Aligning Research with Institutional Goals

Experience of our North and Central Divisions

Presented by Jim Rohack MD Chief Health Policy Officer
with help from Drs David Ballard, Chief Quality Officer, Dr Donald Wesson, Chief Academic Officer and Dr Andrew Masica, Chief Clinical Effectiveness Officer

IOM-PCORI Workshop
April 23, 2014
Circle of Care

**VISION:**
To be the most trusted name in giving and receiving safe, quality, compassionate care.

- **People**
  Be the Best Place to Deliver and Receive High Quality Care

- **Quality**
  Practice Evidence Based and Patient Centered Care

- **Finance**
  Be Responsible Financial Stewards

- **Service Excellence**
  Deliver Value to our Patients and our Communities

- **Staff & Physician Engagement**
- **Education & Research**
- **STEEEP Quality Improvement**
- **Liquidity and Debt Capacity**
- **Operational Efficiency**
- **Philanthropy**

Lean thinking supports all that we do.
Integrated Delivery System
Build a Fully Integrated and Digitally Connected Care Delivery Network

New Models of Care
Deliver the Right Care at the Right Time in the Right Setting for our Patients

Baylor Scott & White Health is Routinely Listed as a “Top 3” Health Care System Nationally

Scale and Synergy
Achieve Economies of Scale and Influence to Enable Future Success

Population Health
Achieve the Triple Aim of Health Care

Circle of Innovation

- Baylor Scott & White Quality Alliance
- IT and Data Analytics
- Health Plan
- Chronic Disease Management
- Wellness
- Technology Enabled Access
- New Models of Reimbursement
- Merger Synergy
- Strategic Growth
- Healthy Population
- Reduced Cost per Capita
- Improved Experience of Care
BSWH Governance

• Board of Trustees—meets quarterly
• Leadership Council—meets quarterly
• Operations Council—meets weekly- Chief Academic Officer sits on
• Clinical Leadership Council—meets monthly
BSWH: Office of the CQO-Organizational Structure
BSWH Operational Goals Supported by Specific Research Programs

• **Reduce Mortality and Morbidity**
  Patient Safety, Clinical Effectiveness

• **Improve Patient Experience**
  Shared Decision Making

• **Manage Health at a Population Level**
  Transitional Care

• **Improve Financial Operating Margin**
  Health Economics

*These are matrixed relationships (i.e. each research program promotes multiple system operational goals)*
## System Roles Underpin Research Infrastructure

<table>
<thead>
<tr>
<th>Research Program</th>
<th>Operational Leads/Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Programs report to David Ballard, MD, PhD, MPH (BSWH Chief Quality Officer)</td>
<td>*Portions of these departmental budgets come from externally funded research</td>
</tr>
</tbody>
</table>
| Patient Safety             | Don Kennerly, MD, PHD  
                            Chief Patient Safety Officer                                 |
| Clinical Effectiveness     | Andrew Masica, MD, MSCI  
                            Chief Clinical Effectiveness Officer                           |
| Shared Decision Making     | Terri Nuss, MBA  
                            VP, Patient Centeredness                                        |
| Health Economics           | Neil Fleming, PhD  
                            VP, Health Policy Research                                     |
|                            | Ian McCarthy, PhD  
                            Director, Health Economics                                      |
| Transitional Care          | Cliff Fullerton, MD, MS  
                            Chief Population Health Officer                                  |
Specific Projects Connected with System Goals

**Mortality/Morbidity Reduction**

**Related Research**
1. Adverse Event Reduction
2. The HVHC: Engaging Patients to Meet the Triple Aim (Sepsis Bundle Deployment)
3. Implementing a Bundle for Intensive Care Unit Delirium

**Improve Patient Experience**

**Related Research**
1. The HVHC: Engaging Patients to Meet the Triple Aim (Shared Decision Making)

**Manage Health at a Population Level**

**Related Research**
1. Deerbrook Foundation Grant (Transitional Care)
2. Impact of EHRs on Diabetes Care Quality and Outcomes

**Improve Operating Margin**

**Related Research**
1. Impact of Health IT on Primary Care Work-Flow and Financial Measures
2. Impact of Order Set Deployment on Quality and Costs of Care
3. Effectiveness and Cost of a Transitional Care Program for Heart Failure
Lessons Learned from Northern Division

1. There is a business imperative to conduct research related to health care delivery organization institutional goals.

2. Governance and related operational mechanisms need to be in place to shorten the cycle time from research evidence generation to related health care organization management decisions.

3. While federal funding can be helpful for this type of research, typical federal peer review funding cycle times make it difficult for these sources to have major roles in research related to health care delivery organization operational goals.

4. Successful delivery organizations will have a robust infrastructure to support these aligned research efforts as a core component of day to day operations.
Academic Alignment at BSW-Central

• System-supported research that is directed to improve the quality and efficiency of healthcare delivery involves GME residents in the design, planning and execution.

• All residents receive didactic training how to conduct such projects and how to integrated the learning into their day to day practice.
• Quality research is intentionally integrated into the clinical spectrum of translational research.

• EG: Traumatic Brain Injury of Trauma Research connects Ph.D basic scientists exploring blood brain barrier with Clinician scientists exploring TBI biomarkers with Clinicians exploring clinical manifestations with Quality investigators exploring how that data can be used to improve quality of care and quality of life
Academic Alignment-BSW-Central

• The research to improve quality of care is composed of a consortium of employed clinicians working side-by-side with independent but fully aligned clinicians in same research protocols focused on same goals.

• Research resources from Academic Operations (e.g. statisticians) help to support health delivery research that improves patient care and outcomes
Lessons Learned from BSW-Central

• Academic partnerships can depend on personalities of leaders
• Tenure vs non-tenure tracks, faculty titles that are modified or not can be major issues
• Who controls and how the indirect dollars flow for outside grants with partners is not easy. Trust is key.
• Curricular reform at medical school can bring up town-gown clashes
Detailed Examples of Research Programs and Alignment with Operational Goals (BSWH North Division)
Patient Safety

<table>
<thead>
<tr>
<th>Grant Title</th>
<th>Funding Agency</th>
<th>Award Amount</th>
<th>Length of Study</th>
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<tbody>
<tr>
<td>Engaging Physicians to Improve Patient Safety in Ambulatory Primary Care</td>
<td>Physician’s Foundation</td>
<td>$123,384</td>
<td>2006-2009</td>
</tr>
<tr>
<td>Adverse Event Directed Analysis in Ambulatory Primary Care</td>
<td>AHRQ</td>
<td>$199,986</td>
<td>2007-2009</td>
</tr>
<tr>
<td>Improving the Safety of Primary Care by Measuring Adverse Events and Improvement</td>
<td>AHRQ</td>
<td>$868,061</td>
<td>2008-2011</td>
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</table>

Research Focus: To reduce adverse events in the hospital setting

Publications


Clinical Effectiveness*

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<tr>
<td>The HVHC: Engaging Patients to Meet the Triple Aim</td>
<td>CMS</td>
<td>$850,000</td>
<td>2013-2015</td>
</tr>
<tr>
<td>Implementing a Bundle for Intensive Care Unit Delirium - the IBID Project</td>
<td>AHRQ</td>
<td>$587,421</td>
<td>2012-2014</td>
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*Projects still in progress; manuscripts for peer review in development

Research Focus:

1. **Sepsis Improvement (HVHC):** to optimize the treatment of septicemia and sepsis through implementation of bundled care interventions with improvement strategies

2. **ICU Delirium (AHRQ):** to deploy specific care processes for ICU delirium in a coordinated bundle and evaluate the impact of the bundle on practice adoption, clinical outcomes, and program sustainability
# Health Economics

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<td>Impact of Health IT on Primary Care Work-flow and Financial Measures</td>
<td>AHRQ</td>
<td>$99,955</td>
<td>2010-2012</td>
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**Research Focus:**

1. To inform real world health IT adoption and implementation decisions for stakeholders

2. To stimulate more comprehensive health IT implementation research by increasing the knowledge base regarding perceived barriers to health IT implementation in ambulatory care settings

**Publications**


# Health Economics (cont.)

## Impact of Order Sets on Quality and Costs of Care Publications


## Effectiveness and Cost of a Transitional Care Program for Heart Failure Publications

Population Health Management
(PI: D. Ballard, MD, PhD, MSPH, FACP)

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<th>Length of Study</th>
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<tr>
<td>Impact of an AEHR on Quality of Diabetes Care in a Primary Care</td>
<td>ADA</td>
<td>$562,000</td>
<td>2009-2011</td>
</tr>
<tr>
<td>Impact of Health IT Implementation on Diabetes Process and Outcome Measures</td>
<td>AHRQ</td>
<td>$299,985</td>
<td>2011-2013</td>
</tr>
</tbody>
</table>

Research Focus:
1. To quantify the effects of a commercially-available ambulatory electronic healthcare record (EHR) on quality of diabetes care, as measured by compliance with recommended processes of care and patient outcome measures, in a large group of primary care practices

Publications


**Winner of the 2012 John Eisenberg Article-of-the-Year Award**