REPORT FROM THE COMMITTEE ON THE PROMOTION OF THE CLINICAL PROGRAM BUILDER AND INNOVATOR

August 6, 2010



TABLE OF CONTENTS	PAGE
Executive Summary	3
Report from the Full Committee	5
Background	5
Methods.	7
Results	8
Subcommittee Report on Clinical Excellence	10
Subcommittee Report on Innovation and Quality Improvement	12
Subcommittee Report on Promotion of Program Building	16
Subcommittee Report on Team-based Research	20
Subcommittee on Multiple Tracks	22
Summary Recommendations of the Full Committee	23
Conclusion	25
Bibliography List	25
Appendix 1: List of Committee Membership	27
Appendix 2: Draft Portfolio	30

EXECUTIVE SUMMARY

In February 2009, Dean Edward Miller established a committee to develop an explicit and valid set of scholarly activities to evaluate faculty promotion in the areas of program building, clinical excellence, and organizational innovation. Program building and innovation creates new or novel interventions or therapies that benefit patients, Johns Hopkins Medicine, other health care organizations, and/or society in general.

The need to promote and support clinicians who are leading the field in these areas is great and aligns with the tripartite mission of Johns Hopkins Medicine. Health care reform will require a greater emphasis on monitoring and improving the outcomes we achieve for our patients, a larger number of clinicians spending most of their time in clinical care, while Johns Hopkins Medicine continues to expand, bringing a diverse group of clinicians into the Johns Hopkins family. Our research efforts have historically focused on developing new knowledge, but we must concentrate efforts on translating research into patient care and improving health outcomes. While the United States investment in biomedical science has lead to lifesaving therapies, our health care system too often harms rather than helps patients. This dichotomy stems from our national failure to view the delivery of health care as a science. At Johns Hopkins we must take the lead by investing in and rewarding clinicians who improve the performance of our health system. It is time for Johns Hopkins Medicine to provide the leadership in developing the capacity of physicians who build programs and develop innovations that benefit patients.

The Committee on the Promotion of the Clinical Program Builder and Innovator met over a seven-month period anddeveloped a candidate set of activities and accomplishments for clinical and system innovators that can fulfill the broad criteria for promotion as stated currently in the Gold Book. The purpose of this report is to begin a dialogue that will mature the following recommendations to a scholarly set of criteria. Nevertheless, these criteria should supplement rather than supplant the publication of peer reviewed publications.

.

- 1. Add to the Silver Book criteria for scholarly activity for the clinical innovator, system improver, and expert clinician, and to the CV template sections for quality improvement, innovation with examples for documenting the accomplishments of the master clinician.
- 2. Include the impact of a faculty member's work in quality improvement in addition to peer-reviewed manuscripts as a measure of scholarly activity in the Associate Professor Promotions and the Professorial Promotions Committees' evaluations for promotion. The attributes could include the faculty member's role on the project, the magnitude of the program's impact on outcomes, on populations inside and outside Hopkins and on sustainability of results, and the extent to which the results are robust and minimally influenced by bias. When seeking letters from referees, the promotions committee should ask specifically about the areas of quality improvement.

- 3. Task the Vice Dean's office together with the Associate Professor Promotions Committee (APPC) and the Professorial Promotions Committee (PPC) (and faculty with expertise in the area) to do the following:
 - a. Develop faculty CV templates, examples of scholarly activity, and portfolios for measuring scholarly activity in quality improvement, innovation, and clinical excellence. The Vice Dean's office and chairs of the APPC and PPC should meet with department chairs to ensure they are aware of the promotion criteria and methods to evaluate scholarly activity for work in quality improvement, innovation, and clinical excellence, and ensure the department chairs communicate this information to faculty.
 - b. Meet with department chairs and faculty to raise their awareness of faculty promotions for work in quality improvement, clinical excellence, and program building, and to provide them resources regarding the criteria for promotion in these areas.
- 4. Task the Dean with appointing two faculty members with established careers in quality improvement and system innovation, or clinical excellence and program building, to the Associate Professor Promotions Committee and the Professorial Promotions Committee. Ask department chairs to appoint faculty with expertise in quality improvement and system innovation, or clinical excellence and program building to their departmental promotions committee.
- 5. Task the Vice Dean of Faculty, the Vice Dean for Clinical Affairs, and department chairs with creating and implementing programs to develop, mentor, and coach faculty working in clinical excellence, program building, and quality improvement, and to support collaboration within the School of Medicine and the University.
- 6. Expand the Miller-Coulson Academy for Clinical Excellence across Johns Hopkins Medicine to recognize and support the scholarly work of expert clinicians. Documented scholarly work of expert clinicians can be considered by the promotions committee as partially fulfilling the promotion criteria outlined in the gold book.
- 7. Seek philanthropic support for an Institute of Quality Improvement.
- 8. Task the Dean with creating a position in the Vice Deans Office for Health Care Delivery Research. This position would be charged with advancing the science, building capacity, and obtaining institutional resources to advance the science of health care delivery research.
- 9. Recommend that the Dean's Office monitor success in promoting clinical and system innovators, just as they monitor the promotion of women and minority faculty.
- 10. Retain the Committee on the Promotion of the Clinical Program Builder and Innovator to continue their work in maturing the methods of measuring the scholarly activity of program building, quality improvement, and clinical excellence, of disseminating these methods, and of evaluating the structures required to support these types of efforts. This group would

continue to advance the methods of measuring scholarly activity in this area, share examples of faculty who have been successfully promoted, and report their progress annually to the Vice Dean.

REPORT FROM THE COMMITTEE ON THE PROMOTION OF THE CLINICAL PROGRAM BUILDER & INNOVATOR

In November 2008, Dean Edward Miller hosted a retreat to discuss the future directions of Johns Hopkins Medicine. An outcome of that retreat was Dean Miller's realization that clearer promotion criteria were needed for clinicians working primarily to build programs and develop innovations that improve patient outcomes. Dean Miller established a committee to develop these criteria. This is the initial report from The Committee on the Promotion of the Clinical Program Builder and Innovator. The intention of this report is to begin a dialogue that will mature the initial recommendations from this committee to a scholarly set of criteria.

Background

In February 2009, the Dean established this committee to develop an explicit and valid set of criteria to evaluate faculty promotion in the areas of program building, and clinical or organizational innovation. Program building/innovation is defined as creating new or novel interventions or therapies that benefit patients, Johns Hopkins Medicine or other health care organizations, and/or society in general. These could include patient, provider, organizational, or policy interventions that result in measurable improvement in clinical or economic performance or patient outcomes at Johns Hopkins Medicine, and may be adopted by the following entities:

- Other hospitals and academic medical institutions
- Professional societies
- Policy-makers and regulators

The need for such criteria is growing quickly. Health reform will require greater emphasis on monitoring and improving the outcomes we achieve for our patients, an ever growing number of clinicians spend the majority of their time in clinical care, and Johns Hopkins Medicine continues to expand, bringing a diverse group of clinicians into the Johns Hopkins family.

As you know, the benefits from the United States' investment in biomedical science are both awe-inspiring and lifesaving. Diagnostic imaging studies allow us to peer inside the human body and tour diseased blood vessels, evaluate brain blood flow, and determine whether suspected cancer cells are friend or foe. Many terminal cancers are now curable, and AIDS has become a

manageable chronic illness. Indeed, the entire world looks to the United States for the next major breakthrough in medical research.

Yet, this same American medical system delivers appropriate evidence-based therapies to patients merely fifty percent of the time, ¹ and kills nearly one hundred thousand people annually with preventable errors. ² Out-of-pockets medical costs are increasing and forcing many people to declare bankruptcy. ³ Employers, from small businesses in Baltimore to large automobile companies in Detroit, cannot afford to cover employee health benefits due to ever escalating medical costs. Perhaps most disturbing is a recent Commonwealth Fund report, which ranked the United States health care system dead last among other industrialized nations in terms of quality, access, efficiency, equity, and outcomes despite spending nearly three times more on health care than any other country. ^{4,5}

This dichotomy stems from our national failure to view the delivery of health care as a science. To a great extent, we have failed to invest in and reward efforts that improve performance of the health system. This failure must be reversed. The public and policy-makers are questioning the value they receive from their investments in academic medical institutions. We have not truly induced physicians to address these shortcomings, and we have not led efforts to improve population health and reduce costs of care. In reality, we seem to perform no better than the rest of the health care system.

At a time when there are broad changes occurring in health care delivery with profound effects on academic health care centers, the concept of supporting, recognizing, and promoting clinicalbased faculty is now more important than ever. Without such recognition and support, the institution is likely to encounter difficulties with retention of faculty as well as a high turnover of clinical-based faculty. Importantly, the institution is at high risk of losing mid- and senior-level faculty members who are the most experienced and expected to bring great recognition to Hopkins as a world-renowned center for clinical care. Clinical-based faculty sometimes have a difficult time achieving the necessary pre-requisites for promotion. For those who do meet these stringent requirements, the process is not as straightforward as it is for their basic science colleagues. Academic promotion is the single most important currency of recognition. Evidence illustrating that the institution has not performed well in recognizing clinical-based faculty derives from a recent survey performed at Johns Hopkins conducted by the Miller-Coulson Academy. The results of this consensus demonstrates that faculty that spend the majority of their time (more than 50 percent) caring for patients are at greatest risk for feeling under-valued and disenfranchised. From this survey (n=227 respondents across all clinical departments) with a77 percent response rate, and spending a mean of 78 percent of their time in patient care for which data analysis is ongoing, the following is apparent:

- Only 18.6 percent agreed that "Hopkins Medicine recognizes and rewards clinical faculty for their efforts and accomplishments" (those at lower ranks feel significantly more overlooked, p<0.05)
- Only 39.6 percent agree with the statement: "I feel appreciated and valued as a clinician at JHUSOM" (those at lower ranks feel less appreciated, p<0.05)

• 65.1 percent claimed to have either "seriously considered leaving JHUSOM" or "looked at other jobs" in the last 12 months (those at lower ranks even more so, p<0.05)

It is time for Johns Hopkins Medicine to step forward and lead the way. The need to promote and support clinicians who are leading the field in these areas is great is aligned with the tripartite mission of Johns Hopkins. For too long our research efforts have focused on developing new knowledge rather than improve patient health. Just as Johns Hopkins Medicine led the transformation of American Medicine in the last century, we should further evolve American Medicine. This journey will not be easy or quick. We need to build the capacity of physicians who can lead this work,⁶ invest in information technology, and partner with the spectrum of stakeholders, from doctors, nurses and administrators, to consumers, employers, insurers, and policy-makers. One group cannot accomplish this alone.

To help Johns Hopkins Medicine lead the way, we have to reward the faculty who are leading the field in this important clinical area. Johns Hopkins Medicine has innovative, creative, and disciplined clinicians who, if rewarded, can lead these efforts within Johns Hopkins Medicine, across the United States, and in all corners of the globe.

Methods

The committee members were selected by Dr. Janice Clements, the Vice Dean for Faculty Affairs, Dr. Peter Pronovost, the chair of the committee, and Dr. Julie Freischlag, the co-chair of the committee. They sought to select members from the current promotions committees, and clinicians from Johns Hopkins who work in program building and innovation, including physician advisors and expert clinicians from the Johns Hopkins Bayview Medical Center. The complete list of members is included in Appendix 1.

All face-to-face committee meetings occurred between February and August of 2009. Before the first meeting, the co-chairs and vice dean conducted a literature review and contacted other academic medical centers (AMC) either directly or through the American Association of Academic Medical Center Chief Medical Officers Working Group to identify other promotion criteria for program building, system improvement, or innovation.

All committee members were invited to attend the meetings. The agendas were structured to facilitate dialogue among the committee members, to better understand the current promotions process, and to better understand the perceptions of physicians who felt disenfranchised by the promotions process. The full committee broke into five subcommittees, met independent of the full committee meetings, and presented their findings to the full committee for discussion. The subcommittees included the following:

- Subcommittee on Clinical Excellence
- Subcommittee on Innovation and Quality Improvement
- Subcommittee on Promotion of Program Building

- Subcommittee on Resource Needs to Support Innovation and Program Building
- Subcommittee on Team-based Research

The fifth subcommittee discussed whether one or multiple promotion tracts would be needed. However, this group quickly determined that a one-track system should remain and their recommendation was unanimously supported by the full committee. A brief report is provided in the Results section, but moving forward, four subcommittees remained.

Each subcommittee was charged with defining their area, developing candidate criteria for scholarly activity, and suggesting ways to enhance promotion of faculty who work in this area. Each subgroup produced a report that is included in the Results section of this report.

Results

The literature review and discussions with external AMC did not identify any well-defined criteria for promotion for program building, systems improvement, or innovation. There was some literature to guide promotion criteria for expert clinicians, although much of this came from within Johns Hopkins through the Bayview Institute for Clinical Excellence. Nevertheless, several papers were recently published that highlighted the need to reward clinicians who work to improve the health care system.

The dialogue during the full committee meetings were rich and, at times, passionate. Early discussions focused on whether the current promotion criteria were sufficiently broad and clear enough to recognize scholarly activity of faculty who are expert clinicians, innovators, and program builders. The discussions revealed that while the Gold Book is sufficiently broad in its definition of scholarly activity to include expert clinicians, clinical innovators, and program builders, few clinicians had been promoted in these areas. Moreover, the clinicians who worked in these areas felt the criteria to evaluate their scholarly activity was largely ambiguous, felt that work other than peer-reviewed manuscripts was devalued, and felt undervalued by the institution. For example, several faculty members who were expert clinicians and worked to improve the quality and safety of care believed their efforts were not appreciated by the promotions committee or often by their department chairs.

What emerged from these discussions was the unanimous agreement that scholarly activity by the expert clinician, the innovator, and the program builder should be valued by the School of Medicine and the promotions committees. Although the Gold Book is broad, greater efforts are needed to clarify the measures of scholarly activity in these areas, and ensure that promotions committee members, faculty, and department chairs are aware of these pathways to promotion. The full committee recognized that reaching these goals would likely take continued work by this committee and outreach to faculty.

Below we present each subcommittee report and then integrate these reports into summary recommendations.

SUBCOMMITTEE REPORTS

SUBCOMMITTEE REPORT ON CLINICAL EXCELLENCE
SUBCOMMITTEE REPORT ON INNOVATION AND QUALITY IMPROVEMENT
SUBCOMMITTEE REPORT ON PROMOTION OF PROGRAM BUILDING
SUBCOMMITTEE REPORT ON TEAM-BASED RESEARCH
SUBCOMMITTEE REPORT ON MULTIPLE TRACKS

Subcommittee Report on Clinical Excellence

Members: David Hellmann, George Dover, Emily Rudnick, Scott Wright, and Chris White

B. How might we measure scholarly clinical activity in this area?

We recommend measuring scholarly clinical activity by using the tools and processes that Dr. Scott Wright and his colleagues (Drs. Colleen Christmas, Steve Kravet, and Chris Durso) developed for the Miller-Coulson Academy of Clinical Excellence, which was recently launched in the Department of Medicine at Bayview. The metrics developed for the Academy are based on 2.5 years of qualitative and quantitative research by Wright and colleagues, and have been published in part (see Mayo Clin Proc 2008;83:989-94).

The chief tool for measuring clinical excellence is a portfolio that includes the following elements:

- Calculation of percent clinical effort and work RVU's.
- Comprehensive evaluations of peers, nurses, trainees, and patients.
- Review of patient satisfaction scores.
- Measurement (where appropriate) of "drawing power," as reflected in the percent of patients who come from outside the zip codes neighboring Johns Hopkins.
- Publication of scholarly work related to clinical excellence.
- National and international presentations of clinical work.

To mirror the process of grant reviews, a "study section" of preeminent physicians from other institutions would review the portfolio.

C. What would you recommend to further enhance work in the area?

We believe that the infrastructure needed to promote clinical excellence at Johns Hopkins Medicine includes:

- Creating a school-wide academy of clinical excellence to be chaired by a senior faculty leader.
- Charging each clinical department to review the tools developed by the Miller-Coulson Academy and suggesting revisions that will accurately measure clinical excellence in each department. This process should involve developing and collecting provider-specific measurements of clinical excellence for each department.

- Seeking donations of 50 to 100 million dollars to endow the Johns Hopkins Academy of Clinical Excellence and fund 15 to 30 Academy professorships throughout the institution.
- Directing the chair of the Academy to work with each department to develop an "outside study section" of experts to help judge applicants seeking Academy membership.
- Funding the director of the Academy to create a clinical excellence skill-building and mentoring program. Part of such a program would offer an opportunity for junior faculty to develop skills in the design and conduct of initiatives to improve the quality (including safety, efficiency, and cost) of clinical care. A summer course for quality of care could be developed along the lines of the current courses in research methods. The clinical mentoring program should connect junior faculty with experts in the Schools of Medicine and Public Health to help with design, analysis, and publication of clinical studies.

Subcommittee Report on Innovation and Quality Improvement

Members: Chip Davis (Chair), John Fetting, Misop Han, Brooks Jackson, Sewon Kang, Sam Mayer, and Marlene Miller

Summary

This subcommittee of SOM faculty is **proposing to include work in either Innovation and/or Quality initiatives at Johns Hopkins or beyond as a recognized and valid activity to support appointment or promotion at each rank.** The attempt is rooted in the need to align physician incentives with the institution's mission to improve the health of the community and the world by setting a standard of excellence in medical education, research and clinical care. In order to sustain the momentum of Innovation and Quality, we must formally recognize and reward for these activities.

Innovation and Quality are the hallmark of such successes and could take many forms—the first to perform a type of surgery, finding new drug combinations to better treat a medical condition, creating techniques to improve teamwork among surgical team members, and so on. The subcommittee members recognize that Innovation and Quality efforts are often not straightforward, and there are many challenges to quantify and to incorporate these efforts for faculty promotions.

Thus, this document recommends using criteria that is measurable and scientific to quantify efforts and to provide a roadmap for faculty and staff.

Innovation and Quality

The proposal is to recognize a new career pathway in academic medicine, called the "Clinician Quality Improver and/or Innovator." The criteria for appointment or promotion in the area of Innovation and Quality must be demonstrated by measurable and scientific outcomes to be successful and/or sustainable. Leadership in each area should be defined by roles not only within the Johns Hopkins system (e.g., successful implementation of innovative standards of care/best practices from other facilities), but also those that have scalable impact in other organizations. Successful work in areas of Innovation and Quality (e.g., improvements in processes or outcomes of care, demonstrating a return on an investment for the institution) must be documented with internal review evaluations, published materials, and the like.

Measurements

Examples of some quantifiable measure that could be considered for documenting Innovation and Quality activities include the following:

- a. Innovation and Quality Awards
 - O Johns Hopkins Medicine: Teaching awards (e.g., the Johns Hopkins Alumni Association Award for Excellence in Teaching) are considered the most important high-quality measure in educational efforts. This recommendation proposes the development of a portfolio of Innovation and Quality Awards for people with the most significant contributions.
 - o External: The Joint Commission and the National Quality Forum (NQF) (e.g., the National Quality Healthcare Award).
- b. Develop promotional opportunities for Innovation and Quality that are linked with research and publications.
 - o poster presentations, conducting lectures and workshops
 - o manuscripts must be published in peer-reviewed journals
- c. Participate in Innovation and Quality forums that drive health care policy and implications (e.g., NQF).
- d. Lead a collaborative to advance the academic science of Innovation and Quality and the institution's leadership position in Innovation and Quality by submitting manuscripts each year for publication in peer-reviewed journals on this work.
- **e.** Successful completion of an internal Innovation and Quality initiative (e.g., implementation of complex technologies). Use a template reporting document to capture the value of the work (see below under the section "**Documentation**" for template components).

Evaluation

The evaluation of a candidate's work to determine how extensive or effective their role has been will:

- demonstrate change internally/externally,
- lead research to advance the field of Innovation and Quality, and
- develop broader educational efforts outside the local institution.

There will be a "sliding scale of impact" of the initiatives (e.g., internal, collaboration with other institutions, national, international). The wider impact will correspond with a higher weight. For example, publications that are more widely cited will be weighed more heavily for programs, technology, or inventions that are adopted nationally/internationally.

Documentation

To better assess both Innovation and Quality efforts in faculty promotions, the subcommittee would like to develop an online resource that documents the guidelines for portfolio/dossier

inclusion and provides portfolio examples. The portfolio can be a 1 or 2-page standardized summary of Innovation and Quality-related activities and associated evaluations. It would also include a listing of the candidate's critical peer-reviewed publications regarding Innovation and Quality. The subcommittee plans on developing "sample" CVs that merit promotion to the rank of Associate Professor and Professor for the promotions committees to review.

The subcommittee recommends adding a subsection to the Johns Hopkins University CV template, which currently includes Research Activities, Educational Activities, Clinical Activities, and Organizational Activities, for "Organizational Program Development" to allow candidates to list internal and external organizational areas of focus on Innovation and Quality.

The subcommittee also recommends creating a documentation template to complete for evaluation of non-publishable Innovation and Quality work. This will include the following:

- f. Role Chair, project lead, member
- g. Internal Scope # of units/clinics/departments/functional units involved in activity
- h. **External Spread** # of external organizations/states/countries that adopt practice/initiative/methodology
- i. Sustainability Was activity sustained over one year, over five years, in perpetuity?
- j. Value Were they provided dedicated time to complete?
- k. **Time/Effort** % time or length of time person devoted to effort
- 1. **360 Review -** feedback from others on the project, leadership that championed initiative (e.g., departmental chair, quality improvement team leader), frontline clinicians and patients affected by change
- m. **Outcome Measures** was applicable to initiative (e.g., improved throughput, reduced LOS, reduced medication errors)

Program Development

For Johns Hopkins Medicine to support and promote "Innovation and Quality" as a legitimate academic discipline, an adequate source of funding should be available to faculty interested in this career path. A way to create a self-sustaining and growing funding source would involve:

- 1. Initial seed investment by the School of Medicine (+ JHH) to award money for innovative cost saving applications/projects.
- 2. Objective methods to estimate the monetary savings derived from implementation of a successful program.
- 3. Commitment from leadership to reinvest a fraction (whatever %) of the estimated savings expected from any innovative program, which will benefit the institution, into the initial funding pool.

If implemented correctly, the initial investment will be recovered in due time, and interested faculty will come up with innovative projects that can be actualized through the support of available funds available. Over time, the size of the fund will grow because these programs will save significant money to Johns Hopkins Medicine. In short, this should be a self-sustaining model by fueling the growth of this field.

Next Steps

- 1. Develop the following:
 - a. Johns Hopkins Medicine Innovation and Quality Awards
 - b. "Sample" CVs that merit promotion to the rank of Associate Professor and Professor
 - c. An online resource that documents the guidelines for portfolio/dossier inclusions with portfolio examples
 - d. An internal documentation template to evaluate non-publishable Innovation and Quality work.
- 2. Add a subsection to the Johns Hopkins University CV template for "Organizational Program Development."
- 3. Develop details regarding program development.

Subcommittee Report on Promotion of the Program Builder

Members: Steve Thompson, Dan Brotman, Steve Yang, Arjun Chanmugum, Dave Yousem, Phyllis Sharp, Eric Aldrich, Elizabeth Hunt

The charge of this subcommittee was to define:

- 1. What is program building?
- 2. What are the nontraditional aspects of program building that are worthy of consideration during the promotion process?
- 3. How should we define clinical excellence?

Program building

Who is a "Program Builder?" A program builder is usually the leader (or one of the primary leaders) of a team of individuals united in a common mission. This team's mission may or may not be clinical. For example, the team may be engaged in health education for consumers, health policy, or the business of health (medicine, nursing, or public health) as it relates to health or health information technology. Teams often include not only physicians but also allied health professionals, such as nurses, public health professionals, and sometimes non-clinical members (e.g., computer technicians or business managers). However, not all team leaders are program builders.

Program building is a longitudinal effort that generally taking place over the course of years. To qualify as a program builder, a team leader must be successful in the growth and development of the program by leading to increased size or scope, and/or improving the quality of the program. Endeavors with finite time limits, such as directing a health professional continuing education course (CME, nursing, or public health), does not generally constitute program building.

Successful program builders develop programs that:

- are worthy of emulation,
- receive regional, national, or international recognition, and
- grow in size or scope.

Additionally, program building may involve smaller initiatives that are innovative or novel, or may involve the successful revitalization of a previously successful initiative that had been in decline

We encourage the development of metrics to quantify program building, but recognize that such metrics cannot be universally applied to all programs, and in some instances may not be possible. Examples of metrics that may reflect the quality, scope, or scale of a program include:

- 1. Increase in the number of patients managed by a clinical service (e.g., medicine, nursing) or improvement in metrics of quality or efficiency of that service.
- 2. Number of new initiatives or projects completed under the auspices of the program.
- 3. Number of outside visitors or trainees seeking education through the program, or seeking to develop a similar program.
- 4. Number of national or international presentations or workshops delivered to those interested in understanding or emulating the Hopkins program.
- 5. Number of similar programs that are ultimately developed using a model or approach clearly originating within the Hopkins program.
- 6. Number of non-traditional publications (e.g., practice guidelines, legislative bills, protocols used by paramedics) created by the program.

For an individual who assumes leadership of an existing program, changes over time (after assumption of the leadership role) should be examined.

Other measures of program building (not captured by metrics) may include:

- 1. Leadership roles in national or international organizations that are granted based on programmatic expertise.
- 2. Recognition as a spokesperson or expert (e.g., called to testify before Congress on an issue that is germane to the program's mission).
- 3. Expertise frequently requested to translate existing evidenced-based strategies or research findings into interventions that benefit specific patient populations in national and international settings.

Nontraditional Aspects of Program Building

The nontraditional aspects of health care that are worthy of consideration include public education or serving on national or state organizations, work primarily in health policy, the business of medicine, medicine as it relates to law, information technology and its utilization in medicine, or pure health care advocacy on a national level.

For these individuals the definitions of leadership and program building (noted above) may be equally applicable. However, additional recognition may be given to individuals who foster the development of nontraditional publications that are critical for health care delivery, patient safety, and public education. These publications could include, but are not limited to, educational materials used by national organizations, protocols for use by paramedics or other health

professionals that are used on a regional and national basis. Leadership in public health advocacy, in which individuals are defined or recognized as key spokespeople, is also worthy of consideration, with an appropriate effort at defining some metrics of the impact of such activities.

Clinical Excellence

The Miller-Coulson Academy of Clinical Excellence has defined a metric for clinical excellence. The committee welcomes a better understanding of this definition, and refers the full committee to publications by Christmas, et al. (Mayo Clin Proc 2008 Sep;83(9):989-94; and Shojania et al. JAMA 2009;301:766-768).

The group defined a need for objective and subjective specialty specific data that are either widely accepted, quantitative, or have clear face validity. Specific factors that may be considered include:

- 1. a clinician who is in high demand (frequent referrals from outside the region, a nationally and/or internationally regarded "go-to" person for a particular disease, condition, or procedure);
- 2. outcome data as appropriate (e.g., risk-adjusted postoperative mortality or complication rates, reduced hospital stays, significant changes in behavioral risks);
- 3. a national or international reputation as a clinical teacher or mentor: Someone who is instrumental in advancing his or her field and training the next generation of clinicians and clinical leaders. Evidence of this may include publications with junior faculty, long-term consistent evaluations of excellence in teaching and or innovative classroom/laboratory instruction; being frequently sought out to conduct educational sessions at professional meetings; frequent solicitation to evaluate the quality of newly developed educational programs; serving as a curriculum consultant; and leadership in developing interdisciplinary education.

A high degree of professionalism in the clinical arena is mandatory. Although standard performance metrics (e.g., percent of hypertensive patients in a clinical practice that meet their target blood pressure) can be used to supplement or validate the criteria above, such metrics alone cannot be used in isolation to *define* clinical excellence.

Recommendations for Implementation

The concept being proposed is a considerable departure from the usual. Like any proposed new change, it needs to be supported and championed. To better implement the recommendations of this subcommittee, we propose the following:

- 1. The university's promotions committees, for each rank, should have at least two representatives (per committee) who are familiar and well versed in the goals and recommendations of this committee. It will be the representatives' charge to ensure that the criteria developed by this group are implemented, and the promotions committee members are continuously educated about these criteria.
- 2. Similar to the reports that were forthcoming to address the issue of gender disparity, each promotions committee should monitor and issue a report to document and track outcomes of the promotion process for all individuals including those put forward for academic excellence.
- 3. Core resources should be provided from the university, for a minimum of 18 months, to help the chairperson of the promotions committees and individual division and department heads better evaluate candidates for promotion for clinical excellence.
- 4. The creation of a new position—Vice Dean for Clinical Care—to oversee and address issues pertaining to clinical excellence and patient safety, and to ensure that master clinicians can continue to thrive and educate the next generation of physician and nurse leaders.

Subcommittee Report on Team-based Research

Members: Jon Lewin, Frank Frassica, Estelle Gauda, and Diana Scorpio

The Subcommittee discussed two different scenarios in which team-based science is both critical and difficult in our current Hopkins environment. The first of these is when a clinician scholar or clinician educator performs research as part of a team, including clinical research trials. The second scenario is when a basic scientist performs much of their work in a supporting role in team-based projects.

The group discussed the importance of teams to foster the promotion of our clinical colleagues, ways in which avenues for cross-silo research can be increased, and ways to promote program-based science such as that performed at the NIH Intramural Program.

Several barriers to the success of team-based science at Johns Hopkins Medicine were identified. These include:

- 1. A lack of resources to help clinician educators or clinician scholars.
- 2. Bias against team science in the promotion process.
- 3. The lack of faculty mentors for team science.
- 4. The lack of appropriate crediting of co-principal investigators across different departments or divisions
- 5. No recognition of shared first or corresponding authorship in the promotion process.

The following solutions to these barriers were discussed:

- 1. Provide resources for clinician scholars and clinician educators to promote their research success, such as the example of the medical editing group in Orthopedics, or people to help with study-design, IRBs, and other research support functions.
- 2. Recognize co-principal investigators or co-first or corresponding authorship within the Institution.
- 3. Create a clearinghouse or toolkit of ideas to guide physician advisors or program directors in better translating their administrative roles into research projects.
- 4. Create a mentorship program or mentorship committee to help program directors or physician advisors (as above).
- 5. Bring people together with like-problems to brainstorm solutions and research ideas.

6. Suggest that department directors ensure that their physician advisors and program directors do research as part of their duties during their administrative time.

Action items arising from the subcommittee meeting included determining who does a better job of supporting team-based science and supporting clinician scholars. Dr. Gauda will telephone the promotions committee leaders at our peer institutions to determine other methods, including how other institutions handle the mid-author investigator.

We will also evaluate whether Dr. Julia McMillan or Dr. Pronovost could help define ideas for program directors or physician advisors, respectively, to develop research programs built on their administrative duties.

There being no further business, the committee meeting was adjourned.

Subcommittee Report on Multiple Tracks

Members: Drs. Julie Freischlag, Eric Aldrich, Justin McArthur, Barbara Fivush, Stephen Yang, Jonathan Orens, and Daniel Brotman

The subcommittee decided to stay with the one-track system.

Everyone needs to publish. However, we do worry about primary care physicians and their ability to create national recognition when their business is more local—taking care of patients in the region. We hope through the improvement of our informatics systems and their ability to improve care systems in their practice, that they can publish these activities. Because the promotion process is now user friendly for the educator, it should help many primary care physicians get promoted for their teaching abilities. Devising a template for them will be essential.

Summary Recommendations of the Full Committee

The subcommittees made a number of important recommendations for criteria to promote faculty who work on program building, innovation, and quality improvement, and team-based research. Below is the integration of these recommendations into a cohesive set of criteria the full committee would like considered

- 1. Add to the Silver Book criteria for scholarly activity for the clinical innovator, system improver, and expert clinician, and to the CV template sections for quality improvement, innovation with examples for documenting the accomplishments of the master clinician.
- 2. Include the impact of a faculty member's work in quality improvement in addition to peer-reviewed manuscripts as a measure of scholarly activity in the Associate Professor Promotions and the Professorial Promotions Committees' evaluations for promotion. The attributes could include the faculty member's role on the project, the magnitude of the program's impact on outcomes, the extent to which the results are robust and minimally influenced by bias, the extent to which the program was implemented within and outside of Johns Hopkins, and the degree to which the results were sustained. When seeking letters from referees, the promotions committee should ask specifically about the areas of quality improvement. The promotions committee should create a documentation template to help evaluate non-publishable innovation and quality work. This could include the following:
 - a. Role chair, project lead, or member.
 - b. Internal Scope # of units/clinics/departments/functional units involved in the activity.
 - c. External Spread # of external organizations/states/countries that adopt the practice/initiative/methodology.
 - d. Sustainability Was the activity sustained over one year, over five years, or in perpetuity?
 - e. Value Was the individual provided dedicated time to complete the work?
 - f. Time/Effort % time or length of time individual devoted to the effort.
 - g. 360 Review feedback from others on the project, leadership that championed the initiative (e.g., departmental chair, quality improvement team leader), and frontline clinicians and patients affected by the change.
 - h. Outcome Measures was this applicable to initiative (e.g., improved throughput, reduced LOS, reduced medication errors)?

- 3. Task the Vice Dean's office together with the Associate Professor Promotions Committee (APPC) and the Professorial Promotions Committee (PPC) (and faculty with expertise in the area) to do the following:
 - a. Develop faculty CV templates, examples of scholarly activity, and portfolios for measuring scholarly activity in quality improvement, innovation, and clinical excellence. The Vice Dean's office and chairs of the APPC and PPC should meet with department chairs to ensure they are aware of the promotion criteria and methods to evaluate scholarly activity for work in quality improvement, innovation, and clinical excellence, and ensure the department chairs communicate this information to faculty.
 - b. Meet with department chairs and faculty to raise their awareness of faculty promotions for work in quality improvement, clinical excellence, and program building, and to provide them resources regarding the criteria for promotion in these areas.
- 4. Task the Dean with appointing two faculty members with established careers in quality improvement and system innovation, or clinical excellence and program building, to the Associate Professor Promotions Committee and the Professor Promotions Committee. Ask department chairs to appoint faculty who expertise in quality improvement and system innovation, or clinical excellence and program building to their departmental promotions committee.
- 5. Task the Vice Dean of Faculty, the Vice Dean for Clinical Affairs, and department chairs with creating and implementing programs to develop, mentor, and coach faculty working in clinical excellence, program building, and quality improvement, and to support collaboration within the School of Medicine and the University.
- 6. Expand the Miller-Coulson Academy for Clinical Excellence across Johns Hopkins Medicine to recognize and support the scholarly work of expert clinicians. Documented scholarly work of expert clinicians can be considered by the promotions committee as partially fulfilling the promotion criteria outlined in the gold book. Task the Academy with further development of these metrics for clinical excellence. The Miller Coulson Academy of Clinical Excellence started to define metrics for clinical excellence. The Committee welcomes a better understanding of their work thus far, and refers the group to publications by Christmas et al.⁸ and Shojania et al.⁶ The group defined a need for objective and subjective data that are specialty specific, and are either widely accepted, quantitative, or have clear face validity. Specific factors that may be considered include:
 - a. A clinician who is in high demand (frequent referrals from outside the region, a nationally and/or internationally renowned "go-to" person for a particular disease, condition or procedure).
 - b. Outcomes data as appropriate (e.g., risk-adjusted postoperative mortality or complication rates; reduced hospital stays, significant changes in behavioral risks).

- c. A national or international reputation as a clinical teacher or mentor: Someone who is instrumental in advancing his or her field and training the next generation of clinicians and clinical leaders. Evidence of this may include publications with junior faculty, long term, consistent evaluations of excellence in teaching and or innovative classroom/laboratory instruction; being frequently sought out to conduct educational sessions at professional meetings; being frequently called upon to evaluate the quality of newly developed educational programs; serving as a curriculum consultant; and providing leadership in developing interdisciplinary education.
- d. Patient satisfaction surveys.
- 7. Seek philanthropic support for an Institute of Quality Improvement.
- 8. Task the Dean with creating a position in the Vice Deans Office for Health Care Delivery Research. This position would be charged with advancing the science, building capacity, and obtaining institutional resources to advance the science of health care delivery research.
- 9. Recommend that the Dean's Office monitor success in promoting clinical and system innovators, just as they monitor the promotion of women and minority faculty.
- 10. Retain the Committee on the Promotion of the Clinical Program Builder and Innovator to continue their work in maturing the methods of measuring the scholarly activity of program building, quality improvement, and clinical excellence, of disseminating these methods, and of evaluating the structures required to support these types of efforts. This group would continue to advance the methods of measuring scholarly activity in this area, share examples of faculty who have been successfully promoted, and report their progress annually to the Vice Dean.

Conclusion

Johns Hopkins Medicine needs to ensure that patients actually benefit from scientific discoveries made in the laboratory. To move in this direction, we should formally recognize and promote faculty who are expert clinicians, program builders, and innovators, and those who improve quality of care. Although the current Gold Book recognizes these areas as worthy of promotion, more work is needed to ensure that faculty know about the tracks and receive the training and mentoring to succeed in them. Moreover, we need valid and appropriate measures to evaluate scholarly activity in these areas, especially measures of impact. Finally, this work should be organized within the School of Medicine with an infrastructure that is commensurate with its importance. This infrastructure could include a new Institute of Quality Improvement and Clinical Excellence and/or a new position for a Vice Dean for Quality of Care. There is no AMC in the country with clearly-defined promotion criteria for faculty who work to improve the health care system. It is appropriate and just that Johns Hopkins Medicine step forward and lead academic medical centers.

Bibliography

- 1. McGlynn EA, Asch SM, Adams J, et al. The quality of health care delivered to adults in the united states. *N Engl J Med*. 2003;348(26):2635-2645.
- 2. Institute of Medicine, ed. *To Err is Human: Building a Safer Health System*. Report from the Committee on Quality of Health Care in America ed. Washington, DC: National Academies Press; 1999. Kohn L., Corrigan J. and Donaldson M., eds.
- 3. Himmelstein DU, Thorne D, Warren E, Woolhandler S. Medical bankruptcy in the united states, 2007: Results of a national study. *Am J Med*. 2009;122(8):741-746.
- 4. Davis K, Schoen C, Schoenbaum SC, et al. Mirror, mirror on the wall: An international update on the comparative performance of american health care. New York, NY: The Commonwealth Fund; 2007.
- 5. Schoen C, Davis K, How SK, Schoenbaum SC. U.S. health system performance: A national scorecard. *Health Aff (Millwood)*. 2006;25(6):w457-75.
- 6. Shojania KG, Levinson W. Clinicians in quality improvement: A new career pathway in academic medicine. *JAMA*. 2009;301(7):766-768.
- 7. Beasley BW, Simon SD, Wright SM. A time to be promoted. the prospective study of promotion in academia (prospective study of promotion in academia). *J Gen Intern Med*. 2006;21(2):123-129.
- 8. Christmas C, Kravet SJ, Durso SC, Wright SM. Clinical excellence in academia: perspectives from masterful academic clinicians. *Mayo Clin Proc.* 2008;83(9):989-94.

Appendix 1

$Committee \ on \ the \ Promotion \ of \ Academic \ Clinicians - Membership$

MEMBER	TITLE/DEPARTMENT	ASSISTANT	PHONE NUMBER
Janice Clements Ex-Officio	Professor and Vice Dean for Faculty Affairs	Charmaine Clarke	443-287-2305
Peter Pronovost Chair	Professor, ACCM; Director Adult CCM Medical Director, Center for Innovation in Quality Patient Care	Linda Marcellino	502-3233
Julie Freischlag Co-Chair	William Stewart Halsted Professor and Director of Surgery		443- 287-3497
Ronald Peterson	President, The Johns Hopkins Hospital & Health System	Fay Jay Gayle Greenwood	955-9540
Steve Thompson	Sr. Vice President, Johns Hopkins Medicine	Susan Gallagher	614-6486 / 955-3180
Brooks Jackson	Chair, PPC; Baxley Professor and Director of Pathology	Ellen Winslow	955-9790
Estelle Gauda	Chair, APC; Professor, Pediatrics		614-7232
David Hellmann	Vice Dean for Bayview, Medicine	Robin Lenzo	550-4925
George Dover	Given Foundation Professor and Director of Pediatrics	Crystal Brice	955-5976
Frank Frassica	Robinson Professor and Director of Orthopaedic Surgery	Maryanne Anderson	502-1714

MEMBER	TITLE/DEPARTMENT	ASSISTANT	PHONE NUMBER
Sewon Kang	Professor and Director of Dermatology	Karen Arvin	955-6943
Jon Lewin	Professor and Director of Radiology	Karen Troxell	955-5677
Justin McArthur	Professor and Director of Neurology	Michelle Lindsay	955-5103
Phyllis Sharps	Associate Professor, School of Nursing Director, Community Public Health Nursing	Brenda Smaw	955-7181 / 410-615-5312
Michela Gallagher	Vice Provost for Academic Affairs		(410) 516-0167
Diana Scorpio	Assistant Professor, Molecular and Comparative Pathobiology		955-3273
Stephen Yang	Professor and Director of Thoracic Surgery	Monique White	614-3891
John Fetting	Associate Professor, Oncology	Christina Dill	955-8842
Barbara Fivush	Professor, Pediatrics	Dietra Moore	955-2467
Eric Aldrich	Associate Professor, Neurology		614-2381
R. Samuel Mayer	Assistant Professor, Physical Medicine & Rehabilitation		502-2438
Elizabeth Hunt	Assistant Professor, ACCM	Merona Hollingsworth	614-0847
Dan Brotman	Associate Professor, Medicine	Lisa Williams	443-287-3631
Arjun Chanmugam	Associate Professor, Emergency Medicine		955-5107

MEMBER	TITLE/DEPARTMENT	ASSISTANT	PHONE NUMBER
Marlene Miller	Professor, Pediatrics		443-287-5365
David Yousem	Professor, Radiology		955-2685
Misop Han	Associate Professor, Urology		502-7454
Laura Morlock	Professor, Health Policy Management Bloomberg School of Public Health		955-5315
Emily Boss	Assistant Professor, Otolaryngology-Head & Neck Surgery		955-9772
Jonathan Orens	Professor, Medicine		955-3467
Scott Wright	Professor, Medicine		550-0817
Nisha Chandra	Professor, Medicine	Shawanna Jackson	550-0851
Richard Davis (Chip)	Vice President, Innovation & Patient Safety	Susan Cirigliano	955-8311
Francesca Dominici	Professor, Biostatistics, Bloomberg School of Public Health		614-5107
Christine White	Assistant Dean for Medicine and Executive Assistant to the Dean/CEO, JHM	Cindy Delinski	955-3180