Clinical & Prevention Urinary Incontinence Trials: Is there a Sensible Path Forward?

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DISCLOSURES

- Current Funding: NIH-NIA & Beaumont Health Foundation (Philanthropy)
- Other Financial Relationship: None
- Conflict Of Interest: None
CLINICAL & PREVENTION UI TRIALS
IS THERE A SENSIBLE PATH FORWARD?

- What do we want to accomplish?
  - Our GOALS
- What are the barriers in achieving our goals?
  - BARRIERS TO BREAK
- How can we achieve our goals?
  - Our STRATEGY
GOALS FOR GERIATRIC UI RESEARCH

• Provide Means To Drastically Reduce The Incidence Of UI & Cure/Control UI Among Sufferers – Improve QOL

• Science of UI Need
  - Improve knowledge in basic science dealing with the LUT
  - An accurate assessment of the incidence and remission rates
  - Reliable information regarding risk factors
  - Effective standardized clinical and preventive intervention for UI
GOALS FOR GERIATRIC UI RESEARCH

PROVIDE MEANS TO SUPPORT SCHOLARS OF UI RESEARCH

- Unification of the various disciplines and institutions working in Geriatric UI research
- Soliciting and encouraging new disciplines for new ideas and solutions
  - Focus the efforts by defining common goals
  - Establish a strategy to raise adequate funds to support Geriatric UI research
  - Establish a clearing house for collection & dissemination of accurate validated information for public consumption
MAJOR ISSUES (BARRIERS) MOVING FORWARD

- **Lack of Focus/Coherence**
  - Wide ranging publications in this topic - No consensus

- **Duplication of Efforts**
  - Too many cross-sectional survey & duplicative intervention studies

- **Gaps of Basic Knowledge**
  - Limited longitudinal studies (incidence, remission, risk factors, etc.) and under-utilization of voluminous data

- **Disparate Groups and Ideas**
  - Duplication of efforts with conflicting results
MAJOR ISSUES (BARRIERS) MOVING FORWARD

- Shortage of Funds and Scholars
- Lack of Authoritative Clearing House for Collection & Dissemination of Information
  - Professional organizations, medical centers, governmental agencies, private enterprise, etc.
- Focus/Efforts/Ideas
  - Basic Science
    - Molecular, biochemical, pharmacologic, cellular, neuronal, etc.
  - Clinical
    - Epidemiology, diagnostic, therapy intervention
Focus/Efforts/Ideas

- Prevention
  - Primary, secondary, both and with what

- Participants (Subjects/Patients) & Care Settings
  - Best model for basic science research
  - Gender differences and focus
  - Settings: Community, Assisted living, Nursing homes, In-patients, Palliative/Hospice care
BARRIERS con’t.

- TECHNOLOGY: MINING THE DATA BASES
  - Utilization of electronic technology in data mining & clinical application
  - Mining the MESA data base to identify risk factors for geriatric UI
    - NIH Funded Grant 2011-2015*
    - Established “continence index: A new questionnaire to predict UI in elderly women in the community

OUTCOMES OF MINING THE MESA DATA BASE
EIGHT RISK FACTORS FOR GERIATRIC UI

1. BMI >24
2. Sneeze often/sometimes
3. Post-partum UI
4. Trouble getting to toilet
5. Wetting |soiling 1/wk.+
6. Can’t shut off stream
7. Memory problems
8. Possible future UI

<table>
<thead>
<tr>
<th>COMBINATION FACTORS</th>
<th>PROBABILITY UI (LL OF CI)</th>
</tr>
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<tbody>
<tr>
<td>1 Factor</td>
<td>50-58%</td>
</tr>
<tr>
<td>2 factors</td>
<td>56-69%</td>
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<tr>
<td>3 factors</td>
<td>66-78%</td>
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<tr>
<td>4 factors</td>
<td>74-87%</td>
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<tr>
<td>5 factors</td>
<td>85-89%</td>
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<tr>
<td>6 factors</td>
<td>87-92%</td>
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<tr>
<td>7 factors</td>
<td>93-95%</td>
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<tr>
<td>8 factors</td>
<td>96%</td>
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BARRIERS

• Funding Issues
  - Governmental Agencies: NIH, DOD, CDC etc., Philanthropy, Private Enterprise: Pharma, insurance companies, etc.

• Scientific Expertise
  - Centers of Excellence
  - Specialists & Specialties – multiple disciplines
  - Institutional support
STRATEGY TO ACCOMPLISH GOALS

- Need to establish a consensus among stakeholders
- Convene a consensus conference
  - Under the auspices of a government agency & other organizations
  - Open to multiple participants (institution & disciplines)
  - Establish known facts & current status
  - Identify and prioritize gaps of knowledge
  - Establish a focused comprehensive research agenda
  - Establish a clearing house to disseminate information
CONCLUSION

- Knowledge on Geriatric UI has advanced
- Significant knowledge gaps still exist
- Prevalence of UI is still high
- Major barriers include issues with content, infrastructure, personnel and funding
- Need for a consensus to develop a strategy to
  - Improve dissemination of information
  - Identify and prioritize solving gaps of knowledge
  - Establish a focused comprehensive research agenda