
6. Take care of the paperwork.
7. Start Now!
ADDENDUM

Retirement and Second Career Planning Resources
Recommended Readings


Financial Planning Decisions

Retirement Income Example
“Full retirement” ---the point where investments coupled with social security generate sufficient income to live independent of any paid work that we may do for reasons other than money.

Example: A balance of $320,000 that earns 5% per year and generates $16,000 per year.

<table>
<thead>
<tr>
<th>Investment Balance Needed</th>
<th>$ 533,333</th>
<th>$ 400,000</th>
<th>$ 320,000</th>
<th>$ 266,667</th>
<th>$ 228,571</th>
<th>$ 200,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Return Expected</td>
<td>3%</td>
<td>4%</td>
<td>5%</td>
<td>6%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Annual Income Generated</td>
<td>$ 16,000</td>
<td>$ 16,000</td>
<td>$ 16,000</td>
<td>$ 16,000</td>
<td>$ 16,000</td>
<td>$ 16,000</td>
</tr>
</tbody>
</table>

A 5% return is more likely in a balanced portfolio containing both stocks and bonds. Higher earnings are possible, but would generally involve greater volatility (risk) in the annual investment return.
Getting from Here to There

The “Rule of 72’s” can be used as a rough guideline in planning the growth of existing or future savings using various return assumptions:

**APPROXIMATE YEARS TO DOUBLE AN INVESTMENT**

<table>
<thead>
<tr>
<th>Return %</th>
<th># of Years</th>
<th>= 72</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>x 24.0</td>
<td>72</td>
</tr>
<tr>
<td>4</td>
<td>x 18.0</td>
<td>72</td>
</tr>
<tr>
<td>5</td>
<td>x 14.4</td>
<td>72</td>
</tr>
<tr>
<td>6</td>
<td>x 12.0</td>
<td>72</td>
</tr>
<tr>
<td>7</td>
<td>x 10.3</td>
<td>72</td>
</tr>
<tr>
<td>8</td>
<td>x 9.0</td>
<td>72</td>
</tr>
<tr>
<td>9</td>
<td>x 8.0</td>
<td>72</td>
</tr>
</tbody>
</table>

**Example: Growth of $100,000 at 8% EoY**

<table>
<thead>
<tr>
<th>Year</th>
<th>Return</th>
<th>EoY Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$ 8,000</td>
<td>$108,000</td>
</tr>
<tr>
<td>2</td>
<td>8,640</td>
<td>116,640</td>
</tr>
<tr>
<td>3</td>
<td>9,331</td>
<td>125,971</td>
</tr>
<tr>
<td>4</td>
<td>10,078</td>
<td>136,049</td>
</tr>
<tr>
<td>5</td>
<td>10,884</td>
<td>146,933</td>
</tr>
<tr>
<td>6</td>
<td>11,755</td>
<td>158,687</td>
</tr>
<tr>
<td>7</td>
<td>12,695</td>
<td>171,382</td>
</tr>
<tr>
<td>8</td>
<td>13,711</td>
<td>185,093</td>
</tr>
<tr>
<td>9</td>
<td>14,807</td>
<td>199,900</td>
</tr>
</tbody>
</table>

**NOTE:** A corollary effect is that if inflation was 3%, it would take about 24 years for prices to double or purchasing power to fall by half. Thus, $16,000 in 24 years would have the purchasing power of $8,000 today.
# Portfolio Growth & Spending

## No spending of returns

**Example: Growth of $100,000 at 8%**

<table>
<thead>
<tr>
<th>Year</th>
<th>Return</th>
<th>EoY Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$8,000</td>
<td>$108,000</td>
</tr>
<tr>
<td>2</td>
<td>8,640</td>
<td>116,640</td>
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<td>171,382</td>
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<tr>
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<td>13,711</td>
<td>185,093</td>
</tr>
<tr>
<td>9</td>
<td>14,807</td>
<td>199,900</td>
</tr>
</tbody>
</table>

## Spending a portion of return

**Return of 8% but spend 1/2 for Living Expenses**

<table>
<thead>
<tr>
<th>Year</th>
<th>Starting Balance</th>
<th>Invest. Return</th>
<th>Spend Half</th>
<th>EoY Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$100,000</td>
<td>$8,000</td>
<td>$(4,000)</td>
<td>$104,000</td>
</tr>
<tr>
<td>2</td>
<td>104,000</td>
<td>8,320</td>
<td>(4,160)</td>
<td>108,160</td>
</tr>
<tr>
<td>3</td>
<td>108,160</td>
<td>8,653</td>
<td>(4,326)</td>
<td>112,486</td>
</tr>
<tr>
<td>4</td>
<td>112,486</td>
<td>8,999</td>
<td>(4,499)</td>
<td>116,986</td>
</tr>
<tr>
<td>5</td>
<td>116,986</td>
<td>9,359</td>
<td>(4,679)</td>
<td>121,665</td>
</tr>
<tr>
<td>6</td>
<td>121,665</td>
<td>9,733</td>
<td>(4,867)</td>
<td>126,532</td>
</tr>
<tr>
<td>7</td>
<td>126,532</td>
<td>10,123</td>
<td>(5,061)</td>
<td>131,593</td>
</tr>
<tr>
<td>8</td>
<td>131,593</td>
<td>10,527</td>
<td>(5,264)</td>
<td>136,857</td>
</tr>
<tr>
<td>9</td>
<td>136,857</td>
<td>10,949</td>
<td>(5,474)</td>
<td>142,331</td>
</tr>
</tbody>
</table>

The investment return & withdrawal amount in year 9 are both 37% higher than in year 1, thus allowing for growth in income and allowing for some inflation. The balance has grown 42% over the period.
### Return of 5.4% but spend 4% for Living Expenses

<table>
<thead>
<tr>
<th>Year</th>
<th>Starting Balance</th>
<th>Invest. Return</th>
<th>Spend 4%</th>
<th>EoY Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$100,000</td>
<td>$ 5,400</td>
<td>$(4,000)</td>
<td>$101,400</td>
</tr>
<tr>
<td>2</td>
<td>101,400</td>
<td>5,476</td>
<td>(4,056)</td>
<td>102,820</td>
</tr>
<tr>
<td>3</td>
<td>102,820</td>
<td>5,552</td>
<td>(4,113)</td>
<td>104,259</td>
</tr>
<tr>
<td>4</td>
<td>104,259</td>
<td>5,630</td>
<td>(4,170)</td>
<td>105,719</td>
</tr>
<tr>
<td>5</td>
<td>105,719</td>
<td>5,709</td>
<td>(4,229)</td>
<td>107,199</td>
</tr>
<tr>
<td>6</td>
<td>107,199</td>
<td>5,789</td>
<td>(4,288)</td>
<td>108,700</td>
</tr>
<tr>
<td>7</td>
<td>108,700</td>
<td>5,870</td>
<td>(4,348)</td>
<td>110,221</td>
</tr>
<tr>
<td>8</td>
<td>110,221</td>
<td>5,952</td>
<td>(4,409)</td>
<td>111,764</td>
</tr>
<tr>
<td>9</td>
<td>111,764</td>
<td>6,035</td>
<td>(4,471)</td>
<td>113,329</td>
</tr>
</tbody>
</table>

The investment return & withdrawal amount are both 11.8% greater than in year 1, thus allowing for growth in income and allowing for some inflation. The balance is now 13.3% higher.

---

**Using the starting balance of $100,000:**

**Investment return:** 5.4%/yr.

**Annual Draw Down:** 4.0%/yr.

**Growth retained for inflation:** 1.4%/yr.

**An 8% annual return expectation anticipates a much larger allocation to equities with accompanying volatility.**
Diversification can protect the portfolio from wide swings and give it more even returns. The goal is to have some parts of the portfolio going up or remaining steady when other areas are in downtrends.

Investment Grade Bonds
High Yield Bonds
Foreign Bonds
U.S. Stocks Large Cos.
U.S. Stocks Small Cos.
International Stocks
Real Estate/Commodities
Money Market Funds
Portfolio

Target Date Retirement Funds
Your To Do List – Pre-Retirement Planning

1. Define your next stage goals.
   a. What will I be doing next year, in 3 years, in 5 years?
   b. Will I stay/will I move?
   c. Where does family fit?
   d. Do I need to work/want to work?
   e. Full retirement or partial?

2. Assess your interests, passions and capabilities.
   a. What am I good at/what are my strengths?
   b. Apply what you learned at work to planning your next stage.
   c. Prepare a “life portfolio” – the facts of your life.

3. Plan your retirement budget.
   a. Projected Income
      i. Social Security Estimator: [www.SSA.gov](http://www.ssa.gov)
      ii. Retirement Income (pensions & 401(k)/403(b)
      iii. Investments, e.g. savings, bond yields & stock dividends
      iv. Annuities
      v. Sale of assets, e.g., home or personal property
      vi. Life Insurance cash value
   b. Projected Expenses
      i. Mortgage or Rent
      ii. Credit Card debt
      iii. Loans
      iv. Real Estate taxes
      v. Insurance, e.g., home, life, auto
      vi. Travel or vacation
4. Take care of the paperwork.
   a. Update Will and Trust documents
   b. Advance Directives
   c. List of advisors who know what and where assets are located
   d. Location of documents, e.g., safety deposit box, under the mattress
   e. Bank accounts
   f. Passwords

5. Develop a network of trusted advisors.
   a. Refresh your network continuously.
   b. Seek out people who have “been there/done that”.
   c. Assess your financial advisors or hire one.

6. Take steps to evaluate and improve/better manage your health.
   a. Do you know your PCP?
   b. Preventive screenings.
   c. Dentist visits.
   d. Take advantage of the Rush Choose Health Wellness program.

Note: Anyone with questions concerning retirement policies and procedures should contact Phyllis DeMarco, Manager, Pension Administration at extension 2-6237.
Objectives

• At the end of the presentation, the learner will:
  • Have a general knowledge of leadership competencies.
  • How competencies can be used, and
  • Where to locate leadership competencies from different organizations.
Why are you here today to hear about leadership competencies?
What are Competencies?

A competency is the capability to apply or use a set of related knowledge, skills, and abilities required to successfully perform "critical work functions" or tasks in a defined work setting.

KSA
Why do competencies matter?

- Structured understanding of what is expected
- Serve as guidelines for development
- Used as evaluation methods
Where can you find competencies?

- **Google:**
  - 24,800,000 results

- **Books:**

- **Organizations:**
  - Educational
  - For profit
  - Not for profit
  - Commercial
AACN DNP Educational Competencies
Essential Clinical Scholarship and Analytical Methods for EBP

- Use analytic methods to critically appraise existing literature and other evidence to determine and implement the best evidence for practice.
- Design and implement processes to evaluate outcomes of practice, practice patterns, and systems of care within a practice setting, health care organization, or community against national benchmarks to determine variances in practice outcomes and population trends.
- Design, direct, and evaluate quality improvement methodologies to promote safe, timely, effective, efficient, equitable, and patient-centered care. ......
Virginia Automotive Mechanic

Skills
1. Repairing machines or systems using the needed tools.
2. Determining causes of operating errors and deciding what to do about it…….

Knowledge
1. Machines and tools, including their designs, uses, repair, and maintenance.
2. Circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming…….

Abilities
1. Arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).
2. Tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
3. Keep your hand and arm steady while moving your arm or while holding your arm and hand in one position…….
What are Healthcare Leadership Competencies?

Leadership competencies are defined as the technical and behavioral characteristics that leaders must possess to be successful in positions of leadership across the health professions.

(National Center for Healthcare Leadership, 2005-2010)
Why Healthcare Leadership Competencies? (NCHL)

• The “end consumer” for health is people.
• Health is a mission- and values-driven industry.
• Health system is extraordinarily complex and more than other sectors requires building consensus among independent constituencies.
• Healthcare leaders are especially challenged to create work climates that motivate high-quality, patient-centered care and retain high-demand talent in a very competitive market.
Where can you find healthcare leadership competencies?

- **Google:**
  - 417,000 results

- **Books:**

- **Organizations:**
  - National Center for Healthcare Leadership (NCHL)
  - American Organization of Nurse Executives (AONE)

- **Rush HR:**
  - HR Source, Manager Resources, Performance Management, Leadership Competencies
Dye and Garman (2015)

• Four Cornerstones
  • Well-cultivated self-awareness
  • Compelling vision
  • Masterful execution
  • A real way with people

• Overlaying a healthy self-concept
Dye and Garman (2015)

• Well-cultivated self-awareness
  Leading with conviction
  Using emotional intelligence

• Compelling vision
  Developing the vision
  Communicating the vision
  Earning loyalty and trust
Dye and Garman (2015)

- Masterful execution
  - Generating informal power
  - Building true consensus
  - Mindful decision making
  - Driving results
  - Stimulating creativity
  - Cultivating adaptability
Dye and Garman (2015)

- A real way with people
  - Listening like you mean it
  - Giving great feedback
  - Mentoring
  - Developing high-performing teams
  - Energizing staff
### Johari Window: healthy self-concept

<table>
<thead>
<tr>
<th>Known to Others</th>
<th>Not Known to Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Known to Self</td>
<td>OPEN</td>
</tr>
<tr>
<td>Not Known to Others</td>
<td>BLIND</td>
</tr>
<tr>
<td>Not Known to Self</td>
<td>HIDDEN</td>
</tr>
<tr>
<td></td>
<td>UNKNOWN</td>
</tr>
</tbody>
</table>
NCHL Competencies

(National Center for Healthcare Leadership, 2005-2010)

• Transformation
• Execution
• People
NCHL Competencies

(National Center for Healthcare Leadership, 2005-2010)

• **Transformation**: Visioning, energizing, and stimulating a change process that coalesces communities, patients, and professionals around new models of healthcare and wellness.
  • Achievement Orientation
  • Analytical Thinking
  • Community Orientation
  • Financial Skills
  • Information Seeking
  • Innovative Thinking
  • Strategic Orientation
NCHL Competencies

- **Execution**: Translating vision and strategy into optimal organizational performance.
  - Accountability
  - Change Leadership
  - Collaboration
  - Communication Skills
  - Impact and Influence
  - Initiative
  - Information Technology Management
  - Organizational Awareness
  - Performance Measurement
  - Process Management/Organizational Design
  - Project Management
NCHL Competencies

• **People:** Creating an organizational climate that values employees from all backgrounds and provides an energizing environment for them. Also includes the leader’s responsibility to understand his or her impact on others and to improve his or her capabilities, as well as the capabilities of others.
  
  • Human Resources Management
  • Interpersonal Understanding
  • Professionalism
  • Relationship Building
  • Self Confidence
  • Self Development
  • Talent Development
  • Team Leadership
NCHL Competencies: People

- Human Resources Management
  - The ability to implement staff development and other management practices that represent contemporary best practices, comply with legal and regulatory requirements, and optimize the performance of the workforce, including performance assessment, alternative compensation and benefit methods, and the alignment of human resources practices and processes to meet the strategic goals of the organization.

- Interpersonal Understanding
  - The ability to accurately hear and understand the unspoken or partly expressed thoughts, feelings, and concerns of others.

- Professionalism

- Relationship Building
  - The ability to establish, build, and sustain professional contacts for the purpose of building networks of people with similar goals and that support similar interests.

- Self Confidence
- Self Development
- Talent Development
- Team Leadership
Rush HR Leadership Competences

Linked to the leadership development that occurs at Rush
LEADERSHIP COMPETENCIES - MANAGERS

Rush has identified the leadership competencies that our organization needs to sustain our success into the future. Leadership competencies are knowledge, skills, and behaviors that contribute to superior leadership performance. Our competencies are the foundation for how Rush systematically approaches our most important resource; our people. Competencies provide a consistent language and are how we:

- Attract and Select people at Rush
- Assess and Align people at Rush
- Develop and Retain people at Rush

There are four tiers of competencies at Rush.

Click here to see an overview of the Rush Leadership Competencies.

Click below to see detailed descriptions of each level:

- **Individual Contributors** – Those without direct reports
- **Frontline Leaders** – Supervisors and Managers
- **Leader of Leaders** – Directors and AVPs
- **Senior Leaders** – Vice Presidents and above

Please consider the environment before printing these documents
How do leadership competencies guide Rush’s talent practices?

**Attract & Select Talent**
Workforce Planning
Recruitment & Selection
On boarding

**Assess & Align Talent**
Performance Management
Talent Reviews
Reward & Recognition

**Develop & Retain Talent**
Development
Engagement
Retention

---

**Rush Competency Model**

<table>
<thead>
<tr>
<th>Imperatives</th>
<th>Sector Leaders (SVP/VP) Competencies</th>
<th>Leader of Leaders (AVP/Director) Competencies</th>
<th>Front Line Leader Competencies</th>
<th>Individual Contributor Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Invent our Future</strong></td>
<td>Sets Strategic Direction, Develops External &amp; Internal Relationships</td>
<td>Contributes to Strategic Direction, Builds Effective Cross-Functional Relationships</td>
<td>Enacts Strategic Direction</td>
<td>Aware of Strategic Direction</td>
</tr>
<tr>
<td><strong>Deliver Value Today</strong></td>
<td>Leads Change, Organizational Awareness / Savvy, Executive Disposition</td>
<td>Enables Change, Organizational Awareness / Savvy</td>
<td>Adaptable, Department Savvy</td>
<td>Adaptable</td>
</tr>
<tr>
<td><strong>Build on our Strengths</strong></td>
<td>Accountable for Organizational Outcomes, Organization-wide Decision Making</td>
<td>Responsible for Driving Operational Results, Operational Decision Making, Business/Financial Savvy</td>
<td>Operational Performance Monitoring, Decision Making, Plans &amp; Organizes</td>
<td>Initiates Action, Manages Work</td>
</tr>
<tr>
<td><strong>People Leadership</strong></td>
<td>Builds, Organizational Talent, Develop &amp; Guides Teams, Ensures Employee Engagement, Compelling Communication</td>
<td>Builds &amp; Develops Talent/Teams, Ensures Employee Engagement, Compelling Communication</td>
<td>Coaches &amp; Supervises, Leads Teams, Communication</td>
<td>Contributes to Team Success, Communication</td>
</tr>
<tr>
<td><strong>Functional Leadership</strong></td>
<td>Professional Knowledge &amp; Technical Skill (Senior Leader), Ensures Quality &amp; Safety, Continuous Learning</td>
<td>Professional Knowledge &amp; Technical Skill (Leader of Leaders), Driven Quality &amp; Safety, Continuous Learning</td>
<td>Professional Knowledge &amp; Technical Skill, Manages for Quality &amp; Safety, Continuous Learning</td>
<td>Professional Knowledge &amp; Technical Skill, Quality Orientation, Continuous Learning</td>
</tr>
<tr>
<td>Competency</td>
<td>Description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invent our Future</td>
<td>“Where we’re going”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deliver Value Today</td>
<td>“What we do”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Build on our Strengths</td>
<td>“Who we are”</td>
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• Develops External & Internal Relationships                                                                  | • Contributes to Strategic Direction  
• Builds Effective Cross Functional Relationships                                                                      |
| Inspirational Leadership | • Leads Change  
• Organizational Awareness / Savvy  
• Executive Disposition                                                                                           | • Enables Change  
• Organizational Awareness / Savvy                                                                                   |
| **Deliver Value Today “What we do”** |                                                                                                      |                                                                                                             |
| Operational Leadership   | • Accountable for Organizational Outcomes  
• Organization-wide Decision Making                                                                        | • Responsible for Driving Operational Results  
• Operational Decision Making  
• Business/Financial Savvy                                                                                         |
| People Leadership        | • Builds Organizational Talent  
• Drives & Guides Teams  
• Ensures Employee Engagement  
• Compelling Communication                                                                                       | • Builds & Develops Talent/Teams  
• Ensures Employee Engagement  
• Compelling Communication                                                                                       |
| **Build on our Strengths “Who we are”** |                                                                                                      |                                                                                                             |
| Functional Leadership    | • Professional Knowledge & Technical Skill (Senior Leader)  
• Ensures Quality & Safety  
• Continuous Learning                                                                                           | • Professional Knowledge & Technical Skill (Leader of Leaders)  
• Drives Quality & Safety  
• Continuous Learning                                                                                           |
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## Rush Competency Model

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• Develops External & Internal Relationships | • Contributes to Strategic Direction  
• Builds Effective Cross Functional Relationships | • Enacts Strategic Direction |
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| **Deliver Value Today “What we do”** | | | |
| Inspirational Leadership | • Leads Change  
• Organizational Awareness / Savvy  
• Executive Disposition | • Enables Change  
• Organizational Awareness / Savvy | • Adaptability  
• Department Savvy |
| | | | |
| **Build on our Strengths “Who we are”** | | | |
| Operational Leadership | • Accountable for Organizational Outcomes  
• Organization-wide Decision Making | • Responsible for Driving Operational Results  
• Operational Decision Making  
• Business/Financial Savvy | • Operational Performance Monitoring  
• Decision Making  
• Plans & Organizes |
| People Leadership | • Builds Organizational Talent  
• Drives & Guides Teams  
• Ensures Employee Engagement  
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• Drives Quality & Safety  
• Continuous Learning | • Professional Knowledge & Technical Skill  
• Manages for Quality & Safety  
• Continuous Learning |
| Cultural Leadership | • Passion for the Rush Mission, Vision & Values  
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• Business/Financial Savvy | • Operational Performance Monitoring  
• Decision Making  
• Plans & Organizes | • Initiates Action  
• Manages Work |
| People Leadership | • Builds Organizational Talent  
• Drives & Guides Teams  
• Ensures Employee Engagement  
• Compelling Communication | • Builds & Develops Talent/Teams  
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• Compelling Communication | • Coaches & Supervises  
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**Leads Teams Competency Definition:**

Using appropriate methods and a flexible interpersonal style to help build a cohesive team; facilitating the completion of team goals.
Leadership Development Guides

**Competency**

**Definition**

**Role Model**

**Role Model Description**

**Key Actions**

**Examples of Key Actions**

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**Leads Teams**

*Using appropriate methods and a flexible interpersonal style to help build a cohesive team; facilitating the completion of team goals.*

**Role Model:**

- Develops a clear mission for the team aligned with business strategy. Ensures all team members understand roles and responsibilities. Actively seeks input from team members to determine methods for achieving goals. Always maintains positive relationships with and among team members by valuing individual contributions. Monitors individual and team performance to encourage team toward achieving measurable goals and assigned responsibilities. Works to provide necessary resources, remove barriers, and provide suggestions when necessary. Team is able to function effectively in the absence of close monitoring or supervision. Considers a variety of factors before allocating decision-making authority and responsibilities to appropriate individuals.

**KEY ACTIONS:**

- Develops direction - Ensures that the purpose and importance of the team are clarified (e.g., team has a clear charter or mission statement), guides the setting of specific and measurable team goals and objectives.
- Develops structure - Helps to clarify roles and responsibilities of team members; helps ensure that necessary steering, review, and support functions are in place.
- Facilitates goal accomplishment - Makes procedural or process suggestions for achieving team goals or performing team functions; provides necessary resources or helps to remove obstacles.
- Involves others - Listens to and fully involves others in team decisions and actions; values and uses individual differences and talents.
- Shares appropriate responsibilities - Allocates decision-making authority and/or task responsibility in appropriate areas to appropriate individuals (considering positive and negative impact, organizational values and structures, and the enhancement of the individual's knowledge/skills).
- Informs others on team - Communicates important or relevant information with the team.
- Models commitment - Adheres to the team's expectations and guidelines; fulfills team responsibilities; demonstrates personal commitment to the team; models a healthy work/life balance for the team.
Leadership Development Guides

What are the Rush Leadership Development Guides?

- The Rush Leadership Development Guides outline the key behaviors associated with each competency to help understand specific actions related to each competency.

- Provide development in a variety of ways for each Rush Leadership Competency.

- Guides are based on adult learning and development principles:
  - Job Experience
  - People & Feedback
  - Courses & Reading
Learning From Experience

1. Involve your team in experiential learning as they are working on a project or system. Demonstrate your commitment to building your team through this on-going process.

2. Write some ideas of where you would like your team or department to be one year from now in terms of quality, outputs, costs, and customer satisfaction. Share your targets with your team and ask them for suggestions on how to achieve these goals. Create a plan that incorporates their feedback and share it with the team. Ensure each member of the team knows what is expected of them to achieve your targets. Model your commitment and consistency by periodically checking back in with the team and provide updates on progress/changes.

3. Take on a project that will require you to establish a team with new members, goals, and objectives. Create a game plan for how you will purposefully create the culture and mission for the team necessary to achieve its objectives. Seek guidance, as necessary, prior to your first meeting to ensure you have considered all components needed to build an effective team. Keep a journal of what you learned regarding developing a team direction and structure, your communication, and the team effectiveness at reaching goals. Share your reflections with your manager or a mentor. Create an action plan for improving your and your team’s performance.

4. List three to five of your team's primary goals. Then, list the one or two primary skills that each team member brings to the team. Analyze the skills gap and consider whether the team is missing any kind of knowledge or expertise that might be useful or necessary to meet the team’s goals. Schedule a training session for the broader team to address more prevalent skill gaps and coach individuals on their specific weaknesses, building new skills for all of them.
5. Think of effective and successful leaders you have known or watched in the past. Ask yourself what these ideal leaders do to encourage people to work together toward a common goal. After writing your ideas, identify the things you need to work on most to meet these ideals. Update your development plan and identify the next opportunity where you can focus on testing or demonstrating these behaviors. Keep a running list of what worked for you and what did not and share with your manager for additional feedback and coaching.

6. Reinforce organizational, departmental, and team goals with your team members by incorporating them into individual work expectations. For example, if an organizational goal is 100% customer satisfaction, ask staff to be accountable for the same goal. Set up a measurement system so staff knows how you plan to measure actual results. Create specific SMART goals that can be measured to ensure that accountabilities and performance are clear.

7. Identify the supporters and barriers to realizing Rush's vision in existing systems (e.g., selection, training, communication, etc.). Prepare strategies that promote the former and address the latter. Use process improvement methods with your team to determine most effective strategies. Involve your team to brainstorm additional options and commit to action. Ensure your team members' roles and responsibilities are clear and aligned with Rush's strategies and the structural goals. Continually monitor progress.

8. Maximize each team member's effectiveness by incorporating each person's personal strengths into assignments. When helping to create their individual developmental plans, always start with a strength, and always include at least one in their plans. Stress how each individual's development strengthens the team as a whole.

9. Think about the information you share with team members. Do you share too much? Not enough? How do you decide what to share? Listen closely to the questions your team asks for additional insight. Plan for your next team meeting differently to incorporate what communication changes you want to make. Look for changes in your team's understanding, commitment, questions, etc.
10. Ensure that you have daily open-door time when team members can interrupt you. Keep this availability consistent to demonstrate your personal commitment to the team. Be willing to discuss work-related issues as well as developmental topics.

11. Identify those goals or targets that are the most crucial lead indicators for your team. Share progress routinely so that staff are clear about how well they are doing. Emphasize both what the team has accomplished and how it was accomplished. Offer support for those areas where progress is lagging.

12. Schedule team outings and activities that are work free. Encourage team members to have fun at work to promote a stronger team environment.

13. Conduct an annual or semiannual team review to reassess goals, celebrate significant accomplishments, and identify, address, and resolve any performance or skills gaps. Keep a running list of outcomes from these meetings and track trends and progress.

14. Ask the team for ideas on ways to get them more involved in team or department decisions. Form task forces to target specific situations. Ensure you follow through on these initiatives and set up follow-up meetings to check on progress. Ensure they share their learnings with you for future opportunities.

Learning From People

1. Reach out to someone who is respected for their strong teams. Ask for time to review what they do to build strong teams and where they have struggled in the past. Seek specific stories about teams they have built to better understand the decisions that were purposefully made along the team's progression. Document your learning and incorporate what you need to do or learn into your development plan.
2. Ask subject matter experts to observe or comment on team interactions, objectives, and goals. Share this feedback into your own plan on how to develop your team. Incorporate this feedback into your own plan on how to develop your team.

3. Talk to people who have recently moved into a new team or inherited a new team. Discuss communication, structural, and feedback approaches that worked well and those that could be improved. Consider incorporating pieces of these new approaches into your own.

4. Ask team members for feedback about your own demonstration of Rush’s values. What things do you do that support the Rush’s values? What actions are inconsistent? After receiving input, work with your manager to create a plan for developing more supportive behaviors.

**Learning From Courses & Readings**

1. Always stay alert to classroom or web-based training courses, workshops, and professional conferences that emphasize developing team building skills, such as providing feedback, performance management, etc.

2. Independently research accredited institutions of higher learning for topic relevant programs that support advancing your applied knowledge and skills in leading teams.

3. Commit to reading professional journals, books, and articles to expand your knowledge around team development, motivating others, and maximizing performance. Read newspapers and articles (for current events) and technical journals (for new developments in your field) that might expand your knowledge and give you some new ideas to try at work. Look for team-related articles in business newspapers and magazines, such as Harvard Business Review, Journal of Business Strategy, Fast Company, Journal of Business, The Wall Street Journal, Fortune, Business Week, and The Economist.
Books

   The Team Handbook has been a reference for team leaders and team advisors for many years. The newest edition of this classic takes you beyond improvement teams to work teams and the teams of today. It combines process improvement methods in team environments to create quality products and services.

   The Team Leader Guide is a compilation of frameworks, strategies and best practices for leaders of work teams.

   Lencioni reveals the five dysfunctions which go to the very heart of why teams often struggle. He outlines a powerful model and actionable steps that can be used to overcome these common hurdles and build a cohesive, effective team.

   The Rowers’ Code offers a new set of behaviors that can help any team overcome challenges and meet goals. It provides an outline for building a culture based on teamwork and communication. As the team learns how to row together, they simultaneously learn the elements of highly effective teamwork.

   Managing Successful Teams prepares managers to meet the challenges of building and leading teams, showing how to improve performance and achieve the best results. Offering valuable advice and practical strategies, it covers each aspect of managing teams, including developing team creativity and innovation, realigning the team’s identity with a specific leadership style and effective team leadership.

Davies-Black.

*Tools for Team Leadership* introduces the critical X-factor in team success—leadership—and delivers an advanced set of tools and strategies to help anyone master the role of team leader. Grounded in the author’s practical frontline experience with hundreds of teams and backed by solid research and instruments, including the powerful Myers-Briggs Type Indicator assessment, the book identifies the chief responsibilities of a team leader and delivers a power-packed toolbox for analyzing a team’s strengths and weaknesses, creatively brainstorming strategies and tactics, generating options and facilitating consensus, and implementing action plans that help teams help themselves. It covers team building for both new and established teams, with special help for team building at the top, and includes a self-study review at the end of each chapter to help turn key learning concepts into a plan of action.


THINKaha.

Explains why teamwork matters in today’s business environment, given the multiple challenges and opportunities. The book reveals what makes up an effective team, how to get a team to focus on its core purpose, and the role of strong (but not egotistical) leadership in team performance. It shows how teams and their group dynamics need to be constantly nurtured, so that the differences in personalities and perspectives of team members can be harnessed towards the collective goal or creative purpose.

**Articles**


The article discusses management’s challenge to blend, develop, and motivate the human resources within the organization. It presents employees as those that impact productivity and as the bottom line in increasing group size and its offerings. It says the employees’ relationship with management should be more of a partnership. Managerial role changes are needed when leading a team include reduction of control, greater use of people skills, and understanding and using group dynamics. The influence power of a manager is reportedly evident in team-building.


The article focuses on the use of metaphors in leadership. The author offers tips when choosing metaphors for a business. These include choosing the most apt metaphor, adapting the metaphor to fit the business culture, and knowing the limits of the metaphor. Information is provided on how metaphors reflect the mental business model of a company.

The article discusses the role of coaching in enabling and improving collective transformational leadership in senior teams. Collective transformational leadership refers to a flow of collectively committing the participation and passion of all primary stakeholder groups to drastic change in the context of common mission, values and vision. The need for collective transformational leadership coaching is emphasized by the Harvard University study "Senior Leadership Teams," wherein 120 teams stated that individual coaching does not improve them.


The article discusses the working groups and teams and defines a team as a small number of people with complementary skills who are committed to a common purpose and a set of performance goals. It focuses on the elements present in a team which include common purpose, commitment and mutual accountability. It notes that the elements can be present but the team can still be derailed from its purpose due to absence of trust and fear of conflict.


This paper presents a study that investigated the relationship between the composition of interdisciplinary healthcare teams and the intra-team knowledge sharing processes, as well as their joint influence on the generation of new, individualized solutions. Innovative behavior is essential, especially for healthcare professionals treating patients with rare diseases when they are faced with an uncertain, unpredictable care environment and the challenge of creating individualized patient treatment options.
Podcast & Videos


   *Kaufman discusses insights on how to effectively manage projects, become a more confident leader, take focused action, and achieve the desired results.*


   *Seth Godin argues the Internet has ended mass marketing and revived a human social unit from the distant past: tribes. Founded on shared ideas and values, tribes give ordinary people the power to lead and make big change. He urges us to do so.*


   [http://www.youtube.com/watch?v=Kj9hw0ngPJU](http://www.youtube.com/watch?v=Kj9hw0ngPJU)

   *Lencioni provides participants with tools, exercises, and real-world examples. He answers questions that all high performance teams answer: Are we really a team? How are we currently performing? Are we prepared to invest the time and energy required to be a great team? What are we committing to do differently to improve our performance as a team.*

4. Search for the competency key actions listed on page 72 at the following sites:

   - TED
     [http://www.ted.com/](http://www.ted.com/)
   - YouTube Channels:
     [http://www.youtube.com/user/LinkageInc1#q/u](http://www.youtube.com/user/LinkageInc1#q/u)
   - ASTD library
     [http://store.astd.org/](http://store.astd.org/)
SHRM library

iTunes Podcasts
Consider Podcasts from LeadershipNetwork.org or Podcast.TV: A Minute with John Maxwell

5. Browse online publications from thought leaders such as:
  James B. Tipton, Paul Sloane, Marshall Goldsmith, John Baldoni, Peter M. Senge

Rush Resources

1. Visit Rush Library's intranet site for access to online article databases.
2. Visit Resources and Development section on http://www.hresourceatrush.com to get a full listing of scheduled learning opportunities.
4. Search the Rush portal for learning opportunities across Rush (e.g., Schwartz Rounds, Rush Generations, Rush News, etc.).
5. Obtain the Individual Development Planning: Guide and Toolkit by contacting the Employee and Organizational Development department at extension #2-5916.
6. Participate in Rush’s social media, including Facebook, YouTube, Twitter and blogs through http://www.rush.edu/rumc/page-1290605886406.html.
7. Attend leadership forums, Dr. Goodman’s Town Hall meetings, etc.
GOOD LEADER

- focus on team interests and needs
- inspiration
- integrity
- clear goals
- good example
- vision
- clear communication
- expects the best
- encouragement
- support
- recognition
- stimulating work
Questions or comments?