

UNIVERSITY OF MINNESOTA

BOARD OF REGENTS

Special Committee on Academic Medicine

Thursday, October 10, 2013

8:00 - 9:45 a.m.

600 McNamara Alumni Center, West Committee Room

Committee Members

Linda Cohen, Chair
Dean Johnson, Vice Chair
Richard Beeson
Thomas Devine
John Frobenius
David McMillan

AGENDA

1. 2013-14 Committee Work Plan Discussion - L. Cohen/A. Friedman (pp. 2-4)
2. Overview of the Academic Health Center - A. Friedman (pp. 5-60)
3. Clinical Services & Operations - A. Friedman/B. Daniels (pp. 61-96)



**UNIVERSITY OF MINNESOTA
BOARD OF REGENTS**

Special Committee on Academic Medicine

October 10, 2013

Agenda Item: 2013-14 Committee Work Plan Discussion

review review/action action discussion

Presenters: Regent Linda Cohen
Aaron Friedman, Vice President for Health Sciences & Dean of the Medical School

Purpose:

policy background/context oversight strategic positioning

According to Board of Regents Policy: *Board Operations and Agenda Guidelines*, Section II, Subdivision 7, Work Plans, "Each year the Board of Regents outlines its priorities and its committees develop work plans with the advice of the president or delegate."

The purpose of this discussion is to review and establish the committee work plan for 2013-14.

Outline of Key Points/Policy Issues:

The draft work plan focuses the committee on three broad themes regarding academic medicine at the University of Minnesota:

- Structure & Finance
- Education
- Research

Background Information:

Board of Regents Chair Richard Beeson established the Special Committee on Academic Medicine in July 2013 as a 2-year committee intended to build knowledge among Regents and ensure that the Board is equipped to fulfill its oversight responsibilities in this area.

**Special Committee on Academic Medicine Work Plan
2013-2014**

Date	Topics
2013	
September 12-13	No Special Committee Meeting.
October 10-11	<p>Theme: Structure & Finance</p> <ul style="list-style-type: none"> • Brief overview of Academic Health Center: mission; basic programmatic and financial facts; Medical School's Strategic Vision 2025 • Focus on clinical services and operations: <ul style="list-style-type: none"> ○ Role of University in providing clinical care in Minnesota: what is academic medicine/health care? ○ Importance of clinical care to education, research, and financing the health sciences; ○ Role of UMP, Fairview, and the new Integrated Structure; ○ Role with respect to other health care systems and providers in Minnesota and nationally; ○ Report on the progress of the IS (The full Board will receive a more comprehensive update on the IS in March); ○ Discussion of clinical practices in the other health sciences schools; ○ Challenges/opportunities facing the clinical programs: market; financing; health care reform. <p><i>Potential presenters: Vice President/Dean Friedman; Bobbi Daniels (UMPhysicians/Medical School); Chuck Mooty and Carolyn Wilson, Fairview; Keith Dunder, Office of the General Counsel</i></p>
November	No BOR or Committee Meetings.
December 12-13	<p>Theme: Education</p> <ul style="list-style-type: none"> • Focus on the U's role in educating and training Minnesota's health workforce: <ul style="list-style-type: none"> ○ Discussion of University's education priorities with health colleges; national rankings; peer institutions; ○ Growing shortage of health professionals: how we are responding; ○ Changing skills/knowledge needed by graduates: how we are changing curriculum; ○ Importance of interdisciplinary education and training: the work of the National Coordinating Center for Interprofessional Education and Collaborative Practice; ○ Challenge of clinical/experiential learning: finding an adequate number of quality, training sites; ○ Challenge of financing education: GME; tuition; student debt. ○ University's global health education programs <p><i>Potential presenters: Vice President/Dean Friedman; Associate Vice President Barbara Brandt; Dean Connie Delaney; Dean Trevor Ames; John Andrews (Medical School Graduate Medical Education)</i></p>
2014	
January	No BOR or Committee Meetings.
February 13-14	No Special Committee Meeting.
March 27-28	No Committee Meetings. Full Board of Regents to visit and tour Medical & Health Sciences Programs on Thursday, 3/27.
April	No BOR or Committee Meetings.

May 8-9	<p>Theme: Research</p> <ul style="list-style-type: none"> • Focus on the breadth of health research underway at the University: <ul style="list-style-type: none"> ○ Discussion of University's health research priorities; national rankings; peer institutions; ○ Discussion of research trends: clinical research; informatics; interdisciplinary science; teams; multi-institutional research; ○ Research infrastructure needs: faculty; facilities; equipment; graduate students; ○ Challenge of financing research: NIH and other federal agencies; subsidy required; ○ University's international health research programs <p><i>Potential Presenters: New Dean/Vice President; Associate Vice President Tucker LeBien; Dr. Bruce Blazar (head of Clinical Translational Research); Dean John Finnegan; select researchers</i></p>
June 12-13	No Special Committee Meeting.
July 9-11	BOR Meeting and Retreat. Committees only meet if there are urgent items requiring action.
August	No BOR or Committee Meetings.

Draft



**UNIVERSITY OF MINNESOTA
BOARD OF REGENTS**

Special Committee on Academic Medicine

October 10, 2013

Agenda Item: Overview of the Academic Health Center

review review/action action discussion

Presenters: Aaron Friedman, Vice President for Health Sciences and Dean of the Medical School

Purpose:

policy background/context oversight strategic positioning

To provide the Special Committee on Academic Medicine information to prepare for the policy discussions to follow.

Outline of Key Points/Policy Issues:

This presentation provides an overview of the mission and programmatic and financial facts of the Academic Health Center (AHC).

Materials included:

- AHC overview presentation
- Articles on academic medicine
- Medical School strategic plan

Background Information:

Board of Regents Chair Richard Beeson established the Special Committee on Academic Medicine in July 2013 as a 2-year committee intended to build knowledge among Regents and ensure that the Board is equipped to fulfill its oversight responsibilities in this area.

**Board of Regents
Special Committee
on Academic Medicine
Academic Health Center Overview**

October 2013

Innovative expertise in education and research leading to better health and vital economy in Minnesota.

Academic Health Center

Meeting Expectations:

70% of all health professionals working in Minnesota trained at the University

Leading work in

- diabetes
- infectious diseases
- neuroscience
- cancer
- cardiovascular research

- Global impact in prevention and health improvement
- 970,000 human and animal patient visits
- 1,700 educational rotations in Minnesota

Through our:

Schools and Colleges

Centers and Institutes

Clinics and Hospitals

In Disciplines of:

Dentistry

Medicine

Nursing

Pharmacy

Public Health

Veterinary Medicine

Driving Initiatives in:

Education

Research

Clinical/Outreach

AHC Mission

- Prepare the next generation of health professionals who will care for our families and communities
- Discover and deliver new treatments and cures
- Contribute to the economic vitality of our health industries in Minnesota

Academic Health Center Facts

- One of the most comprehensive health sciences centers in the nation
- Six schools: *Dentistry, Medicine, Nursing, Pharmacy, Public Health, Veterinary Medicine, and a Center for Allied Health Professions*
- 20 Interdisciplinary Research and Education Centers
- 6,200 students in 62 programs (professional, graduate, undergraduate)
- 1,400 faculty

Academic Health Center Facts

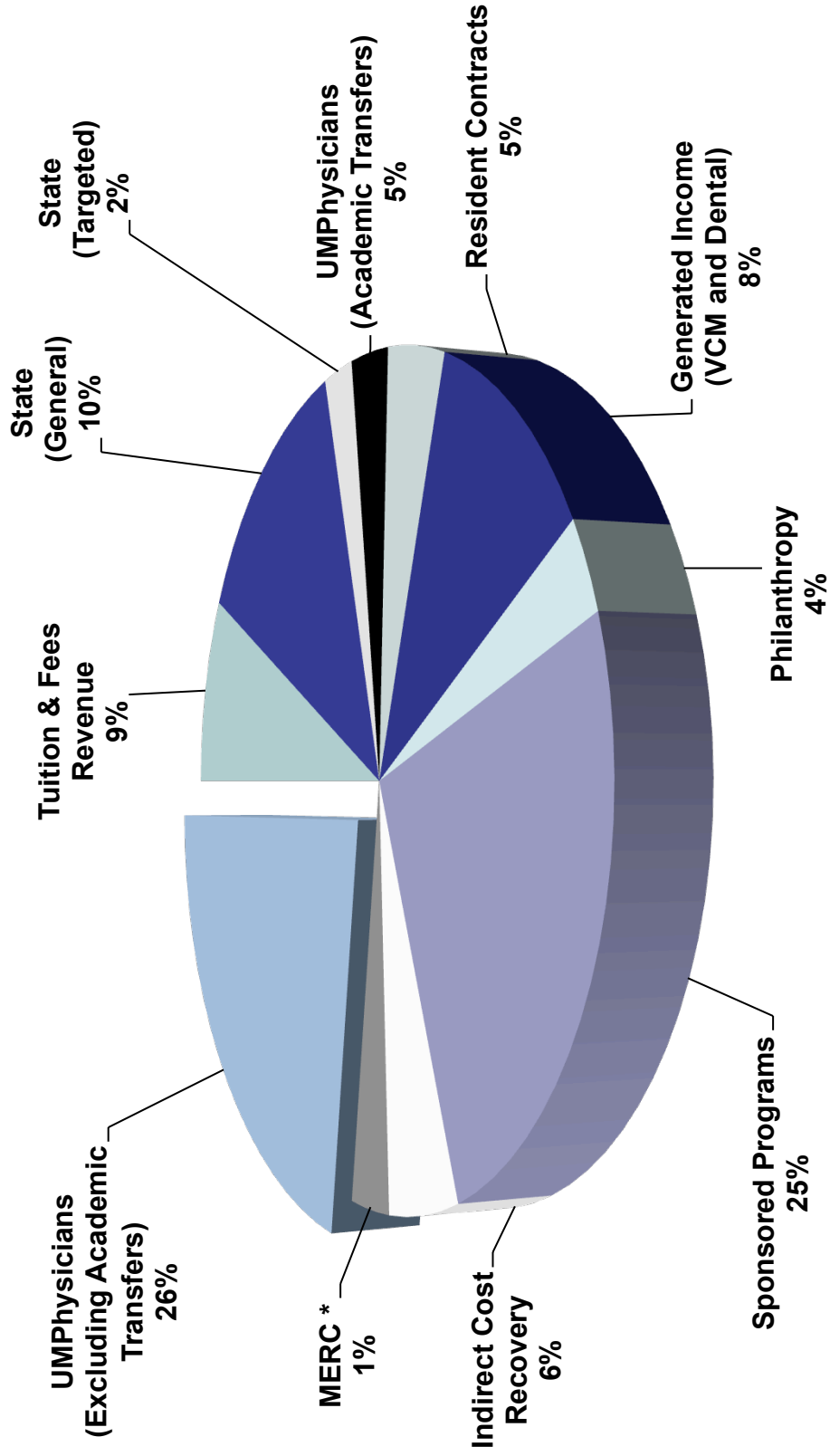
- Educate / train 70% of the health professionals in Minnesota
- Educate at over 1,700 sites across the state and internationally: hospitals, clinics, pharmacies, nursing homes, community agencies, and other sites
- Conduct over \$400 million in health research annually
- Provide care to nearly 1,000,000 patients

AHC FINANCES



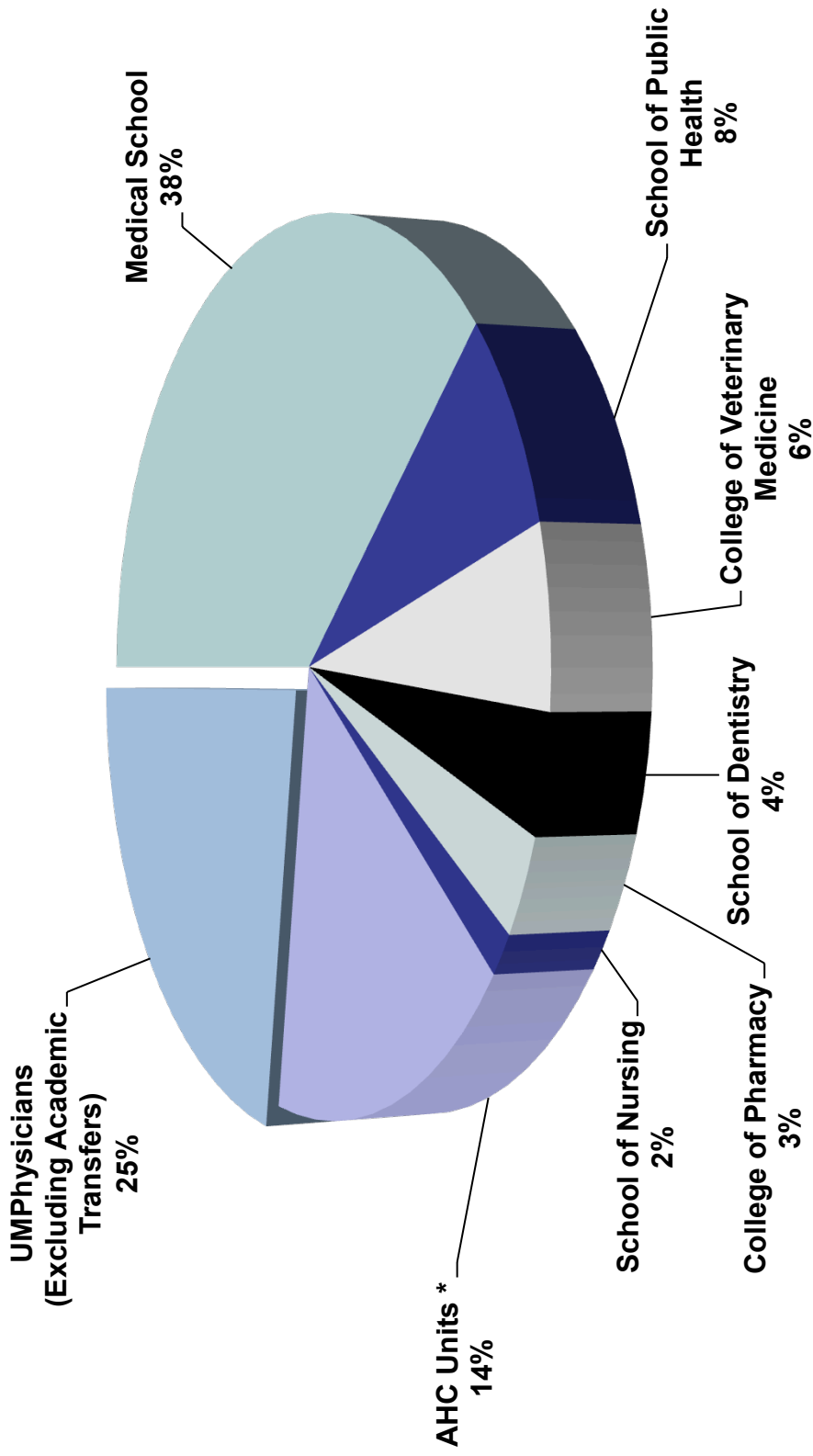
AHC Revenue FY12 (\$1.6 B)

(Includes UMPPhysicians, affiliated 501(c)(3) faculty practice clinic)



*Medical Education and Research Costs (MERC) is the program funded by state of Minnesota to contribute to unfunded costs of education at clinical training sites across the state.

AHC Revenue by Academic Area FY12 (\$1.6B)

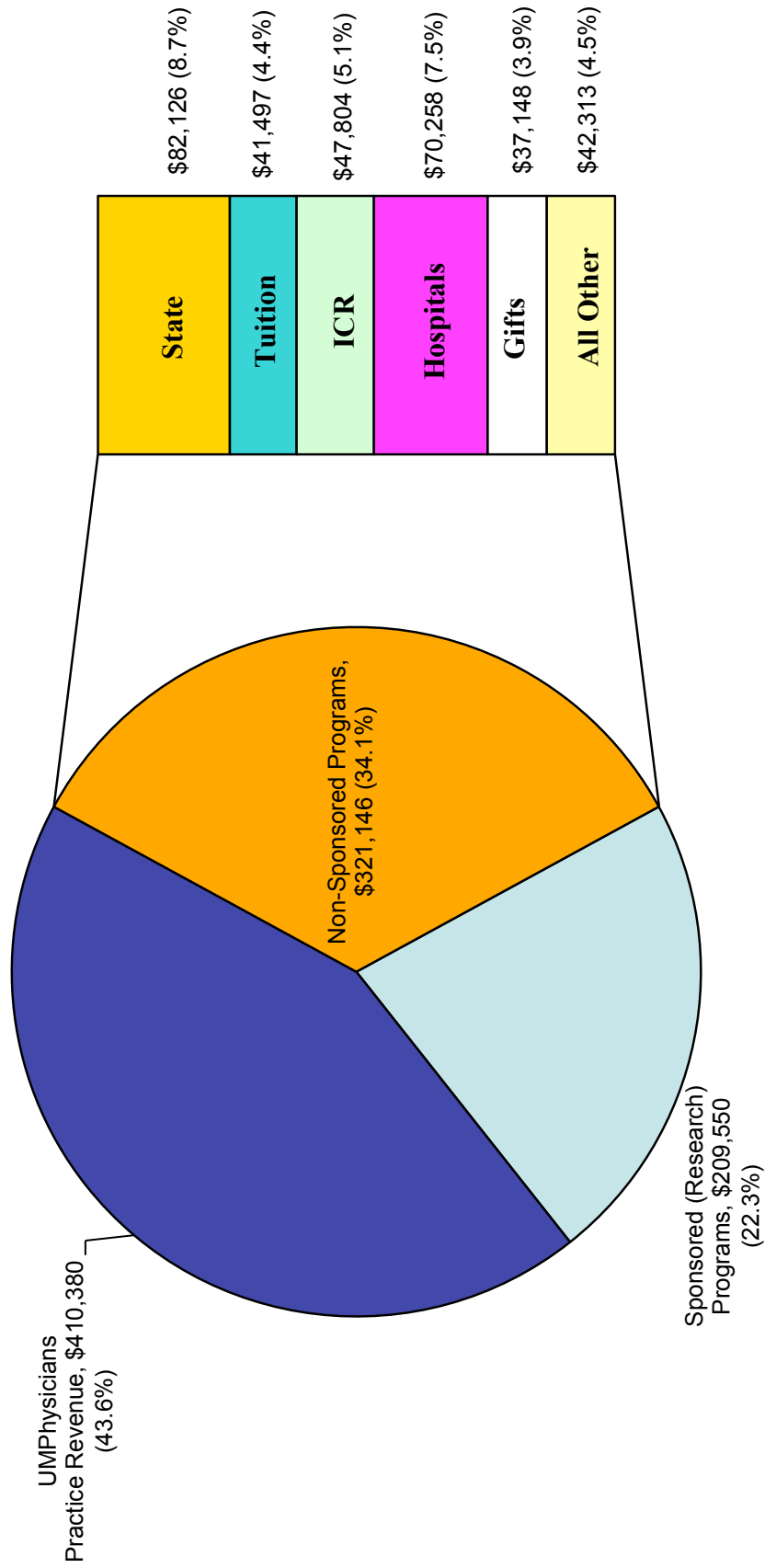


* Examples of AHC Shared Units: Masonic Cancer Center, Clinical Translational Science Institute, Center for Infectious Disease Research & Policy, Center for Spirituality & Healing.

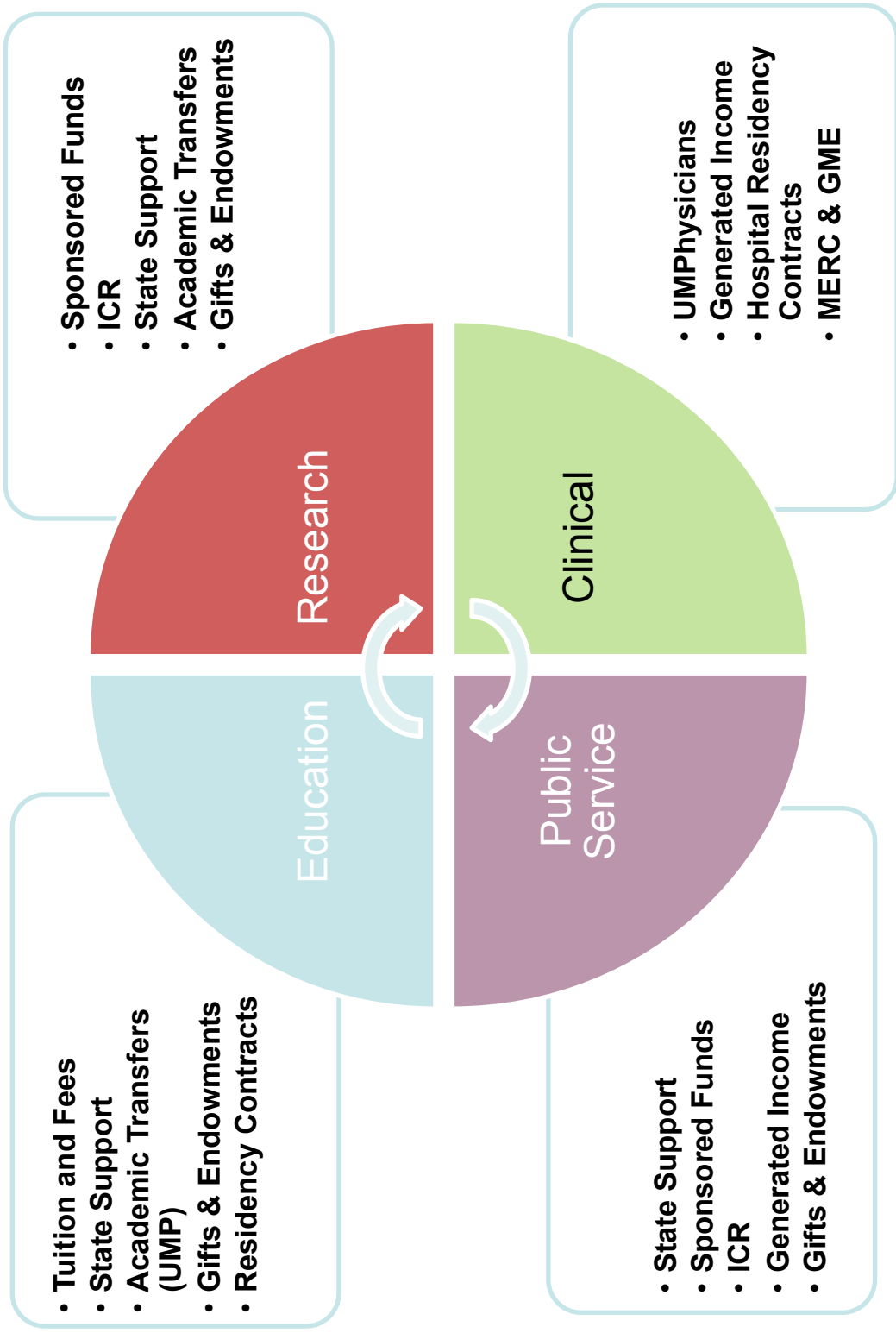
Medical School Funding Today

U of M Medical School Major Funding Sources, FY 12

Budget = \$940 million (includes UMPPhysicians)



How Missions of the Medical School are Generally Funded



AHC EDUCATION PROGRAMS



AHC Professional Education Programs

- Professional Programs
 - Doctor of Medicine (MD)
 - Doctor of Pharmacy (PharmD)
 - Doctor of Dental Sciences (DDS)
 - Doctor of Veterinary Medicine (DVM)
 - Doctor of Physical Therapy (DPT)
 - Doctor of Nursing Practice (DNP)
 - Master of Occupational Therapy (MOT)
 - Master of Public Health (MPH)
 - Master of Healthcare Administration (MHA)
- Graduate Programs: e.g., Bioethics (MS), Health Informatics (MS)
- Baccalaureate Programs:
 - Bachelor of Nursing (BSN), Bachelor of Dental Hygiene (BSHD), Bachelor of Dental Therapy (BSDT), Mortuary Science (BS), Clinical Laboratory Science (BS)

Health Professions Education

- Highly regulated through accreditation standards, licensure and certification requirements for practice
- High workforce demand driven by an aging population, retirements, and health care reform
- High number of applicants; high retention; and high “on-time” graduation rates
- Lengthy time to educate and train health professionals: didactic and experiential

Health Professions Education

- Clinical and experiential learning, including over 1,700 affiliated training sites across Minnesota and internationally
- Affiliation agreements in just about every county in Minnesota
- Competencies demonstrated through standardized patients and examinations
- Use of simulation and technology for competency development
- Interprofessional education and training

Graduate Medical Education

- Training and education of physicians after Medical School and before specialty certification
- Most GME programs in Minnesota are sponsored either by University of Minnesota or Mayo
- University of Minnesota trains 910 residents and fellows annually
- 61% of our GME residents stay in Minnesota to practice

AHC RESEARCH PROGRAMS



Research

- AHC faculty conduct \$414 million of research annually. 60% of the U's sponsored research.
- Primary funders:
 - National Institutes of Health
 - Department of Health and Human Services
 - National Science Foundation
 - Departments of Defense, Homeland Security, Agriculture
- Leadership in: cancer, cardiovascular, diabetes, infectious disease, neuroscience
- Clinical and Translational Science Award: \$51 million over 5 years

AHC Research Success

- Significant growth in research awards and funding
- Clinical and Translational Sciences Award
- Investments that encourage collaboration across disciplines and professions
- Partnerships with the private sector that are models of interdisciplinary and translational research
- New research facilities (BD2). More efficient use of existing and remodeled space
- Centers and programs of world-class excellence

Medical School Strategic Plan

- Initiated after the AHC external review
- Faculty-led process completed end of June
- Vision for our school that relies and insists on excellence in:
 - Research: Increasing NIH funding leading to national and international centers of excellence
 - Education: Innovation aimed at preparing students for the changing practice of medicine
 - Patient Care: Strong clinical programs that drive volumes and support the mission of the school

What Is Academic Medicine?

In my first editorial,¹ I began outlining my plans for this journal. In this editorial, I would like to elaborate on those plans. Of course, any agenda for a journal named *Academic Medicine* must be built on the answer to the question, *What is academic medicine?*

One obvious answer is that academic medicine encompasses the traditional tripartite mission of educating the next generation of physicians and biomedical scientists, discovering causes of and cures for disease, and advancing knowledge of patient care while caring for patients. That notion, however, has been extended by the International Working Party to Promote and Revitalize Academic Medicine by highlighting the interrelationships among teaching, research, and service: “We strongly feel that it is the ‘added value’ or the synergy that should exist between these three roles—when they are brought effectively together—that defines academic medicine.”² This definition suggests that it is insufficient to define academic medicine by simply referring to the three primary activities performed by academic medical faculty—in other words, that the whole of academic medicine is greater than the sum of its parts.

In her commentary on planning in academic medicine for the Group on Institutional Planning of the Association of American Medical Colleges, Ann Schwind defines academic medicine in terms of the places where its missions are carried out: “Academic medicine refers to the array of organizations which contribute to the education of physicians and biomedical scientists, and which contribute new knowledge through their research programs. Patient care is a third element of mission for many of these organizations.”³

The Milbank Memorial Fund’s report on the future of academic medicine offers a definition of academic medicine as a general and collective ability to achieve: “‘Academic medicine’ might be defined as the

capacity of the system for health and health care to think, study, research, discover, evaluate, innovate, teach, learn, and improve.”⁴ The report also notes that, although there are national differences, medical schools and teaching hospitals are central to realizing this capacity in all countries.

All of these attempts to define academic medicine tend toward a common central theme: that academic medicine is the discovery and development of basic principles, effective policies, and best practices that advance research and education in the health sciences, ultimately to improve the health and well-being of individuals and populations. This central theme is of key importance to this journal, which aims to pursue the mandate that its name implies: to publish original articles and research reports, critical reviews, perspectives, and commentaries that address topics across the full spectrum of broad-based concerns in academic medicine. The journal has, for many decades, published important papers on education and training issues, and since 1989, has published articles and theme collections that address key topics in health policy, research practice, clinical practice, and institution-level issues at medical schools and teaching hospitals.

The journal will continue to publish in those areas and will also seek to publish articles about science policy relevant to academic health centers, the future of established and emerging academic disciplines, key figures in academic medicine, and the history of academic medicine (especially articles that give a historical context that helps us understand current problems). Of course, in presenting these and other topics, the journal will continue to give priority to original works that identify important problems, pose penetrating questions, challenge assumptions, perform cogent analyses, and offer viable solutions. In addition, to advance discussion of current controversies, the

journal will publish commentaries, point-counterpoint pieces, and letters to the editor.

Furthermore, to enrich and diversify the journal’s content, and to enhance our readers’ experience in new ways, the journal also will begin to publish original artwork by students and residents, faculty and staff, and patients and others at medical schools and teaching hospitals. The artwork will usually reflect experience with learning how to be a physician or scientist, caring for patients, exploring research questions, teaching, being sick in a teaching hospital, or some other aspect of the “academic medicine experience.” All forms of art will be considered for publication, and a selected piece will be featured each month on the journal’s cover, beginning sometime later this year. Each submission will be reviewed based on the degree to which it deepens our understanding of the received experience in academic medicine. Full details will be announced next month.

I am certain that the content of *Academic Medicine* will continue to evolve over time in anticipation of and in response to changes in medical schools and teaching hospitals. It is in this spirit that I invite you to continue to communicate your ideas and feedback about the direction of the journal via (editor@aamc.org) and by contributing “grand challenges” via the Editor’s Notepad at (<http://www.aamc.org/academicmedicine>). If, as the Milbank Report suggests, academic medicine can be defined as our collective capacity to achieve, then our very best thinking about what we want to achieve, and how to go about doing so, should be represented on the pages of a journal named *Academic Medicine*.

Steven L. Kanter, MD

References

- 1 Kanter SL. A “grand challenge” from the new editor. *Acad Med* 2008;83:1–2.
- 2 International Working Party to Promote and Revitalize Academic Medicine. ICRAM (the

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- 3 Schwind A. Planning in academic medicine. Available at (<http://www.aamc.org/members/gip/aspaper.pdf>). Accessed January 14, 2008.
- 4 Awasthi S, Beardmore J, Clark J, et al. on behalf of the International Campaign to Revitalise Academic Medicine. The Future of Academic Medicine: Five Scenarios to 2025. Available at (<http://www.milbank.org/reports/0507FiveFutures/0507FiveFutures.html>). Accessed January 14, 2008.



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[Commentary]

Commentary: Preparing for Health Care Reform: Ten Recommendations for Academic Health Centers

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Abstract

Health care reform, the subject of intense national debate and discussion during the presidential campaign and the first year of the Obama presidency, is now reality. The Patient Protection and Affordable Care Act of 2010 (PPACA) became law in March 2010. Despite efforts by the new Republican majority in the House of Representatives of the 112th Congress to repeal the bill, some aspects of PPACA have already taken effect, and the majority of the remainder are scheduled to be implemented by 2014. PPACA will change the U.S. health care system in fundamental ways. Perhaps more than other entities in the U.S. health care system, academic health centers (AHCs) will bear the impact of the struggle to care for 32 million new, primarily low-income insurance beneficiaries. A large influx of new patients trying to access the health care system through AHCs will coincide with major changes in the financing of health care, the training of health professions students, and the conduct of biomedical research. Although many of the sweeping changes coming through PPACA will not happen until later in this decade, AHCs must begin planning for the future now if they are to prosper, or even survive, in the brave new world of health care reform. The author of this commentary first briefly analyzes some of the most important effects PPACA will have on AHCs and then makes recommendations for how AHCs can prepare to take advantage of the opportunities and mitigate the challenges inherent in implementing PPACA.

Following a protracted, highly partisan national debate, on March 23, 2010, President Barack Obama signed into law the Patient Protection and Affordable Care Act of 2010 (PPACA). The ratification of PPACA, the most important and ambitious social legislation since Medicare, has served as a highly polarizing political event. The partisan battle over health care reform is far from over; the Republican majority in the House of Representatives of the 112th Congress has promised a vote on the repeal of the bill and has vowed to fight some of its provisions. In addition, several lawsuits are challenging the constitutionality of the bill, particularly the mandate that individual citizens must purchase health insurance or pay a penalty. Despite these challenges, some provisions of the bill took effect January 1, 2011, and many others will be implemented by 2014. PPACA will reshape the U.S. health care system in fundamental ways and, in so doing, will have a profound impact on academic health centers (AHCs). In this commentary, I first briefly analyze some of the most important effects PPACA will have on AHCs and then make recommendations as to how AHCs can and should prepare for the implementation of PPACA.

PPACA's Effects

PPACA extends health insurance coverage to 32 million (M) new beneficiaries, over half of whom will be covered by expanding Medicaid to U.S. citizens whose incomes are at or below 133% of the federal poverty level (FPL), effective in 2014.¹ Individuals and families with incomes between 133% and 400% of the FPL will receive federal subsidies to help them purchase private health insurance.¹ Most of these individuals and families are expected to purchase insurance through state-organized health insurance

exchanges. Although at full implementation in 2019, PPACA will ensure that 93% of Americans have health insurance, 23M individuals, including 5M undocumented aliens, will remain uncovered.²

Studies have consistently shown that the newly insured use more health services than the uninsured,³ and thus, the access issues inherent in implementing PPACA are profound. Given that many of the newly insured will be patients at the lower end of the income spectrum, many will access the health system through safety net providers generally and AHCs in particular.

The passage of PPACA creates serious workforce issues that were inadequately discussed in the debate surrounding health care reform. Before the passage of PPACA, the consensus was that the United States would face a shortage of between 100,000 and 200,000 physicians by 2020.⁴ The increased demand for services created by 32M new insurance beneficiaries will exacerbate this shortage considerably. Perhaps of most concern is the shortage of primary care physicians, which is already a major issue in many parts of the country. Physician shortages are especially acute in urban core and rural areas.⁴ A persistent lack of racial and ethnic diversity in the physician workforce is also becoming a more pressing issue as the United States becomes an increasingly Hispanic nation and as health disparities continue to plague minority population groups.

Further, in an attempt to reign in ballooning health care costs, PPACA contains provisions expected to result in \$575 billion (B) in savings in Medicare between now and 2019, much of which will come in the form of reduced reimbursement to providers, especially hospitals.² PPACA began payment reductions to hospitals in 2010 with a decrease in the payment update formula, indexed to inflation, used to increase hospital payments. Another issue of concern to AHC-affiliated hospitals, many of which serve as the major safety net provider in their region, is a nearly \$40B reduction in the so-called "disproportionate share" payments that these hospitals receive for the exceptional amount of charity care they provide.²

Quality and safety, major issues in U.S. health care since the publication of *To Err Is Human*,⁵ will be even more important under PPACA. The legislation contains provisions that financially penalize hospitals for excess readmissions and for "preventable" hospital-acquired complications. Also, a "value-based purchasing" provision seeks to channel Medicare business to hospitals at the top of Medicare quality rankings, shifting about 2% of total Medicare payments by 2017. In combination, these measures have the potential to result in large payment reductions and/or payment shifts among hospitals.

Finally, research issues also figure in PPACA. New provisions establish programs and institutes to encourage the translation of discovery into practice.

Recommendations

Recommendation 1: AHCs must resolve to train the workforce needed in their own service areas

Most AHCs make decisions about the number and type of trainees that they matriculate and educate based on faculty preference and/or hospital service needs rather than on local workforce conditions. This strategy needs to change if AHCs are to effectively train the health care workforce needed by the nation. Workforce needs vary from place to place, and each individual AHC is well suited to ascertain and address local shortages.

Previous studies have shown that admissions practices, curricular experiences, and faculty role models can influence student specialty choice and practice location.⁶ Providing fulfilling rural and urban core primary care experiences as a routine part of medical student education could help to address both the primary care shortage and the physician maldistribution problem. Also, AHC leaders should advocate greater prominence and improved reimbursement for primary care services. Specifically, they can work with political leaders to create state-based loan forgiveness programs, and they can promote the National Health Service Corps (which is expanded by PPACA).

Recommendation 2: AHCs must look for ways both to expand the number of physicians who are being trained and to shorten the time needed to produce fully certified doctors more quickly

Recently, many medical schools have increased class sizes, and a number of new medical schools have been founded. However, the number of residency training slots has not undergone a commensurate expansion, and without enough graduate medical education (GME) positions, workforce expansion efforts will stall. PPACA includes some provisions for establishing new primary care residency positions. Options include the redistribution of unused, federally funded GME slots and the creation of "teaching health centers." Such centers would be community-based ambulatory care centers—like federally qualified health centers (FQHCs), rural health clinics, or Indian Health Service clinics—that operate one or more primary care residency programs. Although these new GME positions are not sufficient to meet the nation's needs for more doctors, we must use them strategically to train more primary care physicians even while we explore other options for expanding GME opportunities for graduates.

It is also time to reexamine ways of shortening the training time required to produce independently practicing physicians. Several three-year medical school programs produce successful physicians in North America: Lake Erie College of Osteopathic Medicine has a three-year option for students who desire a career in ambulatory primary care, and the University of Calgary has a required three-year curriculum for all students. AHCs should also explore adopting combined baccalaureate-MD programs, such as the successful six-year program at the University of Missouri Kansas City. Any reduction in the length of the training cycle (of course, reductions cannot compromise quality) would save trainees between \$160,000 and \$230,000 in foregone income per year,⁷ reduce graduates' educational debt, and help to ameliorate the physician shortage.

Recommendation 3: AHCs must commit to training more midlevel providers to help manage the huge influx of new patients that our health system will experience

With appropriate oversight by primary care physicians, midlevel providers can provide many of the routine primary care services that our population needs. Teams of health professionals, such as those in medical home models, can both care for large panels of patients and use scarce physician time more efficiently.

Recommendation 4: AHCs must work harder to improve the diversity of medical school classes to enhance the training and composition of the physician workforce

Partnering with secondary schools, community colleges, and universities to create pipeline programs is an effective strategy for identifying and supporting promising underrepresented minority students. PPACA reauthorizes the Health Careers Opportunity Program, which many AHCs have used—and should continue to use—as a way to provide premedical minority students with a hands-on introduction to health careers.

AHCs can create programs, such as postbaccalaureate, conditional acceptance, and combined baccalaureate-MD programs, which have been shown to successfully increase the number of minority students matriculating into medical school. Ensuring that matriculated minority students have support systems in place to help them succeed is also critical. Finally, because all physician graduates care for patients from diverse backgrounds, each medical school must have a robust cultural competency curriculum.

Recommendation 5: AHCs must revise their medical school and residency curricula to provide trainees with the skills they need to successfully practice in tomorrow's health care environment

To help address our health care system's poor performance in patient safety and quality, students and residents need a basic grounding in quality improvement and systems engineering. Given the strong emphasis on prevention in the health care reform debate, students also need greater exposure to public and population health curricula. Finally, the growing importance of interdisciplinary health care teams is exemplified by the inclusion of a patient-centered medical home pilot project in PPACA. This model of care is gaining greater currency across the United States, and students and residents must have firsthand experience with teamwork and effective care coordination (both central features of the medical home model).

Recommendation 6: AHCs must explore new partnerships or shore up existing ones with safety net providers, particularly FQHCs

The implementation of PPACA will place a premium on the relationships AHCs have with other components of regional safety net health systems. FQHCs will play a major role in providing the primary care needed by large numbers of new Medicaid beneficiaries.⁸ Seamless care transitions between AHCs and FQHCs will help to improve the efficiency and quality of care for these numerous new patients. Also, the teaching health center provision of PPACA makes FQHCs important *educational* venues. Given their pivotal roles in PPACA, FQHCs are likely to receive continued increases in funding. Thus, AHCs should partner with these institutions to help provide not only medical care for the large increase in the Medicaid patient population but also training opportunities for the next generation of physicians.

PPACA allows for the possible expansion of the Area Health Education Center (AHEC) network, the goal of which is to establish at least one AHEC in each state. Many AHCs already have strong ties to the AHEC system, and through these established relationships—as well as new partnerships—AHCs can help sustain rural health practitioners in their service areas.

Recommendation 7: AHCs should create actual or virtual integrated care networks with community providers in their regions to improve cost efficiency

Data clearly show that integrated health networks, such as Mayo Clinic, Scott and White, and Kaiser Permanente, achieve superior patient outcomes at lower per-patient costs.⁹ A recent Rand Center study concluded that accountable care organizations, medical homes, and bundled reimbursement programs have promise as cost-containment strategies.¹⁰ PPACA mandates Medicare pilot programs in all of these delivery system innovations by 2013. Strong relationships with regional health care payers, community physicians, and health systems will allow AHCs both to be early adopters of such reforms and to position themselves to establish actual or virtual integrated care networks. PPACA also creates an innovation center to formulate and experiment with networks and other delivery reforms.

Recommendation 8: AHCs must maximize revenues and reduce expenses to survive financial challenges post-PPACA

In a time of provider shortages, with reductions in clinical reimbursement on the horizon, clinical efficiency and productivity become highly significant. Using the \$26B in funding provided by the American Recovery and Reinvestment Act to invest in electronic health records and then using these electronic resources to coordinate care with other community providers can make each health care dollar go further, which, in turn, would allow AHCs to take care of larger numbers of patients at a reduced per-patient cost. Another must is efficient billing and collection systems that allow AHCs to recover revenues for the clinical services they provide.

Recommendation 9: AHCs must move aggressively to improve clinical quality and safety

PPACA's focus on improving quality will reward those AHCs with robust quality and safety programs. Further, the legislation's focus on preventing avoidable readmissions will both place a well-warranted emphasis on coordination-of-care transitions and underscore the importance of having strong relationships with community primary care providers, especially FQHCs.

Recommendation 10: AHCs must lead the way in bench-to-bedside research

PPACA establishes the NIH's Cures Acceleration Program, the goal of which is to move promising biomedical research breakthroughs into clinical practice more quickly. Comparative effectiveness research will benefit from the formation of the Patient-Centered Outcomes Research Institute, a nonprofit, nongovernment entity that will develop a research agenda and preside over the awarding of grants in order to implement said agenda through a research trust fund. AHCs are uniquely positioned and have the resources to conduct the types of research these programs will support.

In Sum

PPACA, an extremely complex piece of legislation, will have a major impact on the U.S. health care system. Mentioning, let alone assessing, all of the possible ramifications of PPACA in a short commentary is difficult. What is crystal clear is that major change, catalyzed by this far-reaching legislation, is coming to AHCs over the next 10 years. These institutions are highly complex, and each has its own distinctive characteristics and unique culture. Thus, each AHC will have to make its own preparations for the coming changes. The time to formulate an institutional strategy for dealing with the challenges and taking advantage of the opportunities of PPACA is now. Health care reform, for better or for worse, is no longer just a potential; it is a reality, and all of us in academic medicine must quickly focus on how to survive and prosper in this brave new world.

Funding/Support:

None.

Other disclosures:

None.

Ethical Approval:

Not applicable.

References

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Perspective

Transforming Academic Health Centers for an Uncertain Future

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Article

Academic health centers (AHCs) have long led the advancement of science and medicine by pursuing missions of clinical care, research, and education. AHCs have been places where important fundamental and translational research is performed and medical innovations are created and tested. Given the dramatic changes ahead in health care and deteriorating research funding, can this record of achievement continue, or do AHCs in the United States face a growing risk of extinction?¹

Despite their substantial societal value, these centers have an uncertain future. The health care landscape is changing rapidly owing to the Affordable Care Act, state budget deficits, and private insurers' responses to pressures to constrain cost growth. Reductions in Medicare and Medicaid reimbursement, strategies for driving health plan enrollees to lower-cost providers (e.g., having narrow networks and tiering network providers), and elimination of government funding (e.g., payments for hospitals treating a disproportionate share of low-income patients) all put pressure on AHCs.

AHCs face additional challenges specific to their research and education missions. Today, the costs of research exceed the "soft money" available to support it: for every dollar of direct federal research support, an additional 30 to 40 cents is needed from institutional resources beyond the federally negotiated indirect-overhead recovery. Total support for research will probably decline as deficit reduction becomes even more of a government priority, National Institutes of Health funding is constrained by budget cuts, industry sponsorship of research wanes, and philanthropic organizations struggle to return to pre-recession contribution levels.² Some portions of the research and teaching missions of AHCs are currently supported by revenues from clinical activities, but shrinking margins on clinical care revenues put this support model at risk.

Looking ahead, there is a risk of what a PricewaterhouseCoopers report termed a "margin meltdown."³ A growing gap between the excess costs of fulfilling AHCs' academic missions and the available funding will jeopardize the integrity of those missions. In short, profound changes are needed in AHCs' organization and operations.⁴

The transformation will require both rethinking and staying true to AHCs' core missions. Must AHCs be more selective about areas in which they aim to excel? Are they structured appropriately and optimally sized? Are their current measurements of success appropriate? Are planning and decision making for their academic and clinical missions appropriately aligned?

One key consideration will be balancing specialized clinical excellence and population health. Excellence in tertiary and quaternary care has been critical to AHCs' success. However, as large national employers and insurers seek best-in-class care, partly through "centers of excellence" designations, and as even subspecialty health care becomes commoditized, we believe that AHCs must build up highly differentiated programs of distinction — world-class, cutting-edge, highly specialized clinical programs that are leveraged and integrated with translational research and advanced training. Such programs should be capable of producing game-changing advances and delivering superlative care. Of course, achieving this goal will not be easy. To increase the chances of success, AHCs must play to their strengths and adopt clear strategies, prioritization, and implementation.

Simultaneously, AHCs will have to become higher-performing regional health systems, spanning the spectrum from community-based and primary care to highly specialized hospital and post-acute care, all linked by effective information

systems. Greater clinical integration is needed among hospitals, faculty, and employed and unemployed community-based partners; such integration may be achieved through formal arrangements conducive to improving the consistency, efficiency, and quality of care for individual patients, as well as health outcomes for populations. To improve performance, we believe that AHCs should refocus their efforts on their tripartite mission, and we suggest four approaches to doing so. First, AHCs should leverage their university affiliations and redesign care delivery, drawing on insights from health and behavioral economics, psychology, sociology, policy and management, industrial engineering, and computer science.

Second, we believe that AHCs will need to increase the yields of research, accelerating the translation of results into practice and boosting their impact on medicine and health. Doing so will require establishing an effective “discovery-to-care continuum”⁴ to facilitate more seamless translation, by creating structures integrating centers of clinical and translational research with offices of program management, regulatory affairs, education and training, biostatistics and biomedical informatics, and central biobanking, among others. Such structures can catalyze interdisciplinary collaborations and assemble resources into shared core services and facilities that offer natural economies of scale. More should also be done to foster a strong culture of innovation and reward entrepreneurship.

AHCs should also seek to optimize the size of their research enterprise. Specific areas of research excellence could be emphasized, and support for unfunded research rationalized. AHCs should develop meaningful measures of research success that are related to scientific and societal impact rather than to funding obtained or articles published. Dedicated grant-application resources could also be created, and more structured mentoring provided.

Intrinsic assets of AHCs, such as access to biologic samples and clinical data, should be better leveraged. In the Big Data era, AHCs should strive to become “learning health systems” by making clinical data “research grade” and lowering the costs of data acquisition and knowledge generation. Our institution, like many others, has migrated to a single comprehensive electronic health record platform, which allows us to convert health data from a byproduct of care delivery into a central asset for improving research and translation.⁵ The data-and-technology revolution also offers new ways to engage patients, through e-health, mobile devices, and increased personalization driven by advanced analytics.

It's likely, however, that AHCs cannot make this transition to true learning health care alone. We therefore recommend that AHCs seek new research and other collaborations with diverse partners — including nonmedical university disciplines, industry, and businesses — and engage in public-private partnerships and multisite collaboratives.

Third, we're convinced that medical education and training must be reinvented to adapt to the changing health care paradigm. We think that AHCs should reexamine traditional beliefs and approaches to medical education, questioning its cost and duration. Should education shift toward using dedicated instructors, increased online instruction, simulation, even gaming? Can AHCs shorten training time by streamlining the educational continuum — for example, providing a focused 3-year medical school curriculum in primary care, plus a 2-to-3-year residency?

AHCs would also be well advised to expand beyond their focus on physician education and think more expansively about programs for other health professionals and about emerging areas such as population health management, clinical informatics, and leadership and management. Robust interprofessional education will be important, since health system performance will increasingly depend on high-functioning, team-based approaches to care. Health care reform's success will depend on modernization of health education so that students and trainees learn transparency and accountability while developing competencies in social determinants of health, health economics, and informatics.

Fourth, we believe that AHCs require enterprise-wide planning and management to prepare for their uncertain future. The PricewaterhouseCoopers report highlights AHCs' decentralized structures as a barrier to their ability to respond to these challenges.³ AHCs are complex organizations — amalgamations of health care units with traditional departments, disciplines, and thematically organized research institutes. Such decentralization has permitted innovation, but a culture of faculty individuality and autonomy can conflict with the imperatives of team-based care and regulatory compliance. In true enterprise-wide planning and management, leaders, faculty, and administrators from throughout the enterprise would engage in coordinated planning to affirm, align, and prioritize specific aspects of their institution's missions; develop clarity about decision rights and accountability; and agree on and implement changes that enable long-term sustainability and success. They must ensure that critical decisions and tradeoffs — such as priority setting regarding faculty hires or allocation of clinical and research support in a resource-constrained setting — are made collaboratively and serve the entire institution's long-term interests.

AHCs urgently need to reexamine their approaches, challenge sacred cows, and prepare for transformation. Above all, as they pursue these new directions, AHCs must remain accountable to society both locally and globally.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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CONFERENCE RECOMMENDATIONS

January 17-20, 2013 | Atlanta, Georgia

Transforming Patient Care: Aligning Interprofessional Education with Clinical Practice Redesign

Rapid redesign of healthcare delivery, stimulated in part by the Affordable Care Act, is occurring alongside, but independently of, health professions educational reform. On the delivery side, change is being driven by three simultaneous aims: improving the patient's experience of care, improving the health of individuals and populations, and reducing the per capita cost of health care (the "Triple Aim"). On the education side, there is growing awareness of the importance of achieving team-based clinical competencies as an essential public good. Key to these efforts is the recognition that health care today involves professionals working together in collaborative, interdependent care systems and in partnership with the people served by these systems.

Missing from these many laudatory and innovative efforts is the ability to connect practice redesign with interprofessional educational reforms. Historically, health professions education and healthcare practice have developed and functioned separately, with little recognition that the two are inextricably linked.

In recent years, the Josiah Macy Jr. Foundation has promoted change in health professions education, focusing particularly on interprofessional education. This work is based on the belief that healthcare professionals who learn about, from, and with each other will be more likely to develop the competencies needed to work effectively together to care for patients and communities. The Foundation believes that this educational reform effort must be coordinated with related efforts to redesign healthcare delivery to be team-based and responsive to individual, family, and community needs. The two realms should not be changed in isolation. Educational reform must incorporate practice redesign, and delivery system change must include a central educational mission if we are to achieve enduring transformation.

Making this important linkage between interprofessional education and collaborative practice will create an environment within which all participants learn, all teach, all care, and all collaborate. It invites recognition that better outcomes for individuals and populations; better

quality, safety, and value within healthcare systems; and better education, training, and life-long professional development of healthcare workers are all connected. It also expresses the responsibility of all healthcare professionals to meet the needs of the individuals, families, and communities they serve as their highest goal, by developing and sustaining a culture of mutual respect between and among the different health professions.

In January 2013, the Foundation brought leaders in health professions education and healthcare delivery together to discuss how they might align their efforts to connect great learning and great practice. Conference participants discussed a commissioned paper that lays out a vision for a high-functioning healthcare system with empowered patients and engaged teams of practitioners and learners. They also discussed case studies featuring interprofessional education and collaborative practice efforts currently underway.

During the conference, participants reached a consensus vision for the joint future of healthcare education and practice: **We envision a healthcare system in which learners and practitioners across the professions are working collaboratively with patients, families, and communities and with each other to accomplish the Triple Aim.** Participants agreed that this vision is achievable if all sectors of the education and practice communities work together with mutual respect and professionalism.

Based on this shared vision, conference participants crafted recommendations for immediate action in five areas:

1. Engage patients, families, and communities in the design, implementation, improvement, and evaluation of efforts to link interprofessional education and collaborative practice.
2. Accelerate the design, implementation, and evaluation of innovative models

linking interprofessional education and collaborative practice.

3. Reform the education and life-long career development of health professionals to incorporate interprofessional learning and team-based care.
4. Revise professional regulatory standards and practices to permit and promote innovation in interprofessional education and collaborative practice.
5. Realign existing resources to establish and sustain the linkage between interprofessional education and collaborative practice.

The recommendations in each of these areas are presented below. They are interdependent and of equal importance; each one necessitates the others. While many more recommendations to improve the education and practice of health professionals were proposed and considered during the conference, we present only those that are directly related to achieving the linkage of interprofessional education and practice. We do not underestimate the magnitude of the change in culture that will be required to accomplish all of these recommendations. However, conference participants agreed that these steps must be taken if we are to achieve the Triple Aim of better care, better health, and lower costs.

Furthermore, because of the rapid changes already taking place and the constraints on further growth in healthcare costs, there is great urgency in meeting this need. While full implementation of these changes will involve actions beyond the scope of each educational institution or healthcare system, much can be accomplished today at the local level by the engagement of educational and healthcare delivery leaders in the spirit of this report. We urge everyone in a position of responsibility to take steps within their own areas of jurisdiction now, while also participating in the more general recommendations outlined.

Recommendation I

Engage patients, families, and communities in the design, implementation, improvement, and evaluation of efforts to link interprofessional education and collaborative practice.

If the alignment of education and practice is to be successful, it must be informed by the needs and preferences of the patients, families, and communities served. All of us — patients, families, communities, clinicians, faculty members, students, healthcare leaders, policymakers, and society at large — are part of the same healthcare system. And we all share the benefits when our healthcare system is aligned with and responsive to individual and collective needs.

A growing body of evidence demonstrates that incorporating patient preferences contributes to higher-value health care. Value also is enhanced when patients, families, and communities assume increased responsibility for factors influencing health. Thus, the future of health care should be one in which we all learn, all teach, all care, and all collaborate at every level of the healthcare system — from the development of policies to the daily interactions of patients and providers. This is a future first and foremost characterized by more engagement.

Engagement refers to deliberate and consistent efforts by all healthcare professionals and healthcare systems to advance the central role of patients, families, and communities in defining what matters to them; to promote informed and shared decision making regarding plans of care; to foster shared accountability for actions related to these plans; and to assure reciprocal and respectful relationships. The ultimate goal is to assure that patient, family, and community perspectives inform system-level design of health professions education and patient care. Achieving this goal will require

changing expectations for health professional competencies, accreditation standards, and the measurements used to gauge success.

1. **Convene a national group to identify effective methods for patient, family, and community engagement in the design and evaluation of models linking interprofessional education and collaborative practice.**

A public-private partnership of federal agencies and private foundations would be the ideal convener. The group's deliberations will be informed by the existing work of the Institute for Patient- and Family-Centered Care, the Centers for Medicare and Medicaid Partnership for Patients, the Institute for Healthcare Improvement, the Patient-Centered Outcomes Research Institute, and local and national healthcare systems with experience in team-based care, such as the Geisinger Health System and the Veterans Health Administration. The group would engage educational institutions, healthcare systems, professional associations, and regulatory organizations in disseminating its results.

2. **Ensure that expectations of patients, families, and communities inform the competencies used to guide the development of new models linking collaborative practice and interprofessional education.**

Over the past decade, much effort has gone into the delineation of the professional competencies needed to achieve the Institute of Medicine's aims for health care: safe, timely, effective, efficient, equitable, and patient-centered. More recently, the Interprofessional Education Collaborative has defined the competencies most relevant to interprofessional learning and team-based care. Although the competencies reflect considerable professional wisdom, they should be further informed by

patient, family, and community needs and expectations.

3. Revise accreditation standards to ensure input from patients, families, and communities.

Evidence that patient, family, and community voices influence the design, implementation, evaluation, and continuous improvement of systems of learning and care should be a prerequisite for successful accreditation. Accrediting bodies for education and healthcare should revise their policies to incorporate standards of patient, family, and community engagement.

Recommendation II

Accelerate the design, implementation, and evaluation of innovative models linking interprofessional education and collaborative practice.

Innovators already are designing new models linking interprofessional education and collaborative practice. In order to achieve widespread alignment of education and practice redesign, many more approaches must be developed. Robust evaluation tools that can be used to link successful models to improved outcomes and to accelerate the spread of those models also are needed.

These early models should be classified on the basis of their key attributes, learning impact, patient and population health outcomes, and effects on healthcare costs. Successful models could then serve as prototypes for launching and testing additional models. Lessons learned should be rapidly disseminated, so that progressively more sophisticated education-practice partnerships can be developed in the future.

Broadly based coalitions with a shared vision and a common understanding of priorities are

needed to advocate for this effort. Creative approaches to patient and community engagement and explicitly designed measures for success are needed. Such coalitions must include academic health centers, large healthcare systems, community health organizations, and advocacy groups.

1. Develop broadly based coalitions to align education and clinical practice.

Broadly based coalitions must help inform the operational design of the education-practice interface. Private-public partnerships among government agencies and foundations can facilitate further creation of these coalitions. The National Center for Interprofessional Practice and Education is the result of such a public-private partnership. The Robert Wood Johnson Foundation's Aligning Forces for Quality initiative also could be a force for linking interprofessional education and practice.

Among the key stakeholders for these coalitions are: patients, families, community leaders, academic health centers and other health professions schools, health systems, community health organizations, public health and social services agencies, and local chapters of health professional organizations. Students and their local and national professional organizations are powerful forces for change and should be included as well.

The National Center for Interprofessional Practice and Education will be an appropriate locus for some of this work. However, many other initiatives will be needed at the local, regional, and national levels. National professional organizations (such as the Interprofessional Education Collaborative) and national quality organizations (such as the Institute for Healthcare Improvement and National Quality Forum) should provide guidance and assistance.

2. Develop scenarios to advance alignment between interprofessional education and collaborative practice.

The scenario-building process should start with the development of a shared vision around the core values of achieving the Triple Aim through interprofessional education and collaborative practice. Because educational and practice resources will continue to be constrained, it is essential that new, creative scenarios for the education-practice interface be developed without delay. The alignment between education and practice must be explicit and interdependent, and improvement must be viewed as a shared responsibility. The goal is to build new models linking education and practice that bring real and measurable value to individual and population health.

3. Develop metrics to evaluate the impact of models linking education and practice on learning, on patient and population health, and on healthcare costs.

There is a paucity of rigorous measures to evaluate the impact of linking interprofessional education and collaborative practice. There is a need to support new scholarship in this area, including the development of evaluation protocols that go beyond process measures and identify the most effective models, tying them to the Triple Aim outcomes. There also is a need to apply known scholarship in teamwork from other fields, such as business and education, to health care. The Centers for Medicare and Medicaid Services, the National Institutes of Health, the Patient-Centered Outcomes Research Institute, the National Quality Forum, the Health Resources and Services Administration, and the Agency for Healthcare Research and Quality should all share an interest in supporting this work in partnership with private foundations.

Academic institutions and healthcare systems need to recognize the importance of this work in allocating resources and in promotion policies.

Recommendation III

Reform the education and life-long career development of health professionals to incorporate interprofessional learning and team-based care.

An alliance of education and practice will only be successful if the healthcare workforce is appropriately prepared for collaborative work. This must begin with pre-licensure education and continue for a professional lifetime. Professional development must become a shared responsibility of educational institutions and healthcare delivery systems.

Increasing numbers of healthcare system leaders and policymakers have recognized that achieving the Triple Aim will require more widespread adoption of new models of interprofessional education and collaborative practice. Despite this knowledge, health professions education still inadequately values interprofessional education and learning in team-based care. To change this will require a partnership of teaching institutions and delivery systems to create learning environments and teachers that model interprofessional collaborative practice.

1. Incorporate interprofessional team-based competencies into all health professions education programs.

Adopting or modifying existing interprofessional competencies — such as those issued by the Interprofessional Education Collaborative — should be undertaken without delay. Common language and standards need to be developed and incorporated into

policies for professional certification and institutional accreditation across the health professions and across the continuum of education.

Similar work needs to be done by delivery-system accrediting bodies, such as the Joint Commission and National Committee for Quality Assurance, and incorporated into credentialing and privileging policies and procedures for hospitals, medical homes, and healthcare organizations. Competencies can be revisited periodically as better ways to enhance interprofessional learning and team performance become available.

The National Center for Interprofessional Practice and Education should work collaboratively with the Interprofessional Education Collaborative and other professional and educational organizations to build a repository of robust case studies and implementation strategies for the competencies.

2. Expand faculty development programs to prepare health professionals for effective interprofessional learning, teaching, and practice.

Relatively few health professions faculty have participated in interprofessional education programs. Traditionally trained educators and health professionals, whether in academic health centers or community-based settings, are generally unable to model interprofessional competencies or mentor students in collaborative work across professions.

The Macy Foundation has supported a pilot interprofessional faculty development program, and the Interprofessional Education Collaborative has hosted several faculty development institutes. Broad expansion of these types of efforts will be necessary. Cataloging best models

and lessons learned should be one of the priorities of the National Center for Interprofessional Practice and Education.

3. Incorporate interprofessional team-based competencies in performance reviews of health professionals in clinical and academic settings.

Performance feedback should be provided with an eye to interprofessional as well as professional competence. Institutional, professional, and government licensure review processes should all incorporate interprofessional elements in their frameworks. In addition and where appropriate, faculty evaluations should include feedback from both students and patients regarding teaching of team-based competencies.

4. Develop new models of clinical education to prepare health professionals for team-based care.

The clinical education of health professionals is fragmented and discontinuous. Newer educational models that emphasize continuity of patient care over time and across settings should be replicated. Increasing the number of longitudinal, team-based experiences will lead to greater opportunities for students to build relationships with patients, families, teachers, and other clinicians. Wider deployment of such models would increase opportunities for interprofessional training experiences and better prepare students for team-based care.

Recommendation IV

Revise professional regulatory standards and practices to permit and promote interprofessional education and collaborative practice.

If the alignment of interprofessional education and collaborative practice is a goal of the healthcare system, then professional regulation should reflect that goal. Efficient models of care and education take advantage of significant overlaps in knowledge, skills, core commitments, accountabilities, and professional imperatives of the different health professions. Good teamwork requires team members to understand and agree upon their roles and to encourage each other to function at the highest levels of their education and training.

This currently is not always the case for all health professionals or all healthcare delivery systems. But, when these conditions are met, interprofessional clinical education is possible, and health professionals learn how to contribute their unique strengths to achieve the Triple Aim. When these conditions are not met, professionals learn to function in silos and are less likely to develop the skills needed to collaboratively improve health and health care.

1. **Revise accreditation and certification standards to eliminate barriers to efficient and effective team-based care and clinical interprofessional education.**

Standards and policies of accrediting and certifying bodies should be revised so that they require interprofessional education and training in collaborative team-based care, promulgate policies that approve the use of interprofessional faculty members and preceptors, and allow acceptance of interprofessional continuing education courses.

Health professionals should be able to teach students based on their areas of

expertise and scopes of practice rather than simply on the basis of their professional backgrounds. Learners should be able to accrue credit towards certification and re-certification based on the relevance of the learning experience to their practice, and faculty from all health professions should be able to contribute to the experience of all learners.

2. **Revise state and federal laws and regulations to eliminate barriers to efficient and effective team-based care.**

Regulatory policies generally lag behind advances in healthcare education and clinical quality improvement methods. Legislators, governors, attorneys general, professional societies, and patient and community advocacy groups, while mindful of their obligation to protect the public, should advocate for regulatory relief so that health professionals receive appropriate training to function in interprofessional teams at the highest levels of their education and training. There is an urgent need for collaboration across the health professions to update state licensure practice acts and scope of practice regulations.

3. **Create incentives for institutional privileging policies that support linking efficient and effective team-based care and clinical interprofessional education.**

Innovations in interprofessional education and collaborative practice – and ultimately the achievement of the Triple Aim – are often impeded by institutional decisions about professional privileges. Institutional privileging should be based on documented training, certification and licensure, and demonstrated expertise within legal scopes of practice. Restrictions that artificially limit patient (and learner) access to the full variety of health professionals qualified to provide care inhibit innovations in

team-based care and interprofessional education.

Institutions may need incentives to open up practice privileges to the full extent of applicable laws and regulations. Accreditors, such as the Joint Commission and insurers/payers, including Medicare and Medicaid, could help by requiring non-exclusionary privileging practices as a part of accreditation or insurance contracts.

Recommendation V

Realign existing resources to establish and sustain the linkage between interprofessional education and collaborative practice.

The alignment of interprofessional education and practice can take place only if current resources are reconfigured to accomplish this goal. It must become the new way of doing business to achieve the Triple Aim.

Transformation of the U.S. healthcare system will require new financial models and creatively aligned incentives. The resources available for change include financial and human assets provided by government and the private sector. These resources, which currently are widely scattered and poorly coordinated, reside in healthcare delivery systems, educational institutions, health insurance companies, private foundations, and public agencies and the communities they serve, to name but a few.

Creating an effective, efficient, and sustained linkage between interprofessional education and collaborative practice will require that all resources be brought “to the table” and shared in support of the Triple Aim. It will require the development of new incentives, including innovative payment systems, to motivate participants engaged in system redesign. And it will require training and, where necessary, retraining in systems-based practice,

performance improvement, and public health – all conspicuously underrepresented in the education of most health professionals today.

Transformative change will require substantive engagement of health system executives, educational leaders, insurers, and professional organizations, as well as students and users of health services. Health system administrators and education and training program directors should be included, along with clinical professionals, patients, families, and community advocates. Together they will need to negotiate the use of resources across organizational boundaries, redirecting existing resources and identifying new resources where possible.

1. Delineate the resources presently or potentially available for supporting the linkage of interprofessional education and collaborative practice.

Understanding the resources for clinical education will be essential in determining how they might be shared more effectively in the future. At each site, this will require an environmental scan of existing and potential resources. This should include the type, source, and ownership of all relevant resources and whether and how they are being used to promote effective linkages between interprofessional education and collaborative practice.

Health system assets include delivery systems, service lines, facilities, their own education programs, contracting services, information systems, providers, administrators and support personnel, quality improvement systems, and financial resources. Educational system assets include expertise in teaching and learning, evaluation systems, research and reporting, learners in the health professions, clinical faculty expertise, affiliation networks, accreditation linkages, and financial resources. Community and public resources include primary care networks, federally

qualified health centers, visiting nurse associations, faith-based organizations, and local health departments.

2. Develop new models of resource sharing among organizations that integrate interprofessional education and practice.

New models of shared governance, organizational management, and accountability must be developed, as well as new approaches to reallocating resources between practice and educational partners and across relevant health professions. New model formation is anticipated to happen predominantly at the local level, but buy-in at organizational and policy levels will be essential as well.

At the local level, educational and practice institutions will need to plan, implement, and evaluate model teams of integrated learners, including where they are deployed and what will be the expected outcomes for teams and individuals, the evaluative approaches used, and the expected impact on the Triple Aim. Within these new models, incentives for those engaged in care provision and workplace learning need to be aligned to achieve sustainability.

These efforts will need human and financial resources to promote and achieve alignment of incentives, establish sustainable decision making, and provide oversight of the education-practice interface resulting from the overlap between participating practice and educational institutions.

3. Demonstrate a positive value proposition for linking interprofessional education and practice.

Achieving these new models requires each institution to assess the expected value added and create a plan to achieve that value. It requires reallocating resources from programs not adding value, and providing

some up-front investment that can be recovered from achieving the Triple Aim. Individual value propositions may vary, but an effective business case, including a positive return on investment and a plan for continuous improvement, is essential. Savings garnered from achieving the Triple Aim need to be reinvested in further enhancing the practice and education interface.



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The conclusions and recommendations from a Macy conference represent a consensus of the group and do not imply unanimity on every point. All conference members participated in the process, reviewed the final product, and provided input before publication. Participants are invited for their individual perspectives and broad experience and not to represent the views of any organization.

The Josiah Macy Jr. Foundation is dedicated to improving the health of the public by advancing the education and training of health professionals.

** Planning Committee Members*



JOSIAH MACY JR. FOUNDATION

44 East 64th Street, New York, NY 10065

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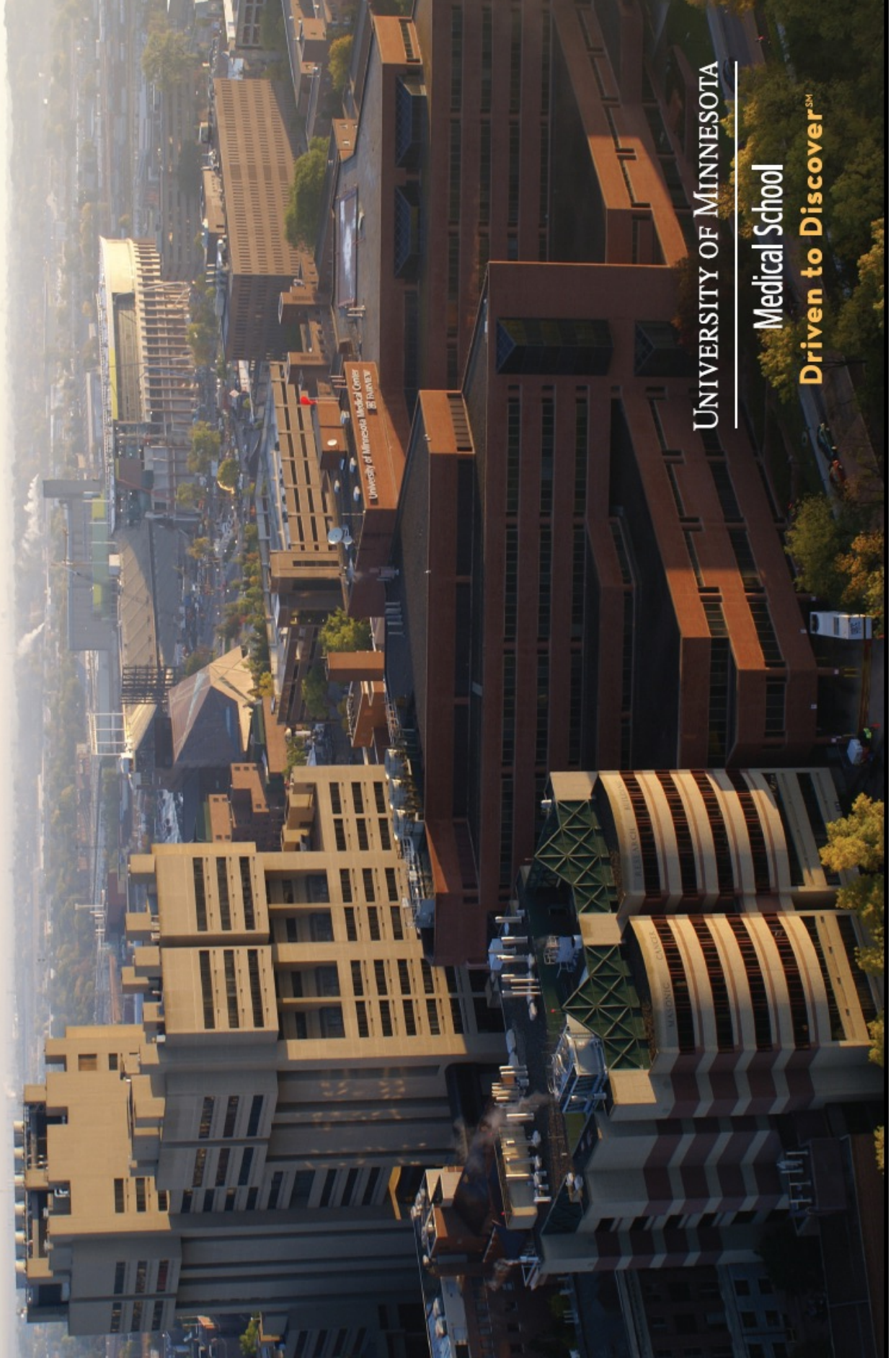
CONFERENCE RECOMMENDATIONS

January 17-20, 2013 | Atlanta, Georgia



Transforming Patient Care:
Aligning Interprofessional Education
with Clinical Practice Redesign

Strategic Vision 2025



UNIVERSITY OF MINNESOTA

Medical School

Driven to DiscoverSM

Message From the Strategic Planning Committee: We Must Create A Culture of Excellence

The University of Minnesota Medical School educates medical students and graduate physicians, provides patient care, and performs biomedical and clinical research through the hard work of nearly 1700 full-time and affiliate faculty, 2800 adjunct clinical faculty, and 1500 staff. Medical students are accomplished, graduating with an excellent education, high national board scores, prestigious post-graduate training opportunities. The Medical School has committed to changes in medical education to meet the challenge of the evolving health care environment. Hospital and clinic patient care is highly rated by the patients and the medical community, and the new integrated structure for the University of Minnesota Physicians and the University of Minnesota Medical Center-Fairview will increase the academic support for the medical school. Research in many areas is highly funded with national prominence, and supported with new Biomedical Discovery District facilities. The University of Minnesota Medical School consistently ranks in the upper tiers of all medical schools. Our results and impact are impressive, but we aspire to be the best.

The faculty recognizes that significant changes are needed to enhance our research, educational innovation, and clinical impact both statewide and nationally.

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RESEARCH: An increase in the research portfolio and NIH funding that is transformative, leading to national and international recognition of centers of excellence and faculty development.

EDUCATION: Innovative educational and research opportunities that prepare medical students for the changing practice of medicine in the future.

PATIENT CARE: Strong clinical programs and reputation that drive patient recruitment, faculty development, research and education for the academic missions of the medical school.

The faculty understands THEY are the agents of change. Faculty must drive recruitment, curriculum, promotion and tenure, patient care, and research. A review of high performing U.S. medical schools, data review, and faculty input during the strategic planning process identified multiple challenges in our industry and environment. In partnership with the Board of Regents, President, University and Health Systems, the faculty are committed to achieving a new level of excellence in research, clinical care and education. A culture of excellence is the essential requirement for the Medical School to regain its position of excellence by 2025. The following Strategic Plan for the Medical School provides the platform to accomplish this vision.

OUR VISION:

To be a world class medical school advancing health at the forefront of learning and discovery.

OUR STRATEGIC INTENT:

Promote a culture that demands and rewards excellence.

Critical Strategies: Transforming Medical Care

1. Leadership that transforms the culture of the Medical School by demanding and supporting excellence in all aspects of our mission.
2. Research that distinguishes the Medical School through centers of excellence, scholarship, and the development of destination educational and clinical programs that change the practice of medicine.
3. Education that advances all aspects of medicine through innovative teaching and learning practices that set national trends.
4. Clinical Care that transforms the practice of medicine in a valued, patient-centered environment.

STRATEGY - LEADERSHIP: Leadership that transforms the culture of the Medical School by demanding and supporting excellence in all aspects of our mission.		
RATIONALE: High performing medical schools are built on a culture of clear expectations and milestones that demand and reward excellence. The culture of the Medical School must change. Hardwired systems of accountability built on clear metrics of excellence and defined reward and recognition are required. Our leaders – from the University President through the leaders inside each Department- must be held accountable in our pursuit of excellence and our resources must be prioritized to value and incentivize our best performers. Leadership turnover in the Medical School has prevented achievement of long-term planning goals.		
METRICS OF EXCELLENCE: We encourage senior leadership to develop metrics based upon the following:		
<ul style="list-style-type: none"> • Defined, measurable and clearly communicated expectations of all staff, faculty, Division/ Department/Center/Institute leaders and programs. • Hardwired accountability systems -- including evaluation, rewards, recognition, and consequences for failure -- and methods to ensure application of expectations to all faculty, staff, and leaders. • Consistent measurement and enforcement, with transparency of results. 		
Key Initiatives	Objective	Timeline
1. Recruit a new Dean who is committed to long-term support for cultural transformation to ensure an environment that demands and rewards excellence.	Leadership focused on and held accountable to long-term excellence.	2014
2. Develop a rigorous and substantial leadership performance review process.	Ensure leadership accountability to excellence.	Begin 2013
3. Create a formal internal leadership development academy for high-potential faculty and staff, preparing our next generation of leaders. This program should be supported with appropriate centralized funding.	Develop our next generation of leaders.	2015
4. Hold all levels of leadership, including Department Heads and Center/Institute Directors, and affiliate leaders, accountable for achieving the metrics of excellence within their units through: <ul style="list-style-type: none"> • A more substantial faculty performance review process; • Better recognition for top performers; • Strategic recruiting; • Diligent long-term planning. 	Accountability to demand excellence.	Begin 2013

5. Develop metrics of excellence to measure program and Department performance to prioritize investment.	Prioritization to direct resources towards excellence.	2014
6. Align other current sources of academic investment, such as the Dean's Tax, Academic Transfers, and committed Integrated Structure support, towards excellence, supporting the priorities outlined in this plan. As investments are made, outcomes should be transparently tracked over time so that results can be reported.	Align academic resources to support academic success	Begin 2013
7. Transparently and regularly report department, Center, and School-wide financial results and hold leadership accountable for sharing with faculty.	Increased transparency	Begin 2013
8. Expect defined, accountable, and rewarded exemplary mentorship.	Reward and support development of successful faculty	Begin 2013

<p>STRATEGY - RESEARCH: Research that distinguishes the Medical School through centers of excellence, scholarship, and the development of destination educational and clinical programs that change the practice of medicine.</p>		
<p>RATIONALE: High performing medical schools establish, endorse, and nurture a culture of excellence in research and its dissemination through the allocation and reallocation of resources towards those faculty School-wide who demonstrate a sustained high impact scholarship program. This generates high impact research and national recognition.</p>		
<p>METRICS OF EXCELLENCE:</p> <ol style="list-style-type: none"> 1. Sustained high quality/impact scholarship, as determined by: <ul style="list-style-type: none"> – Quality of papers, patents, data sets (these metrics should be discipline specific) – Minimum of one/year as Senior Author following promotion to Associate or Full Professor, measured on a 5-year average; expectation is that faculty will exceed this minimum requirement – Post-tenure award assessment (rolling 5 year periods, See Key Initiative #3 below) <ul style="list-style-type: none"> • Faculty member to identify best 5 high impact papers and department to request outside evaluation from experts within the field. 2. Peer reviewed extramural grants or funding, as determined at department or school level by: <ul style="list-style-type: none"> – Number of individual and interdisciplinary grants per faculty member; – External funding dollars per faculty member; – 50% of salary recovery on grants over a rolling 5 year period (for tenure track faculty); – Multi-grant portfolio at post-tenure award level. 3. Identify 5 aspirational peer institutions to determine appropriate number or ratio of physician scientists. 4. Identify 5 aspirational peer institutions to determine appropriate number of K grants and career development awards. 5. Increase patient participation in clinical trials: <ul style="list-style-type: none"> – Achieve same participation rate as our 5 aspirational peers. 5. Increase in the number of national awards (HHMI, NAS): <ul style="list-style-type: none"> – Dean to set a target and goal. 6. Increase the number of collaborative research grants. 		
<p>Key Initiatives</p> <ol style="list-style-type: none"> 1. Substantial investment for recruitment of a critical mass of early career faculty with a demonstrated potential for excellence in research in targeted areas. This should include: <ul style="list-style-type: none"> • Recruit 6-9 faculty as cluster hires across basic and clinical departments, with at least 2-3 MD-scientists, supported by centralized funding. • Mandate rigor in every faculty recruitment process to ensure strategic use of resources and a diverse applicant pool. 		
<p>Objective</p> <p>Develop a diverse pool that will be competitive for and result in HHMI appointment</p>		<p>Timeline</p> <p>2014</p>

<ul style="list-style-type: none"> • Development of a “Biomedical Scholars” program, allowing new hires to compete for funding in addition to their start-up packages (non-renewable). 			
<p>2. Recognition and allocation of resources to mid-career faculty. This should include:</p> <ul style="list-style-type: none"> • Development of an internal “Distinguished Scholars Program”, allowing current faculty to compete for 5-year awards (in the range of \$250K/year) for research (renewable). • Development of a “Dean’s Distinguished Lectureship”, a competitive honor for faculty making seminal research discoveries, accompanied with a monetary one-time award. • Development of a “Physician-Scientist Scholars Program”, supporting development and mentoring for a cadre of physician-scientists. • Hold leadership (deans and heads) accountable to actively preparing and advocating for outstanding faculty to distinguished national awards (i.e. NAS appointment, HHMI investigators). Appoint a <i>standing advisory committee</i> to actively vet and act upon faculty recommendations made by leadership. 			2013
<p>3. Develop a rigorous annual review process for all faculty at the assistant professor level. This should include:</p> <ul style="list-style-type: none"> • Developing initial plans for new junior faculty to clearly set expectations for promotion. • Using the metrics of excellence for research to measure performance. <p><u>After award of tenure</u>, research faculty must undergo an intensive review every five years, to include outside evaluation by peers in their field to measure evidence of a sustained research program and scholarship and to re-allocate resources as necessary.</p> <p><u>After promotion to associate professor (for non-tenure tracks)</u>, an intensive five-year review process (similar to that described above) should be developed for non-tenure tracks to measure progress.</p>			Begin 2013
<p>4. Strategically build and leverage technological infrastructure and operational services that facilitate success of faculty and staff.</p> <ul style="list-style-type: none"> • Strategically invest in the computational and physical infrastructures for tissue and specimen bio-banking as a resource for all investigators. 		Provide infrastructure support to enhance research outcomes.	Begin 2014

<ul style="list-style-type: none"> • Develop a centralized infrastructure that assists with vetting scientific ideas for translation as well as matching the appropriate ideas, investigators, and resources. The current Office of Discovery and Translation (part of CTSI) could be further developed to meet this goal. • Develop an infrastructure that will assist investigators with identifying and attaining funding sources for their research. • Create high functioning computational platforms that leverage health information technology to facilitate research. 		
<p>5. Develop metrics for excellence of education and research for basic science graduate programs, to include the appropriate size and funding for the various programs, and to achieve better integration with faculty research.</p>	<p>Create a culture of excellence in basic science graduate education</p>	<p>Start 2014</p>

STRATEGY - EDUCATION: Education that advances all aspects of medicine through innovative teaching and learning practices that set national trends.		
RATIONALE: High performing and State-supported medical schools are committed to supporting teaching excellence, educational innovation, and diversity to ensure its learners are prepared to be collaborators and leaders in the modern health care environment, and meet the needs of the health care workforce for the entire State.		
METRICS OF EXCELLENCE:		
<ol style="list-style-type: none"> 1. Ongoing success of student learners reported and tracked: <ul style="list-style-type: none"> – Students accepted to top institutions; – Students placed in leadership positions; – Board scores; – # of external fellowships for graduate students; – Feedback from clinical partners on trainee and learner preparation. 2. Number of students participating in basic or clinical research and discovery. 3. Percent of alumni donating to UMN. 4. Number of faculty promoted on the teaching track. 5. Number of faculty receiving teaching awards. 6. Student, resident, and fellow evaluations. 7. Educational scholarship (publications and other written scholarship). 8. Peer evaluation of teaching. 9. National leadership positions. 		
Key Initiatives	Objective	Timeline
<ol style="list-style-type: none"> 1. Create an environment across the Medical School and affiliate sites to support exemplary education practices through a series of certification programs to include: <ol style="list-style-type: none"> 1) Master Teacher; 2) Program Directors; and 3) Program in Educational Leadership. 2. Improve relationships with affiliate partners and community stakeholders to ensure a comprehensive learner experience in our community. 	<p>Expand the network of exemplary educators and develop educational leaders.</p> <p>Improve and leverage community resources to improve educational experiences and outcomes.</p>	<p>2014</p> <p>2013</p>

<p>3. Strengthen curriculum changes that prepare our students, residents and fellows for life-long learning and the future of health care delivery.</p>	<p>Educate a physician workforce for the future</p>	<p>Begin 2014</p>
<p>4. Develop metrics for excellence for GME programs that would allow for program stability and learner competency to be measured regularly.</p>	<p>Success and re-accreditation of stable training programs.</p>	<p>2014</p>
<p>5. To promote life-long learning, medical student research and scholarship should be supported across the continuum, to include:</p> <ul style="list-style-type: none"> • Seed support for and attainment of an institutional T-35 grant to improve medical student scholarship opportunities; • Intentional support to attain additional institutional R-25 grants to improve medical student scholarship opportunities; • Development of a database to match interested students to faculty research opportunities. 	<p>Create a culture that values scholarship for all learners.</p>	<p>Start planning 2014</p>
<p>6. Develop an infrastructure that aides students as learners and faculty as educators.</p>	<p>Infrastructure for educational excellence</p>	<p>Begin 2014</p>
<p>7. Increase philanthropy efforts to improve scholarship funds available for high performing and diverse medical students, with a deliberate attempt to improve retention of high performers.</p>	<p>Retain excellent and diverse applicants.</p>	<p>2014</p>

STRATEGY – CLINICAL CARE: Clinical care that transforms the practice of medicine in a valued, patient-centered environment.		
RATIONALE: High-performing academic medical centers recognize and value a group of physicians who are considered superior, those who are distinguished from their peers by an exceptional depth of knowledge in their field, by remarkable interpersonal and communication skills, by a commitment to professionalism, by drawing referrals and being sought out for advice and care for difficult cases, by being frequently asked to care for other faculty and family members of this medical community, by being skilled mentors, by creating scholarly work relating to their area of clinical impact and a commitment to acquiring and disseminating new knowledge, and by evidence of impact outside of their specialty area.		
METRICS OF EXCELLENCE:		
<ol style="list-style-type: none"> 1. Create a culture that values excellence in clinical care, with performance that is: <ul style="list-style-type: none"> – Safe – Timely – Effective – Efficient – Equitable – Patient-centered 2. Percent of clinical faculty teaching or patients cared for by learners (support education). 3. Participation in clinical research as evidenced by grant support, patient enrollment, and publications. 		
Key Initiatives	Objective	Timeline
<ol style="list-style-type: none"> 1. Create an internal “Academy of Master Clinicians” within the Academic Health Center, to recognize exceptional clinical care. 2. Begin an in-depth review of the Clinical Scholar track to better determine: <ul style="list-style-type: none"> • The type of scholarly activity and metrics for promotion and reward that should be expected in this track; • The type of development and infrastructure needed to support this kind of scholarly activity; • Appropriate ranges of protected time to perform scholarly work that allows for faculty success; • The appropriate background faculty must possess who are hired on to this track; • The appropriate compensation model for clinical scholars across the Medical School. 	<p>Visibly value excellence in clinical care</p> <p>Identify keys to success for clinical scholars</p>	<p>2014</p> <p>Begin 2013</p>

3. Support the University of Minnesota and Integrated Structure patient care strategies for top decile clinical performance.	Align with current initiatives	2013
4. Demonstrate integration with UMP Vision 2014 Strategic Plan: a culture of exceptional patient experience, and innovation through translational research, care delivery, and improvement of outcomes.	Align with current initiatives	Begin 2013



**UNIVERSITY OF MINNESOTA
BOARD OF REGENTS**

Special Committee on Academic Medicine

October 10, 2013

Agenda Item: Clinical Services and Operations

review review/action action discussion

Presenters: Aaron Friedman, Vice President for Health Sciences and Dean of the Medical School and Bobbi Daniels, CEO of University of Minnesota Physicians and Vice Dean for Clinical Affairs, Medical School

Purpose:

policy background/context oversight strategic positioning

To provide the committee information about the role of the University in providing clinical care in Minnesota, the importance of clinical care to education, research, and the financing of the health sciences.

Outline of Key Points/Policy Issues:

The presentation will include the challenges and opportunities facing the clinical programs, an update on the Integrated Structure, and a discussion of the University's clinical practice with respect to other health care systems.

Materials included:

- AHC Clinical Programs presentation
- Integrated Structure background information

Background Information:

Board of Regents Chair Richard Beeson established the Special Committee on Academic Medicine in July 2013 as a 2-year committee intended to build knowledge among Regents and ensure that the Board is equipped to fulfill its oversight responsibilities in this area.

**Board of Regents
Special Committee
on Academic Medicine
Academic Health Center
Clinical Programs**

October 2013

What is Academic Medicine and Health Care?

- Practices across the spectrum of care that:
 - Support education and training
 - Advance research
 - Support innovation
 - Improve the health of individuals and communities

Clinical Care is Critical to Academic Health

- Education and training of health professional students
- Clinical research and translation to practice
- Recruiting and retaining top faculty
- Financing the academic mission

National Trends

- Clinics need to reduce costs to compete in the market
- Closer integration of education, research and care
- Closer integration of governance, organizational and administrative structure to align strategy and operations
- Faster track to move research discoveries to practice
- New models of interprofessional, team-based education, training and practice
- Focus on wellness and population health

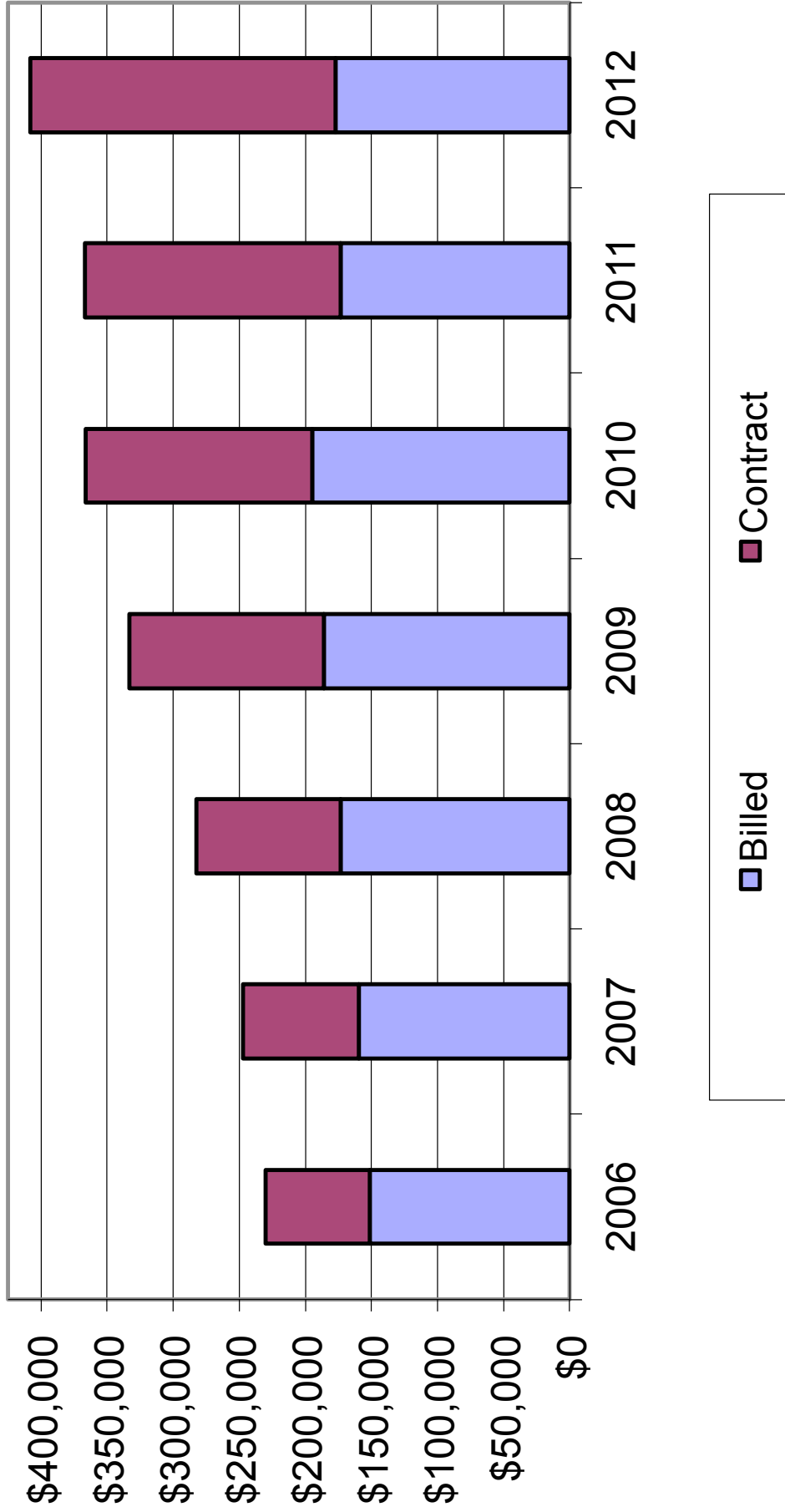
U of M Clinical Care Presence in the State

- Over 975,000 patient visits in our clinics and hospitals
- University of Minnesota Medical Center (UMMC) part of Fairview Health Services, is the primary teaching hospital
- University of Minnesota Physicians (UMP) is the largest integrated practice in Twin Cities

UMP - History

- Created in 1996, merging 18 separate faculty clinical practices to:
 - Leverage resources
 - Facilitate multispecialty collaboration
 - Compete in the market
- Medical school faculty who practice must do so through UMP
- UMP pays clinical portion of faculty salaries
- UMP provides financial support to Medical School education and research

UM Physicians Revenue Growth



University – UMP – Fairview Relationship

- Institutions Sharing a Common Commitment
 - Clinical Excellence
 - Research
 - Education
- Relationship continues to evolve
- Revolutionary changes in healthcare
 - Providers
 - Academic institutions
- Integration is key across the care spectrum

University – UMP – Fairview Relationship

- The market demands integration of education, research and clinical care
- We are well positioned
 - One of the nation’s most comprehensive Academic Health Centers
 - Track record of innovation
 - Commitment to excellence
 - Legacy of meeting community needs and providing high quality care

New Integrated Structure Model

- Joint management structure
 - Co-leadership
 - President of UMMC
 - CEO of UMPhysicians
- Functional integration of clinical and administrative services
- New board to govern the Integrated Structure
- Enhanced financing of University's academic mission

Integrated Structure - Scope

- University of Minnesota Medical Center
- University of Minnesota Amplatz Children's Hospital
- UMPhysicians outpatient clinics
- UMP-Fairview services:
 - Cardiology
 - Oncology
 - Mother and children's services
 - UMP services at Fairview's Maple Grove facility (except surgery)
- Future proposed Ambulatory Care Center

The Combined Integrated Structure

- Provides full spectrum of care, primary through quaternary – working in collaboration with referring physicians from throughout the state, region, and nation
- 700,000 patient clinic visits annually
- 35,000 hospital admissions annually
- \$1.9 billion in annual revenues:
 - 55 percent of Fairview’s total revenues
 - 80 percent of UMPhysicians total revenues

The Combined Integrated Structure

- National leaders in:
 - Blood and Marrow Transplants
 - Cancer care
 - Cardiovascular
 - Organ transplants

Integrated Structure – Vision and Goals

- Improve patient care
 - Provide a seamless experience
 - Develop care models in line with health care reform
- Enhance Education
 - Generate additional funding
 - Increase standing of Medical School and other health sciences schools
 - Increase on-site training and interprofessional education
- Support health care research
 - Increase focus on clinical trials
 - Speed research from the lab to the bedside

Integrated Structure – Current Activity

- Improved quality outcomes
- Growth in new patients, financial performance exceeding expectations
- Upcoming decisions for the Board of Regents
 - Ambulatory Care Center: Lease
 - Naming Agreement
 - Appointment of University Members to the IS Board

Clinical Practices in Other AHC Schools

School of Dentistry

- Pre-doctoral, post-doctoral, specialty and faculty practice clinics see more than 100,000 patients annually
- Clinics serve as principal training sites for:
 - 500+ dental, dental hygiene and dental therapy students (annually)
 - 100 dental residents each year (annually)
- Outreach partnerships with clinics in the Twin Cities and across the state

Clinical Practices in Other AHC Schools

College of Veterinary medicine

- One of the larges and most advanced veterinary hospitals in the world
- Sees more than 35,000 patients annually
- Full service referral center for small and large animals
- Specialize equine clinic
- The principal training site for veterinary students and residents

Clinical Practices in Other AHC Schools

School of Nursing

- Faculty practice plan has nine practice agreements with community partners to provide:
 - Psych-mental health
 - Primary care
 - Women’s health
 - Pediatric services

Clinical Practices in Other AHC Schools

College of Pharmacy

- State of the art medication therapy management program
- Partnership with six health care systems across the state
- Manages a medication therapy management network serving 35,000 University of Minnesota employees and their families

Clinical Practices in Other AHC Schools

Community University Health Care Center

- Provides medical dental and mental health services in Phillips Neighborhood of Minneapolis
- Serves very low income and recent immigrant patients
- More than 63,000 patient visits annually
- Services provided in seven languages
- Major training site with more than 225 AHC students and residents annually

Clinical Practices in Other AHC Schools

All AHC schools are planning to grow their clinical practices and are examining opportunities to increase collaboration and integrate practices across schools.

Key Future Issues Facing the AHC

- AHC schools are dependent on successful clinical practices, which are challenged by the changing health care environment
- State funding cuts have reduced our ability to fulfill our historic covenant with state to provide the health professionals to entire state and support critical health research
- On-going need for major investments to modernize outdated education, research, and patient care facilities
- Increasing state interference in already highly regulated health research and effective health policy and care

Integrated Structure

Background Information

Board of Regents

AHC Committee

September 25, 2013



Vision and Goals

- Vision
 - National leader in:
 - Outcomes
 - Research
 - Education
 - Ranking among the top 10 percent of academic medical centers in the nation



Vision and Goals

- Goals
 - Improve patient care
 - Provide a seamless experience
 - Develop care models in line with health care reform
 - Enhance Education
 - Generate additional funding
 - Increase standing of Medical School and other health sciences schools
 - Increase on-site training and interprofessional education
 - Support health care research
 - Increase focus on clinical trials
 - Speed research from the lab to the bedside

Integrated Structure Master Agreement

- Limited Liability Company owned by UMPPhysicians and Fairview
- New Board appointed by University/UMP/ Fairview
- Co-led by UMMC President and UMPPhysicians CEO
- Five-year agreement – automatic renewal unless one party seeks to end it



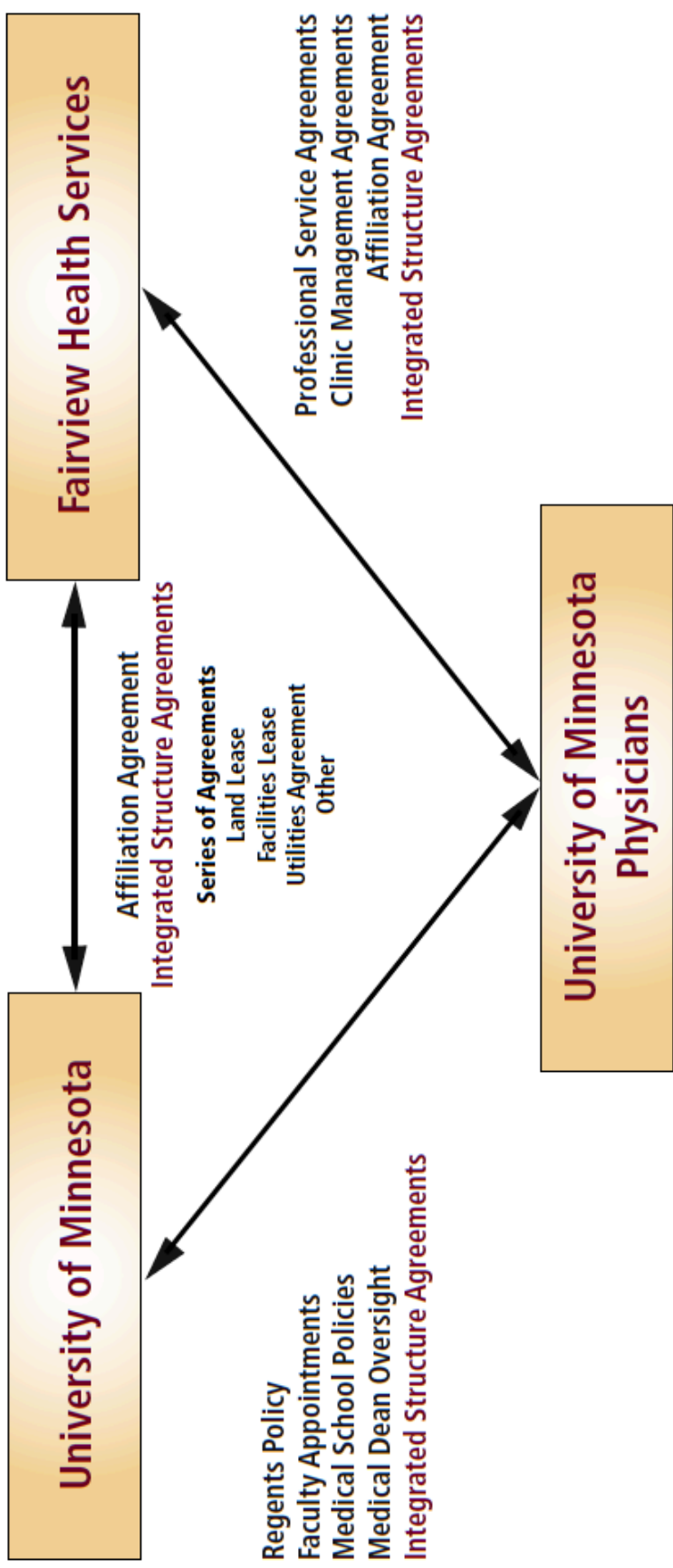
Integrated Structure Master Agreement

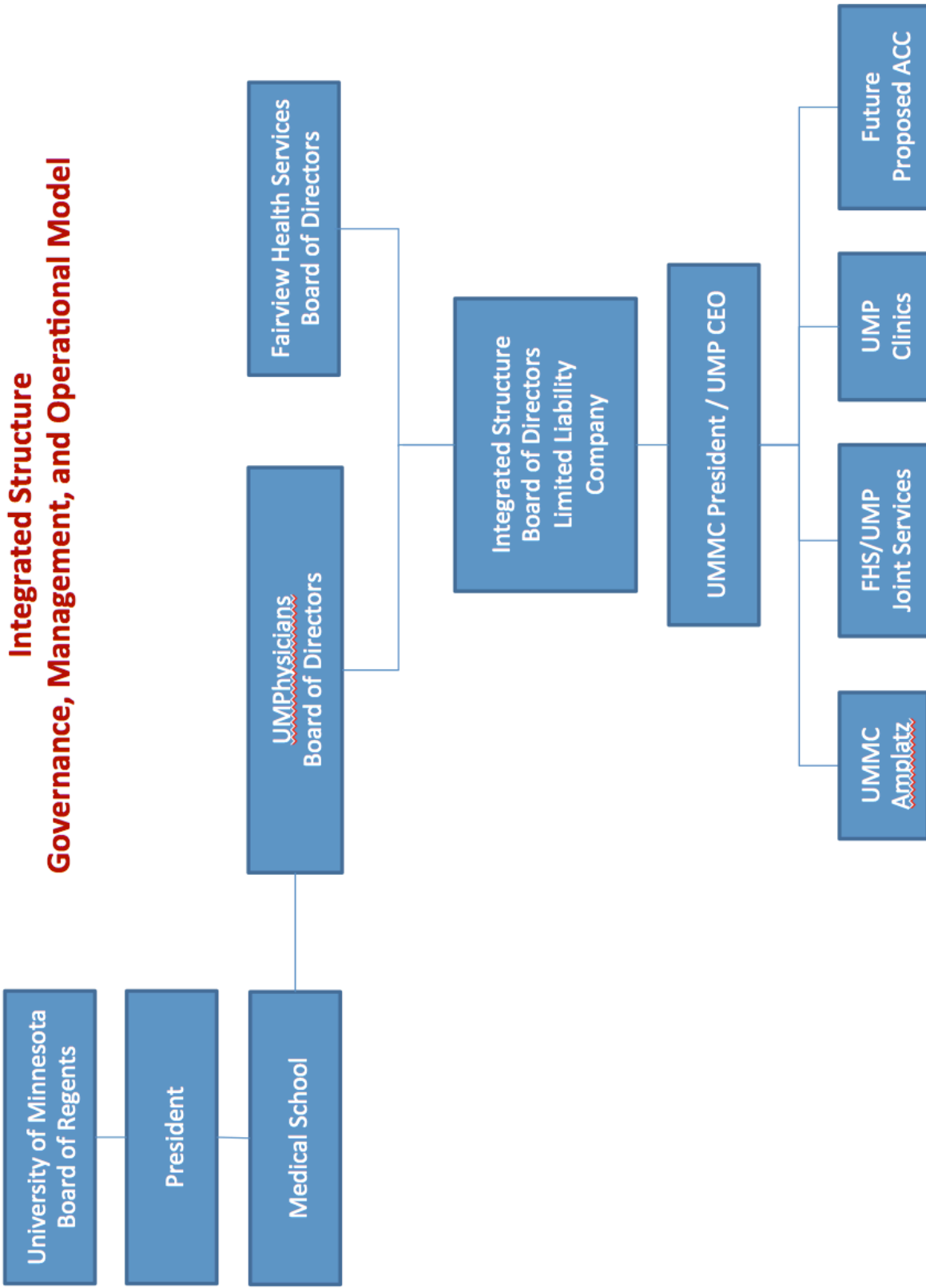
- Shared governance, shared management
- Single strategic, operational and management model
- Functional integration of clinical and administrative services
- Not a merger, acquisition or take-over
- Underlying agreements between University, Fairview and UMPPhysicians continue



The Triangle of Agreements

Among the University, UMP and Fairview Health Services





Board of Directors

- 12 Members
 - Dean of the Medical School (will serve as Chair)
 - Four members appointed by UMPPhysicians/University
 - Fairview CEO
 - Four members appointed by Fairview
 - Co-presidents of the Integrated Structure serve as non-voting members
- Dean's approval required for any action with material impact on academic programs
- New board in place by end of 2013
- Current UMMC and UMACH boards will be disbanded

Strategic Plan and Finances

- Single Strategic Plan for the IS enterprise
- Single management, operational and financial model
- Integrated operating and capital budget with shared financial and operational goals
- Virtually integrated profit and loss statements
- The three organizations remain independent, with separate balance sheets

Management

- Single management team led by UMMC President and UMPhysicians CEO
- Co-management of all the major service units
- Functional integration of clinical and administrative services
- Enterprise will continue to use Fairview Epic System and UMPhysicians professional services coding system
- IS management will make choices about other support services based on quality, service and cost

Increased Academic Support

- Opportunity to generate additional earned revenue to:
 - Invest in academic medicine, research and education
 - Continue to contribute to Fairview financial performance
- Annual amounts to the Medical School
 - \$7 million in first two years
 - \$8 million in the next two years
 - \$10 million for the next six years
- Payable in quarterly payments with fourth payment contingent on meeting net income target
- Opportunity for incentives and additional revenue if targets are exceeded

University Reserved Powers

- University retains all current authorities over clinical enterprise including:
 - Approval of new UMPHysicians sites or ventures
 - Approval of faculty appointments
 - Approval of the CEO of UMPHysicians
 - Approval regarding potential closure of any academic program
 - Approval/veto of any changes to Fairview system bylaws that adversely affect the University's rights
 - Approval of the use of the University name

University Reserved Powers

- Regents approve IS board members upon recommendation of UMPPhysicians, Dean and President
- Medical School Dean's approval required for any IS action that has material impact on academic programs
- UMPPhysicians and Fairview also retain certain reserved powers including:
 - Approval of IS budget
 - Addition of new members
 - Capital calls
 - Activities that could put the IS in conflict with UMPPhysicians and Fairview