Exhibit 1: Patient Complexity and Interprofessional Team Care
Geriatrics Block Mini-Rotation
Curriculum Abstract

Todd James MD
Indiana University School of Medicine
tojames@iu.edu

Abstract:

Patient Complexity and Interprofessional Team Care is a geriatrics block rotation mini-course designed to improve medicine trainee’s understanding of health care teams. It was developed in the setting of a new model of care collaboration for vulnerable seniors, Geriatric Resources for Assessment and Care of Elders. The course is a blended curriculum offered during a 4-week residency block rotation in geriatrics. It is composed of a web-based, audio, PowerPoint lecture to introduce the Minnesota Complexity Assessment Method (MCAM) tool and application of the tool using paper cases. The tool is then applied to actual patients discussed at an interprofessional team meeting of the GRACE care management program.

Measurements:
Medicine residents completed a pre-and post-rotation questionnaire on beliefs regarding interprofessional team care. Student feedback was collected through personal interviews and narrative evaluations.

Results:
Pre-and post-rotation questionnaires responses demonstrated trends toward intended changes in beliefs regarding interdisciplinary teams. Participants strongly agreed or agreed (100%) that the course was useful to clinical practice; participants strongly agreed or agreed (92.5%) that MCAM was a useful tool and the learning experience was worth the time spent.

Discussion:
A blended curriculum using the MCAM tool to identify obstacles to care and roles of outpatient health professionals was rated highly by medicine residents. The MCAM tools is a useful framework to identify patient specific factors that interfere with usual care and usual decision making, to direct patient needs to interprofessional team members and to develop physician engagement with interprofessional team members. Limitations include crossover effects from other geriatrics rotation experiences. The educational intervention was brief but appeared to make changes in beliefs regarding interprofessional team care. The MCAM tool appears was useful to promote medicine residents understanding of health care teams.

Key words: Curriculum, Complexity, Interdisciplinary Team, Interprofessional Team, Geriatrics
A Blended Curriculum on Patient Complexity and Interprofessional Team Care during 2 Sessions of a Geriatrics Rotation for Medicine Residents

Todd James, MD
IU Geriatrics
Indiana University School of Medicine
tojames@iu.edu
## Exhibit 2: Complexity Curriculum Workbook

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Exhibit 2: Complexity Curriculum Workbook
Introduction

Breakthroughs in the treatment of acute and chronic disease have increased longevity and quality of life for countless patients. These medical interventions are the foundation of an enormous clinical enterprise in America. Indeed, medical care consumes 15.7% of GDP in the United States today. The evidence base for care is growing and has been extensively codified in guidelines issued by leading organizations. Yet, not all patients are able to manage and organize their health care in the face of institutional, organizational and financial obstacles. This coordination is especially difficult for many older, vulnerable patients.

Certainly, resident physicians’ training implicitly includes the navigation of the medical system. The ACGME recognizes this need with its systems based practice competency. However, identifying patients who face obstacles or are ill prepared to navigate health care systems may be difficult for residents. Indeed, patients who are falling through the cracks, who are unable to follow evidence based health care guidelines represent problematic patients. Resident physicians may feel powerless to help such patients. Yet, as with many problems, correctly identifying and naming the issues (readiness for change, social isolation, limited resources, et al.) provides the terminology for finding solutions in the system. With the coordinated efforts of allied health professionals and the skillful collaboration of physicians, these obstacles can be addressed and better health outcomes achieved. This curriculum plan describes an educational intervention to improve post graduate education in the areas of patient complexity and interdisciplinary team care (IDT).

Rationale

One of the significant drivers of IDT care is the significant and unprecedented growth in the older population. In 1900, less than 1/20 in the population was over age 65. However, in about twenty years this will increase to a minimum of 1/5. Not all seniors have chronic diseases or complicated situations, yet the absolute numbers of patients with chronic diseases, including functional impairment, cognitive impairment and other geriatric syndromes, will increase substantially.

At some point in older age, evidence based guidelines begin to conflict and become less relevant. Indeed, many specific factors may interfere with usual care and decision making for the patient’s medical care. These many factors, often not directly medical in nature, become obstacles for the delivery of healthcare and constitute what this curriculum will call “patient complexity.”

Preparing resident physicians to recognize patient complexity, to engage and then collaborate with IDTs is the focus of this curriculum.

National Need

The Institute of Medicine’s (IOM) report “To Err is Human” emphasized a national focus on healthcare safety and quality. This generated a new spotlight on complex systems and processes in healthcare. In addition the 2008 IOM report, “Retooling for an Aging America: Building the Healthcare Workforce,” summarized the need for bold initiatives to address a critical shortage of geriatric education and models of care to address the population of seniors that will soon comprise 20% of the U.S. population.
Achieving goals for patient safety will become even more challenging as the number of geriatric patients increases. While current healthcare delivery does not serve vulnerable geriatric patients well, new models of care based on teams of health professionals have been shown to improve the quality of care (examples include Geriatric Resources for Assessment and Care of Elders (GRACE) and Guided Care).

Recognizing which patients will benefit from new models of IDT care is not a current emphasis in graduate medical education of physicians. In addition, prior initiatives in team based care, e.g. Geriatric Interdisciplinary Team Training Initiative, have found that physicians are not always willing to invest their energies in team activities. Nonetheless, as physicians become more responsible for outcomes (e.g. pay-for-performance) and patients become more complicated, physicians will be encouraged to screen patients for complexity and to work with IDT initiatives.

**Healthy People 2020**

Healthy People 2020 objectives recognize the need to recognize patient complexity and to collaborate in teams. These objectives include:

1. Reduce proportion of adults with moderate to severe functional limitations,
2. Increase proportion of older adults with chronic conditions who report confidence managing conditions,
3. Involve patients with health care decisions.

**Background for Physicians and Interdisciplinary Team Care**

Physicians, during their years of education and training, primarily associate only with other physicians. In a 1991 article in Qualitative Health Research, Weinholtz noted that this socialization of physicians fails them in clinical practice. Physicians have little framework for working with other healthcare professionals and they are unprepared.

Others have described health professional education in terms of “silos.” Trainees in nursing, medicine and others become acculturated and socialized only within their own professions. This pattern of professional education has become so all encompassing that little recognition has been given to the synergies of interdisciplinary efforts. While working in close proximity to each other, health professionals operate in entirely separate spheres of oversight, expectations, regulation and culture. David Reuben, MD has called this phenomenon “disciplinary split.”

For a number of years, national organizations such as the Institute of Medicine, The Hartford Foundation, The Macy Foundation and others have called for a restructuring of the delivery of care to reflect the increasing needs of America’s growing elderly population. Indeed, the Atlantic Philanthropies launched the Medicare Innovations Collaborative which includes six leading health centers whose goal is to develop innovative programs to improve care for those with multiple chronic conditions. Other innovative programs have included Geriatric Resources for Assessment and Care of Elders (GRACE), Guided Care, Patient Centered Medical Home (PCMH), Program of All-inclusive Care for the Elderly (PACE), et al. These practice models are improved, in part, because of the collaborative efforts of IDTs of health professionals, including physicians, nurse-practitioners, social workers, nurses and others.
However, interdisciplinary educational opportunities in U.S. post-graduate training are limited. Indeed, the 2009 National Symposium on Health and Medical Education found that current training is not based on a patient-centered vision and that education must include the development of team skills and collaborative approaches.

The Josiah Macy, Jr. Foundation held a conference on primary care in April 2010, concluding that collaboration and interdisciplinary education are integral components to future models of care and yet little preparation has been made to prepare providers. Now is the time for a curriculum that teaches residents attitudes, knowledge and skills to identify vulnerable seniors and to collaborate with an IDT for optimal patient care. With this approach, residents will be prepared to address the needs of the growing population of seniors. This is not only an issue for primary care practices. The growth of the senior population will affect all areas of medical practice.

Lack of preparation for working with IDTs is only one difficulty that many physicians face. Often, the intensity of the medical aspect of training diminishes a wholistic view of patients and their circumstances. There are dangers in not paying attention to the context with which the patient interacts with medical care.

Medical care that does not take into account the patient specific factors that interfere with care and communication leads to ineffectual care. A concept of “contextual error” has been developed to examine these failures in care. Weiner, et al reported in Annals of Internal Medicine July 2010 an assessment of physicians responses to “red flags” in patient encounters. The results showed inattention to contextual factors such as transportation needs, economic situation and others. As the complication of the patient encounters increased the ability to give “error free” care decreased. In the cases of combined biomedically and contextually complicated encounters only 9% of the physicians provided error free care. If physicians have a framework for understanding a patient’s context and an awareness of system capabilities such as IDTs, contextual errors will decrease.

**Previous Curricular Efforts**

The federal government and the VA have been involved in interdisciplinary and team education for over 40 years. In 1995, the John A. Hartford Foundation funded a large program called the Geriatric Interdisciplinary Team Training (GITT) Program to create training models for IDT training. In evaluation, GITT found that attitudes and cultural traditions of the different health professions were significant impediments to creating teams. Physicians were noted to be the least willing participants. Only a few GITT sponsored programs continue to operate.

While many efforts on improving healthcare delivery with teams have been tried, only some have been successful. The majority of these successful efforts in America have focused on acute interventions for focused outcomes, such as found in intensive care units and emergency departments. Interdisciplinary efforts have been more extensive in Canada, the United Kingdom and Australia, where control of healthcare is significantly more centralized.

The guiding principles for how teamwork is taught and assessed derives from a 2005 paper titled “The Role of Teamwork in the Professional Education of Physicians” by Baker, et al. From this work comes the focus on “knowledge, skills and attitudes” in regard to teams. Baker notes the keen interest in
teamwork by the self-regulatory bodies of medicine, including the Accreditation Council for Graduate Medical Education (ACGME) and others.

A 2008 systematic review of teamwork training interventions in medical student education by Chakraborti, et al. reported the use of sound educational principles but thought the attention to teamwork principles was weak. Possibly, there was little opportunity to teach teamwork principles in the medical school curriculum.

In the U.S. in 2006, Maurer reported on a program called Columbia Cooperative Aging Program which was directed at medical interns. Interns had a 90- to 120-minute interview and exam with well senior adults. Their results demonstrated improved attitudes and knowledge of older adults as well as improved self-report of clinical skills.

A small study (n=62) reported in a 2006 paper by Fitzgerald examines the impact of a short term IDT program with learners from medicine, pharmacy, social work and nursing. They noted improved confidence in IDT participation and improved knowledge and attitudes toward older adults.

Another IDT model used a Program of All Inclusive Care for the Elderly (PACE) program with medical residents. The results indicated a lack of knowledge of key non-physician roles in patients’ care. This is not a surprising result considering the narrow focus of much of medical education.

In Gerontology & Geriatrics Education in 2001, Rosanne Leipzig reported a study integrating medical housestaff on an Acute Care for Elders (ACE) interdisciplinary team. Housestaff reported greater understanding of the hospital course, greater awareness of roles of other health professionals and greater efficiency in patient management.

A “Learning in Teams Model” has been developed and evaluated. It demonstrates evidence that even helping one member of a team introduces fundamental team processes into a team’s work. These results provide a rationale for focusing IDT knowledge, skills and attitudes to even a single health profession such as physicians. Exposure to IDT principles may filter through such an individual and improve the work of IDT’s with which the individual is associated.

A chart of additional curricular tools which have been used to promote IDT is shown. Yet these tools have often lacked the immediacy of actual patient care.

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The Association of American Medical Colleges (AAMC) and the Association of Directors of Geriatric Academic Programs (ADGAP) both publish online, peer reviewed educational materials. Respectively the sites are the MedEdPortal and POGoe. Collins published a curriculum on “An Interprofessional Approach to Chronic Conditions” in POGoe. However, it does not address directly the concept of patient complexity.
Exhibit 2: Complexity Curriculum Workbook

The reported curricular efforts of Maurer, Fitzgerald, Leipzig and others included improved confidence of IDT participation, improved awareness of the roles of others, and improved knowledge regarding principles of geriatric care. IDT skills have been harder to assess due to the relatively brief time that medicine residents spend with IDTs. Nonetheless, there is now evidence that if even one member of a team develops improved knowledge, skills and attitudes an entirely otherwise untrained team may benefit. Physicians are in a unique position promote collaboration with teams due to the central role that they play in patient care.

Some have suggested that a house calls visit may be a better venue for the education of physicians about IDT care. The infrastructure of medicine which constructs barriers between disciplines is not present in a patient’s home. Thus, the house calls setting levels the playing field for each health professional discipline. The home also provides a unique setting to promote the patient as the center of care. While this curriculum will not take residents on home visits, it provides a unique setting, the GRACE team offices, outside of established clinic and hospital settings. An educational program using GRACE may be an optimal environment to promote awareness of IDT care.

We now have new models of patient care (GRACE, Guided Care, et al.) that extend outpatient care to vulnerable patients using IDTs. Current resident training provides limited opportunities to prepare for dynamic interactions with IDTs that they may encounter as physicians practicing in the community. A curriculum within the GRACE program, gives physicians opportunity to interact with an IDT will improve physicians’ skills, knowledge and attitudes in these areas. Earlier efforts support this outcome.

While IDT skills for physicians have not always been highly valued or rewarded, especially during postgraduate education, the need for these skills is now changing. Current trends indicate an increasing importance for physician IDT skills, knowledge and attitudes. This new curriculum will help address a growing national and local need.

**Local Need**

Currently, the Indiana University (IU) Geriatrics program Geriatric Resources for Assessment and Care of Elders (GRACE) has no curriculum to engage medicine residents. All other IU Geriatrics venues, including the Acute Care for Elders (ACE) unit, support the training of medicine residents. Residents get exposure to IDT principles while on the ACE unit. Nonetheless, the medicine residency director expressed interest in expanding the curriculum devoted to IDT care principles.

While soliciting feedback for another initiative, the leadership of the Indiana University faculty group practice expressed interest in further opportunities for IDT course material. The faculty group has been working towards implementing the Patient Centered Medical Home (PCMH) concept and other patient-centered care initiatives. There is an increasing recognition of the need for teamwork skills.

Colleagues within IU Geriatrics have expressed interest in the development of an IDT curriculum to address the needs of vulnerable elders and to prepare physicians for future practice models that include IDTs. Additionally, the local VA is developing a Center of Excellence in Team Care Training which may benefit from new curriculum. Overall, this curriculum is currently needed at IU Geriatrics.

**Context**
Exhibit 2: Complexity Curriculum Workbook

Wishard Memorial Hospital is a public safety-net hospital for Indianapolis. Capacity includes 353 beds with 19,000 admissions annually and an average daily census of 241. In 2009, outpatient visits totaled 1,239,876. Approximately 1,076 physicians are on staff and most are affiliated with the Indiana University (IU) School of Medicine.

Wishard participates in an electronic medical record system (Careweb) that is regional in scope. While it is not exhaustive, it contains a substantial local and regional medical record for each patient. The electronic medical record can be accessed from many desktop locations.

Wishard Hospital is the primary site of IU Geriatrics programs. Residents in the department of medicine complete a 4-week Core Geriatrics Block Rotation during their training. A total of approximately 49 residents complete the rotation each year (~4 / month). The Geriatrics Rotation teaches fundamental knowledge and skills in the care of older adults.

Residents currently rotate in various geriatric venues including Acute Care for Elders (ACE) inpatient care, House Calls for Seniors, IU Center for Senior Health Clinic and others. This new curriculum will become a new resident rotation within the Geriatrics Block Rotation at Wishard Hospital, focused on the GRACE program. GRACE is part of a determined effort to make geriatric expertise available to a wider audience of patients, such as those at the outpatient clinics of Wishard Hospital. The curriculum is complimentary to other experiences that residents will have in geriatrics and throughout their training. The curriculum helps advance ACGME goals for medicine residents.

**Goal of Curriculum**
The overall goal of this curriculum is that as a physician cares for vulnerable seniors with high complexity, the physician will collaborate with an interdisciplinary team (IDT).

Structure of the Entire Curriculum
This visual model of the curriculum shows the curriculum goal at the top and units and sub-units below. The structure is described further later in this document. There are multiple settings for this curriculum: outpatient, inpatient, et al. Each setting will have the same sub-units. The subunits are “assess complexity and engage an IDT” and “work with teams.” The visual model follows the outpatient setting.

Visual Model of the Entire Curriculum
Graduate Will Collaborate With Interdisciplinary Team

Outpatient  Inpatient  Nursing Home  Emergency

IU Geriatrics

Goal and Content for Each Unit
Patient Complexity and Interdisciplinary Teams
The goal for the first unit is that as a physician caring for a vulnerable senior, the physician will identify patient complexity and when appropriate, engage an interdisciplinary team for comprehensive evaluation.

This first unit is also the pilot unit and it will be described in detail in this plan. The content includes a PowerPoint lecture to explain the concept of patient complexity, instructions for how to use the MCAM tool and a description of the GRACE program and health professional roles. Interaction with the geriatrician will be used to role model positive beliefs about IDTs.

This curriculum will prepare resident physicians to identify vulnerable elders that are complex. This complexity includes functional decline and other person specific factors that interfere with usual care and decision making. With knowledge of the areas of complexity and their terminology, residents will appropriately engage and learn to collaborate with an IDT. The curriculum is developed using the outpatient setting as represented by a new model of care at Wishard, GRACE IDT care. As part of training, all medicine residents have outpatient clinic responsibilities and will recognize the unique opportunities to improve the quality of patient care when working within a program such as GRACE.

Working with Teams
The goal for the second unit is that as a physician caring for vulnerable seniors enrolled in IDT care, the physician will demonstrate six skills from the Canadian Interprofessional Health Collaborative (CIHC) National Interprofessional Competency Framework.

The content of the second unit includes lecture explanation of the six skills:
1) Communicate with health professionals
2) Clarify roles
3) Use team dynamics tools
4) Develop collaborative leadership
5) Promote conflict resolution
6) Promote patient/family centered care.

In addition, a checklist of skills to be observed will be introduced. Demonstration of skills will be shown in short videos. Prerequisite material will be reviewed. The geriatrician will model these skills in team settings in geriatrics programs, including the GRACE program and the Acute Care for Elders (ACE) program.

Developing a repertoire of collaborative team skills will enable resident physicians to improve the quality and safety of patient care. Physicians will be prepared to perform in new and emerging models of patient care.

Pilot Unit

The pilot unit was the unit chosen for initial development. It introduces ideas and concepts that are foundational for the subsequent unit.

Unit Goal
The pilot unit’s goal is that as a physician cares for a vulnerable senior, the physician will identify patient complexity and when appropriate, engage an interdisciplinary team for comprehensive evaluation.

The unit focuses on assessing complexity and engaging an IDT. This unit provides instruction and demonstration of a tool, the Minnesota Complexity Assessment Method (MCAM); see Appendix E. The MCAM tool will provide concepts and terminology that become the bridge to effective engagement of an IDT. This tool has been formulated by Peek, Baird and Coleman at the University of Minnesota. Initiating with this unit provides the rationale for working with teams of health professionals.

The unit objectives, unit content and instructional strategies are described below. Also, please see Appendix A: Unit Development Table.

Unit Objectives
The unit has two objectives. The objectives mirror the test and approximate real world experience. The first objective is that the physician will determine patient complexity and engagement of an IDT. The physician will use a new screening tool, the Minnesota Complexity Assessment Method (MCAM). To complete the MCAM the physician will review the medical record and obtain information by attending a GRACE IDT meeting. With this information, the physician will determine engagement of an IDT.

The second objective is that given a Likert scale questionnaire, the resident will indicate positive change in the degree of agreement with statements about IDTs (as compared to a pre-questionnaire). The pre-questionnaire will be given to the residents on orientation day for the Geriatrics Core Block Rotation. Orientation is always the first day of the rotation and may precede the visit to the GRACE program by 1-3 weeks. The questionnaire will be a means to focus attention on the physician’s beliefs regarding IDTs. Physicians may not have examined their beliefs regarding IDTs and may be unaware of them. In addition, a post-questionnaire will provide an opportunity for the physician and the course director to assess for changes in beliefs as a result of exposure to the course.

Unit Content
In order to develop an understanding of patient complexity, the MCAM tool will be introduced and explained in 15-minute lecture; see Appendix B. The lecture will also introduce the rationale and explanation of the GRACE program at IU Geriatrics. To promote positive beliefs about the role of physicians and IDTs, the lecture will discuss the role of physicians. In addition, residents will have the opportunity to see the geriatrician as a role model when they come to the GRACE program activities.

Instructional Strategies
A variety of instructional strategies will be used. The lecture will be available on the IU Angel web portal as a recorded PowerPoint presentation with audio narration. All residents have access to this portal and will be completing other tasks for the Geriatrics Core Block Rotation at the same location. The residents will be directed to complete the viewing of the lecture at 1) the orientation lecture and 2) in the syllabus for the Geriatrics Block Rotation.

When residents come to the GRACE offices on their assigned days, there will be opportunity for in-person discussion of the pre-requisite lecture material and the answering of resident questions. To stimulate discussion and provide further explanations, residents will be given 3 one-page handouts:
1) **GRACE Team Description** (see Appendix C). This will provide a graphical representation of the role of GRACE in outpatient care. It will also list the names of all GRACE team participants.

2) **Health Professional Roles** (see Appendix D). This will provide a table describing the roles, training and credentialing of involved health professionals.

3) **Minnesota Complexity Assessment Method (MCAM)** (see Appendix E). This is the complexity tool the residents will use.

The geriatrician will use a model case medical record and script of an IDT meeting to demonstrate the completion of the MCAM. Please see Appendix F: Medical Record, Transcript of GRACE Interdisciplinary Team, MCAM – Patient Charlene.

The geriatrician will decide which complexity domains determine need for engagement of an IDT. During this time the geriatrician will demonstrate positive beliefs regarding the role of IDT in patient care. This demonstration is expected to take approximately 10 minutes.

The resident will then be given a model case medical record and script of an IDT meeting. Please see Appendix G: Medical Record, Transcript of GRACE Interdisciplinary Team, MCAM – Patient Deirdre. The resident will use this information to complete MCAM and decide which complexity domains determine the need for engagement of an IDT. The resident will have the opportunity to compare their MCAM with a geriatrician-completed MCAM checklist for the same case. This practice should take approximately 10 minutes.

The resident will have additional practice using a real patient on the same day. The resident will examine the electronic medical record and attend the GRACE IDT meeting. During this time the resident will complete and MCAM and will have opportunity to compare with the MCAM completed by the geriatrician. To reinforce the unique opportunities for patient care in IDTs, the resident will remain for the discussion of other patients on the GRACE team list for that day.

**Unit Evaluation Strategies**

Residents will be scheduled for 2 visits to GRACE team meetings. On the second visit, an evaluation will occur. The resident will be given a patient that will be discussed at the GRACE team meeting. For this patient, the resident will review the electronic medical record, attend the GRACE team meeting and complete the MCAM. This is the same process as previously, however the resident will not be a stranger to the team at this second visit. This is expected to encourage interaction.

A this second visit, the resident will then compare his/her MCAM to the MCAM completed by the geriatrician. The evaluation takes place in a real-world scenario. Since the MCAM is not a quantitative tool, agreement will not be expected in MCAM scores but at the level of the domains. Residents will be expected to have agreement in 3 of 5 of the MCAM domains. Agreement means that some level of complexity is or is not present in each of the domains.

The evaluation of the curriculum will occur by examining the residents’ Likert scale, pre- and post-questionnaire responses. The pre- and post-questionnaire contents will be substantially the same. This will enable the resident to evaluate his own beliefs regarding IDTs and will also demonstrate if there is a change in trend in responses to beliefs about IDTs. The questionnaire is thus an evaluation strategy and an instructional strategy to focus the attention of the resident. These questionnaires will be coded by the
residents using random numbers that the residents choose. This will enable questionnaires to be matched. No names or other identifiers will be used and this will ensure that responses are anonymous.

In addition, there will be a Likert scale questionnaire called the “Acceptability Questionnaire” that will solicit the residents’ responses to the curriculum itself. The questionnaire will also provide questions that the responder may answer in prose format.

Visual Model of the Pilot Unit

Implementation Plan

The patient complexity and interdisciplinary team curriculum will become part of the Geriatrics Core Block Rotation. Currently, residents complete 13 rotations per year. In general, medicine residents complete the Geriatrics Rotation during their first year.

Glenda Westmoreland, M.D., the Geriatrics Education Director has approved the addition of this rotation to the Geriatrics Block Rotation. The course coordinator Gwen Le will initiate scheduling...
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Residents into this rotation. This scheduling is done approximately one month prior to the rotation and residents are presented with their schedules on orientation day. At orientation, the faculty member will have a bulleted instruction sheet to ensure that residents understand that a pilot curriculum is being tested and that pre-questionnaires are filled out and collected by the end of the orientation session. By having a bulleted instruction sheet, the various faculty involved in orientation will understand their responsibilities to ensure success of the pilot testing.

The Medical Director of the GRACE Program serves as the geriatrician on the IDT for GRACE. Usually, this geriatrician will be responsible for conducting the GRACE teaching sessions and completing the MCAM. During the pilot testing, the geriatrician will be the developer of this curriculum. However, during future implementation of the curriculum it will be necessary to develop an instruction sheet for other geriatricians who may substitute during IDT meetings.

The PowerPoint lecture will be posted on the IU Angel web portal. Coordinators of this portal are Michael Taylor and Doug Bartlow of the Lilly Library and they have agreed to facilitate this curriculum.

This curriculum was presented to the Institutional Review Board at Indiana University. The IRB granted Exempt status.

Pilot testing is feasible when materials are reviewed and appropriate modifications have been incorporated. Pilot testing can begin on 2/9/2011 with the start of Resident Rotation 9.

The second unit, “Work with Teams,” will be coordinated with the ACE inpatient rotation experience. ACE allows residents to engage and collaborate with another IDT. Since both experiences are unusual in resident education and occur within the same Block Rotation, coordination of the experiences will increase effectiveness.

Evaluation Plan

The curriculum will be evaluated in four areas: content, process, participants and outcomes.

Content
The curriculum will be evaluated by an expert in interdisciplinary collaboration, Christine Arenson MD. She is a Co-Director of the Jefferson InterProfessional Education Center in Philadelphia, PA. In addition, the curriculum will be evaluated by one of the facilitators of the MCAM, C.J. Peek, PhD. He is a psychologist specializing in interdisciplinary communications.

Process
Kent Sheets, PhD, Professor in the Department of Family Medicine at the University of Michigan, is an expert in curriculum development and medical education. He will evaluate the curriculum plan, assessing for consistent and systematic development.

Participants
The learners in this course will complete a pre- and post-questionnaire using a Likert scale. These questionnaires assess for agreement with statements regarding IDTs. The questions themselves focus the learner on the topics of interest and this focus functions as a self-reflection type of learning tool.
However, these questionnaires also provide an objective measure of the curriculum’s ability to alter the beliefs of learners.

The statements of belief in the questionnaires were developed after considering other scales, including, the McFadyen’s Readiness for Interprofessional Learning Scale, Heinemann’s Attitudes Towards Health Care Teams Scale, Weiss’s Collaborative Practice Scales and TeamSTEPPS Teamwork Attitudes Questionnaire. Most of these previous scales had items that were too long or not directly relevant to a GRACE team environment. Nonetheless, some of the questions are similar.

In addition, an acceptability questionnaire will be given to the residents at the end of their GRACE session. It will ask direct questions regarding the acceptability and appropriateness of the course itself. This will be supplemented by short interviews conducted with participants.

Outcomes
The first outcome of the curriculum is the performance of the residents on the test, which is the level of agreement on the MCAM tool with the geriatrician. However, optimal outcomes will be changes in the behavior of physicians as they face complex patients and interactions with IDTs. These outcomes are affected also by other experiences residents have in geriatrics and throughout their medical education. While these outcomes might be assessed by contacting residents at some point in the future, this is not feasible at this time. Also, the relationship of any perceived change in behavior promoted by this curriculum may be difficult to establish. It is hoped that this curriculum will be synergistic with the many other initiatives to improve patient care and outcomes via new and innovative models of medical care.

Conclusion
A new curriculum on patient complexity and interdisciplinary team (IDT) care will prepare physicians for new roles in community practice. As the number and complexity of older patients increases, physicians will increasingly be asked to identify patients appropriate for team care. Once patients are enrolled in IDTs, physicians will use appropriate skills, attitudes and knowledge to collaborate with interdisciplinary teams. This new curriculum will be within the context of the GRACE program for outpatient care at IU Geriatrics. Physicians will be prepared to promote ongoing improvements in the quality and safety of care given to complex, older patients.

Bibliography


Leipzig RM, et al. Integrating Houestaff into a Geriatric Inpatient Interdisciplinary Team.
Exhibit 2: Complexity Curriculum Workbook


Exhibit 2: Complexity Curriculum Workbook


http://www.healthypeople.gov/hp2020/


Exhibit 2: Complexity Curriculum Workbook


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Appendix I: Post-Questionnaire
Appendix J: Acceptability Questionnaire
Exhibit 3: Complexity Overview Table

**Patient Complexity Curriculum Unit Development Table** – tojames@iu.edu

Overall Goal: The overall goal of this curriculum is that as a Health Professional cares for vulnerable seniors, he will identify and address patient complexity and will work with a health care team as an interprofessional collaborator.

Unit Goal: As a Health Professional caring for a vulnerable senior, the professional will evaluate patient complexity and describe how interprofessional teams address patient complexity.

<table>
<thead>
<tr>
<th>Unit Objective(s)</th>
<th>Unit Content</th>
<th>Instructional Strategies</th>
<th>Learner Evaluation Strategies, aka “the test” (include references to appendices)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Given a screening of the patient medical record, attendance at the patient’s GRACE - IDT meeting and completion of the Minnesota Complexity Assessment Method (MCAM) tool, trainee will identify patient complexity and describe the ways that interprofessional team care roles address patient care.</td>
<td>Given a screening of the patient medical record, attendance at the patient’s GRACE - IDT meeting and completion of the Minnesota Complexity Assessment Method (MCAM) tool, trainee will identify patient complexity and describe the ways that interprofessional team care roles address patient care.</td>
<td>Explanation: Web-based audio lecture with slides to describe unit content. Includes demonstration of MCAM domain choices for a paper case patient.</td>
<td>By screening the patient medical record and attending the GRACE meeting, and completing the MCAM tool, the trainee will identify complexity domains that can be addressed by other health care professionals on the team. The resident will describe the ways that interprofessional team care roles can address patient care by marking this on the MCAM “plan of action” box.</td>
</tr>
<tr>
<td>Given a printed Likert scale questionnaire, the trainee will indicate positive change in degree of agreement with beliefs about interprofessional teams (as compared to pre-questionnaire).</td>
<td>Given a printed Likert scale questionnaire, the trainee will indicate positive change in degree of agreement with beliefs about interprofessional teams (as compared to pre-questionnaire).</td>
<td>Resident uses patient case medical record and script of team meeting to determine patient complexity using the MCAM and describe the ways that interprofessional team care roles can improve patient care. Compare with MCAM checklist created by geriatricians.</td>
<td>Given a printed Likert scale questionnaire, the trainee will indicate positive change in degree of agreement with beliefs about interprofessional teams (as compared to pre-questionnaire).</td>
</tr>
</tbody>
</table>
Exhibit 3: Complexity Overview Table

<table>
<thead>
<tr>
<th>Assessment Method Tool.</th>
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<tbody>
<tr>
<td>Handout description of GRACE and health professional roles.</td>
</tr>
<tr>
<td>Demonstration: Geriatrician uses patient case medical record and script of IDT meeting to demonstrate use of Minnesota Complexity Assessment Method tool.</td>
</tr>
<tr>
<td>describe the ways that interprofessional team care roles can improve patient care.</td>
</tr>
</tbody>
</table>

The resident will understand the concept of patient complexity and the use of the MCAM tool. The complexity concept and MCAM tool will be used to demonstrate rationale for an interprofessional team intervention for appropriate patients.