RBHS strategic planning kick-off

December 2, 2013
Objectives for today

What is RBHS?

Share what I've heard from you over the last few months

Review the context for next semester's strategic planning efforts, including RBHS's current status

Discuss RBHS strategic planning
  • Initial thinking on RBHS aspiration and identity
  • Planning process

Get your feedback and answer questions

Review next steps
RBHS established in 2012 by the integration of the former UMDNJ with Rutgers' health professions schools

Established by the 2012 New Jersey Medical and Health Sciences Education Restructuring Act, Rutgers Biomedical and Health Sciences (RBHS) became a major new health care education, research, and clinical division at Rutgers University on July 1, 2013.

RBHS comprises most of the units of the former University of Medicine and Dentistry of New Jersey (which was dissolved under the 2012 statute), several existing Rutgers units with key health-related missions, and two research units that historically were jointly operated by Rutgers and UMDNJ.

Rutgers is one University with three geographic campuses

Newark
• Theoretical and applied research
• Public / private partnerships
• First-rate education in urban setting
• Close working relationship between students and faculty
• Diverse metropolitan campus, proximity to NYC

New Brunswick
• Large, land-grant, AAU campus
• Broad distinction in research and scholarship
• Physical & life sciences hub
• Comprehensive offerings
• International recognition in arts and humanities

Camden
• Personalized campus environment
• High-impact civic engagement
• Distinct areas of research excellence
• Engine of opportunity for families and communities
• Educational and economic impact in South Jersey and Delaware Valley

Rutgers - the State University of New Jersey

• Globally Acclaimed Brand
• Interdisciplinary & Cross-Campus Offerings
• Integrated Graduate & Professional Education
• Academic Rigor
• Broad strength in Arts and Sciences

RBHS
• Organizationally aligned with New Brunswick,
• Leader in medical, dental, and health sciences
• Clinical and research excellence
• Public / private partnerships
• Inter-professional collaboration
• Deep engagement with community
• Collaborative programs with all three campuses

...and a major Biological and Health Sciences component that is distributed geographically but aligned with the AAU campus
### RBHS locations throughout New Jersey

#### New Brunswick
- College of Nursing
- Graduate Biomedical Sciences
- Health Related Professions
- Pharmacy
- Public Health
- Robert Wood Johnson Medicine
- Center for Advanced Biotechnology and Medicine
- Environmental and Occupational Health Sciences Institute
- Institute for Health, Health Care Policy and Aging Research
- Rutgers Cancer Institute of NJ
- University Behavioral Health Care

#### Newark
- College of Nursing
- School of Nursing
- Graduate Biomedical Sciences
- Health Related Professions
- New Jersey Medical School
- Health Sciences
- Public Health
- Dental Medicine
- University Behavioral Health Care

#### Camden
- School of Nursing
- Health Related Professions
- Public Health
- Rutgers at Stratford
- Dental Medicine

#### Satellites
- **Union County**
  - Health Related Professions
- Rutgers at Scotch Plains
- **Somerset County**
  - Rutgers at Somerset

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Note: Bold font indicates schools; Non-bold font indicates centers or institutes; Italic font indicates care provider
Source: RBHS website.
What I've Heard From You
Key themes from my "listening tour" this fall

The RBHS community has a desire...

- For change
- To build excellence
- To be listened to and included
- For collaboration across RBHS and Rutgers, and with private industry
What I heard from you: potential ideas for signature areas

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<tr>
<th>I of III</th>
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<tbody>
<tr>
<td>Addictions</td>
<td>Global health</td>
<td>Preventive medicine</td>
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<td>Aging</td>
<td>Health disparities</td>
<td>Prison health</td>
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<td>Autism</td>
<td>Health economics</td>
<td>Quality of care (measures, issues in specialty areas, patient safety, organization of care and performance improvement, healthcare improvement)</td>
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<td>Big data/computing</td>
<td>Health IT</td>
<td>Reproductive health</td>
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<td>Bioengineering</td>
<td>Health policy</td>
<td>Social determinants of health and social justice</td>
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<td>Bioethics</td>
<td>Healthcare workforce needs</td>
<td>Stem cell</td>
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<td>Biomedical informatics</td>
<td>HIV</td>
<td>Team health care</td>
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<td>Biomedical imaging</td>
<td>Humanities &amp; healthcare</td>
<td>Tobacco/nicotine</td>
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<td>Biostatistics</td>
<td>Immunity/inflammation</td>
<td>Translational research</td>
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<td>Cancer</td>
<td>Infectious diseases</td>
<td>Treatment of mental health issues</td>
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<td>Child health</td>
<td>Medical humanities</td>
<td>Urban health</td>
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<td>Clinical epidemiology</td>
<td>Mental health</td>
<td>Veteran’s health</td>
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<td>Clinical research</td>
<td>Health Behavior</td>
<td>Women’s health</td>
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<td>CME and life-long learning</td>
<td>Neuroscience</td>
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<td>Device development</td>
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<td>Drug development</td>
<td>Patient-centered outcomes research</td>
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<td>Environmental/occ’l health</td>
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<td>Genomics</td>
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What I heard from you: potential initiatives and enabling structures

### Educational initiatives
- Distance learning
- Intercampus teaching
- Inter-professional education
- New joint degree opportunities
- New teaching technologies
- Professional continuing education
- Service courses
- Shortening the training path
- Undergraduate education in health related topics
- Use of simulators

### Service initiatives
- Accountable care organizations
- Health care reform
- Improving efficiency of clinical care processes
- Novel approaches to organization of healthcare
- Population medicine
- Primary care

### Enabling structures
- Advancing institutional stature
- Building maintenance
- Development/fundraising
- Fostering gender equity/diversity
- Increasing productivity
- Institutional rankings
- Opportunities for financial synergies/value added
- Research cores
- Revenue sources
- Role of Centers/Institutes
- Space/money
- Structural programmatic reassignments (depts/schools)
- Technology transfer
- Training grants
Context for RBHS Strategic Plan
Four key inputs will begin the RBHS strategic plan

1. University-wide strategic plan and overarching process

2. Changing healthcare environment

3. Existing school, center, and institute strategic plans and initiatives

4. RBHS current position and differentiators
Context: RBHS plan will build on University-wide strategic planning this semester

<table>
<thead>
<tr>
<th>Winter '12-13</th>
<th>Spring '13</th>
<th>Summer '13</th>
<th>Fall '13</th>
<th>Spring '14</th>
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<tbody>
<tr>
<td>Information-gathering</td>
<td>Strategy development and testing</td>
<td>Strategy refinement</td>
<td>Finalize strategic plan</td>
<td>Campus- / RBHS- / school-specific plans</td>
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<tr>
<td>First SC retreat</td>
<td>Second SC retreat</td>
<td>Interim report presented to the Boards</td>
<td>Fourth SC retreat</td>
<td>Final strategic plan presented to the Boards</td>
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<td>Physical master plan: data collection</td>
<td>Physical master plan: analysis &amp; synthesis</td>
<td>Physical master plan: plan development</td>
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Today
Overview: University-wide strategic plan

Aspiration: To be broadly recognized as among the nation's leading public universities: preeminent in research, excellent in teaching, and committed to community

Integrating Themes
- Cultures, Diversity, and Inequality – Local and Global
- Improving the Health and Wellness of Individuals and Populations
- Creating a Sustainable World through Innovation, Engineering, and Technology
- Educating Involved Citizens and Effective Leaders for a Dynamic World
- Creative Expression and the Human Experience

Strategic Priorities

Envision Tomorrow’s University
Build Faculty Excellence
Transform the Student Experience
Enhance Our Public Prominence

Foundational Elements
- Strong Core of Sciences and Humanities
- Inclusive, Diverse, and Cohesive Culture
- Effective and Efficient Infrastructure and Staff
- Financial Resources Sufficient to Fund our Aspirations
- Robust Shared Governance, Academic Freedom, and Effective Communication
<table>
<thead>
<tr>
<th>University-wide strategic plan</th>
<th>Campus / RBHS strategic plan</th>
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<tbody>
<tr>
<td>Sets an aspiration for the entire University</td>
<td>Translates University-wide priorities into the unique context for a campus or RBHS</td>
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<td>Unites the broader Rutgers community behind a common vision and common values</td>
<td>Defines the aspiration and goals for the campus or RBHS</td>
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<td>Lays out a set of high-level strategic priorities that guide campus, RBHS, and school planning</td>
<td>Outlines concrete initiatives that the campus or RBHS will pursue</td>
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<td>Lays out a funding strategy to support those initiatives</td>
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<td>Identifies specific metrics to measure the success of these initiatives</td>
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Key trends impacting academic healthcare

- The shift to a new healthcare model that requires greater inter-professional collaboration and innovation
- Focus on population health and keeping people healthy vs. treating illness
- Healthcare delivery moving into the community
- Changes associated with the Affordable Care Act
- Challenges to the business model for academic medicine
- Rapid pace of change in medicine, technology, and teaching
- Incorporating big data into research
RBHS's strategic planning efforts to-date

### Current status

Legacy UMDNJ plan was developed during the 04-05 school year and adopted in June, 2005

In May 2012, the UMDNJ Board of Trustees extended the plan through 2013

### Plan outlines 7 goals:

- Be a national leader in educational program design and delivery
- Be a national leader in research
- Provide high quality clinical services
- Strengthen commitment to community and diversity
- Meet NJ's needs in terms of health policy and economic development
- Cultivate culture of academic collaboration, partnerships, and effective management
- Enhance public image and recognition

### Status of RBHS school plans

| School of Nursing (legacy Rutgers) |  
| School of Nursing (legacy UMDNJ) |  
| Ernest Mario School of Pharmacy | From 2009  
| Graduate School of Biomedical Sciences |  
| New Jersey Medical School |  
| Robert Wood Johnson Medical School |  
| Rutgers School of Dental Medicine |  
| School of Health Related Professions |  
| School of Public Health |  

RBHS's Current Status: Student Education
RBHS undergraduate programs are more selective and have a higher yield than the Rutgers campuses.

**Undergraduate acceptance rate at RBHS vs. RU campuses (Fall 2012)**

- RBHS: 35.4%
- New Brunswick: 60.8%
- Newark: 57.5%
- Camden: 62.4%

**Undergraduate yield rate at RBHS vs. RU campuses (Fall 2012)**

- RBHS: 52.9%
- New Brunswick: 35.3%
- Newark: 15.4%
- Camden: 13.5%

1. Acceptance rate is defined as the ratio between the number of students accepted and the total number of applicants.
2. Yield rate is defined as the ratio between the number of students enrolled and the number of students accepted.

Source: NJ State Applications and Admissions Survey, Fall 2012; Office of Institutional Research and Academic Planning; IPEDS.
Pharmacy is largest RBHS undergraduate program

Headcount of full-time and part-time RBHS students by undergraduate program (Fall 2012)

- Pharmacy: 899 (0.2% Full-Time, 99.8% Part-Time)
- SHRP: 635 (57.8% Full-Time, 42.2% Part-Time)
- College of Nursing: 505 (23.0% Full-Time, 77.0% Part-Time)
- School of Nursing: 360 (13.3% Full-Time, 86.7% Part-Time)

Source: Office of Institutional Research and Academic Planning.
RBHS undergrad programs less diverse than some RU campuses, but still more diverse than RU-NB and public AAUs

Percentage of URMs at RBHS undergraduate schools vs. RU campuses and public AAUs with medical schools (2011)

Note: RBHS data from 2012 OIRAP report; RU and Public AAU average from 2011 IPEDS report (data unavailable for 2012).
School of Nursing, GSBS, SHRP are largest graduate programs

Breakdown of full-time and part-time RBHS students by graduate school (Fall 2012)

Source: Office of Institutional Research and Academic Planning.
131114 RBHS Day 1 presentation v9.pptx

Full-time students majority at most schools; part-time enrollment higher than full-time in nursing, Public Health
About 20% of RBHS graduate students are from under-represented minority groups

Percentage of students from under-represented minority groups by RBHS graduate school (Fall 2012)¹

1. Under-represented minority students include African American and Hispanic ethnicities.
Source: Office of Institutional Research and Academic Planning.
More than half of RBHS students receive financial aid
Medical and dental programs have highest percentage of students with aid and amount of aid

Percentage of RBHS graduate school students receiving financial aid (2011)

- NJMS: 86%
- Dental: 85%
- RWJMS: 82%
- Pharmacy: 76%
- Biomedical Sciences: 58%
- Public Health: 43%
- SHRP: 37%
- College of Nursing: 34%
- School of Nursing: 25%
- RBHS average: 52%

Average aid awarded per student:
- NJMS: $41,995
- Dental: $51,978
- RWJMS: $42,609
- Pharmacy: $19,399
- Biomedical Sciences: $25,177
- Public Health: $21,949
- SHRP: $24,084
- College of Nursing: $14,313
- School of Nursing: $16,471
- RBHS average: $27,104

Most RBHS schools have a majority of in-state students. GSBS is more evenly split with higher numbers of out-of-state students.

RBHS in-state vs. out-of-state students by graduate school (Fall 2012)

Source: Office of Institutional Research and Academic Planning.
RBHS medical schools have smaller percentage of out-of-state students than average public AAU medical school

In-state vs. out-of-state students at RBHS vs. RU and public AAUs (Fall 2012)

NJMS has higher percentage of URM students and RWJMS is comparable vs. public AAU med schools

Percentage of under-represented minority students at NJMS, RWJMS, and public AAU medical schools (2012)

Note: specific breakdown by ethnicity is unavailable for peer and aspirant medical schools.
RBHS graduate discipline rankings lag behind peers and aspirants in most specialties

Rutgers ranked higher than aspirants and peers in Physician Assistant program

1. Medical ranking for RWJMS only. Note: RBHS is unranked in Healthcare management and Occupational Therapy specialties. RBHS is #63 out of 101 schools ranked in Nursing-Anesthesia; this specialty was omitted in this analysis as no aspirants and only 4 peers are ranked.

RBHS's Current Status: Faculty
RBHS medical schools and SHRP have the largest faculties

Majority of RBHS faculty are full-time, driven by medical schools

Headcount of full-time and part-time RBHS faculty by school¹ (2013)

1. Ordered by total faculty size.
Source: Office of Institutional Research and Academic Planning.
131114 RBHS Day 1 presentation v9.pptx
RBHS’s Current Status: Research
Per capita research expenditures highest at NJMS
SHRP and NJDS less than half the size of NJMS federal expenditure / faculty member

Federal R&D expenditures per full-time faculty member (2012)

Note: R&D expenditures per faculty member calculated using FY 2013 federal expenditures divided by the number of full-time faculty members. School of Nursing did not have federal research expenditures in 2013.
Source: Office of the Controller; Office of Institutional Research and Academic Planning.
RWJMS and NJMS receive fewer grants overall and per faculty member than peer and aspirant AAU hospitals

NIH funds granted to medical school and affiliated hospitals (2012)

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<tr>
<th></th>
<th>RWJMS</th>
<th>NJMS</th>
<th>Peer AAU medical schools</th>
<th>Aspirant AAU medical schools</th>
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<td>$M</td>
<td>$43.2</td>
<td>$51.8</td>
<td>$127.1</td>
<td>$348.0</td>
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NIH research grant funds per faculty member (2012)

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<th></th>
<th>RWJMS</th>
<th>NJMS</th>
<th>Peer AAU medical schools</th>
<th>Aspirant AAU medical schools</th>
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<td>$K</td>
<td>$73.5</td>
<td>$110.9</td>
<td>$106.2</td>
<td>$199.4</td>
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NJMS has comparable research grants per faculty member to peers

Legacy UMDNJ near bottom vs. peers and aspirants in proportion of high-impact journal faculty publications

Proportion of biomedical and health sciences publications in top 10% "high impact" journals at legacy UMDNJ and RU vs. AAUs with a med school (2008-2011)

University of California, San Diego 18.8%
University of Washington - Seattle 16.1%
University of North Carolina at Chapel Hill 15.6%
University of California, Los Angeles 15.4%
University of California, Irvine 15.2%
University of Michigan 14.7%
University of Pittsburgh 14.3%
University of Virginia 13.4%
University of California, Davis 13.3%
University of Illinois at Urbana-Champaign 13.3%
University of Wisconsin - Madison 13.3%
Rutgers State University at New Brunswick 12.5%
University of Minnesota, Twin Cities 12.5%
Ohio State University 12.3%
Stony Brook University, The State University of New York 11.5%
University of Arizona 10.9%
University of Iowa 10.9%
University of Florida 10.8%
University of Missouri 10.6%
University of Medicine and Dentistry of New Jersey 10.4%
University at Buffalo, The State University of New York 9.7%
Michigan State University 8.4%

Note: UMDNJ includes School of Osteopathic Medicine.
RBHS's Current Status: Clinical
Three tiers of RBHS hospital affiliations

| Two principal teaching hospitals | • Robert Wood Johnson University Hospital – New Brunswick, NJ  
|                                 | • The University Hospital – Newark, NJ |
| Three university hospitals      | • Hackensack University Medical Center – Hackensack, NJ  
|                                 | • Meridian Hospitals Corporation / Jersey Shore University Medical Center – Neptune, NJ  
|                                 | • University Medical Center at Princeton – Princeton, NJ |
| 80+ affiliated hospitals or providers, eg: | • University Behavioral Health Care – a mental health and addiction services network  
|                                 | • The New Jersey Medical School Cancer Center – one of only 14 NCI-designated Minority-Based Community Clinical Oncology Programs  
|                                 | • Rutgers School of Dental Medicine Dental CRC – one of only a few dental CRCs in the nation |
RBHS's Current Status: Alumni Base
RBHS alumni base grew at 5% CAGR from 2009 to 2012

Source: Rutgers University / Alumni Relations Information Technology Department.
RBHS alumni giving rates are lower than Rutgers-New Brunswick and public AAUs

Alumni giving rates, 2012

Source: Rutgers University / Alumni Relations Information Technology Department, US News & World Report.
Initial thinking on RBHS aspiration and identity
Initial RBHS aspiration

**RBHS will be recognized as one of the best Academic Health Centers in the country in terms of teaching, research, and clinical care. This will require a new level of excellence and integration across all the professions and schools.**
Rutgers Biomedical and Health Sciences (RBHS) is spearheading the University's efforts to be a renowned leader in the health sciences and professions. Building upon its many outstanding programs and capabilities, RBHS will strengthen biomedical education and research and foster new public-private partnerships with industries that are critical to New Jersey's economic prosperity.

RBHS is focused on achieving seamless operational integration, continuing to bolster its existing areas of clinical and research excellence, and realizing inter-professional synergies between research and teaching among its various schools. Additionally, RBHS will work to incorporate the insight from disciplines outside its natural domain, such as the social sciences, engineering, law and business, and the arts and humanities.
RBHS strategic planning process
Unique aspects of RBHS (vs. the remainder of Rutgers) will shape our planning process

<table>
<thead>
<tr>
<th>Factors unique to RBHS</th>
<th>Relevance to planning process</th>
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<tbody>
<tr>
<td>Healthcare delivery is central to RBHS's mission</td>
<td>A level of excellence is required across all programs in order to provide excellent care</td>
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<tr>
<td>Healthcare delivery as a whole is undergoing significant change right now</td>
<td>A limited number of programs will be selected as &quot;signature&quot; programs</td>
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<tr>
<td>RBHS has additional postgraduate missions, from residencies to continuing education</td>
<td>The plan should be a &quot;living document&quot;: flexible enough to know when to change course, if necessary</td>
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<tr>
<td>RBHS has access to additional types of resources, e.g.:</td>
<td>Teaching hospitals must be incorporated into the strategic planning process</td>
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<tr>
<td>• Clinical and grant revenues</td>
<td>Fundraising and budgeting processes may differ substantially from those of RU geographic campuses</td>
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<td>• Fundraising opportunities from grateful patients</td>
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<td>• Continuing education</td>
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<td>• Technology transfer</td>
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<td>• Public-private partnerships</td>
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Initial thinking: key principles that will guide RBHS planning

The RBHS planning process will...

- Allow enough time for a thorough, honest self-assessment of our schools and programs
- Give all community stakeholders an opportunity to contribute to the discussion about our future
- Foster collaboration between RBHS schools and with the larger Rutgers community
- Ensure that the RBHS plan aligns with the University-wide plan
- Create mechanisms to hold ourselves accountable to the plan we ultimately produce
Initial thoughts on RBHS planning process
Small group and individual stakeholder discussions will continue throughout

<table>
<thead>
<tr>
<th>December</th>
<th>Phase I</th>
<th>February</th>
<th>Phase II</th>
<th>April</th>
<th>Phase III</th>
<th>May</th>
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<tbody>
<tr>
<td>Review RU-wide and existing school plans</td>
<td>Establish SC</td>
<td>RBHS survey on goals and issues</td>
<td>RU faculty survey on areas of interest</td>
<td>SC identifies RBHS initiatives</td>
<td>Working groups develop implementation plans</td>
<td>SC and Chancellor finalize</td>
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- RBHS kick-off
- Forum to review survey results
- Forum to refine initiatives
- Forum to gather feedback
- Final RBHS plan
Q&A and next steps
Questions for discussion today

What is your gut reaction to this presentation?
- What do you like?
- What do you not like?

What are you already doing that fits in with the RBHS aspiration and identity?

What should we be thinking about that we are not already?
- Healthcare trends
- Planning process
- Aspiration
- Identity

What other questions and reactions do you have?
Initial RBHS aspiration

RBHS will be recognized as one of the best Academic Health Centers in the country in terms of teaching, research, and clinical care. This will require a new level of excellence and integration across all the professions and schools.
Rutgers Biomedical and Health Sciences (RBHS) is spearheading the University's efforts to be a renowned leader in the health sciences and professions. Building upon its many outstanding programs and capabilities, RBHS will strengthen biomedical education and research and foster new public-private partnerships with industries that are critical to New Jersey's economic prosperity.

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