**MHIF FEATURED STUDY:**

**ACURATE IDE**

**DESCRIPTION:**

To evaluate safety and effectiveness of the ACURATE neo 2™ Transfemoral Aortic Valve System for transcatheter aortic valve replacement (TAVR) in symptomatic subjects with severe aortic stenosis who are considered at intermediate or greater risk for surgical valve replacement.

Prospective, multicenter, 1:1 randomization to any commercially available TAVR device.

**CRITERIA LIST/ QUALIFICATIONS:**

**Inclusion**

1. Severe native aortic stenosis defined as initial AVA ≤1.0 cm² (or AVA index ≤0.6 cm²/m²) AND a mean pressure gradient ≥40 mm Hg OR maximal aortic valve velocity ≥4.0 m/s OR Doppler velocity index ≤0.25 as measured by echocardiography and/or invasive hemodynamics
2. Aortic annulus size of ≥21 mm and ≤27 mm
3. Symptomatic aortic valve stenosis per IC1 definition above with NYHA Functional Class ≥ II

**Exclusion**

1. Unicuspid or bicuspid aortic valve
2. Previous acute myocardial infarction within 30 days prior to the index procedure
3. Subject has severe aortic, tricuspid, or mitral regurgitation

**CONDITION:**

Symptomatic Severe Aortic Stenosis (AS)

**PI:**
Santiago Garcia, MD

**RESEARCH CONTACT:**
Karen Meyer, RN
Karen.Meyer2@allina.com | 612-863-5855

**SPONSOR:**
Boston Scientific

**CONDITION:**
Symptomatic Severe Aortic Stenosis (AS)

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**SPONSOR:**
Boston Scientific

**OPEN AND ENROLLING:**
Please Refer Patients!

**EXCLUSION:**

1. Unicuspid or bicuspid aortic valve
2. Previous acute myocardial infarction within 30 days prior to the index procedure
3. Subject has severe aortic, tricuspid, or mitral regurgitation
Minneapolis Heart Institute Foundation® Cardiovascular Grand Rounds

Title: Provider Wellness and Burnout; How to Boil A Frog
Speaker: Michele LeClaire, MD, MS
Senior Medical Director, Critical Care,
Hennepin Healthcare
Assistant Professor of Medicine, University of MN

Date: October 21, 2019
Time: 7:00 - 8:00 AM
Location: Minneapolis Heart Institute Building, Suite 100,
Learning Center

OBJECTIVES
At the completion of this activity, the participants should be able to:
1. Define burnout and current models for understanding it.
2. Measure burnout.
3. Construct basic points of action based on data.

ACCREDITATION
Physician - Allina Health is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. Allina Health designates this live activity for a maximum of 1.0 AMA PRA Category 1 Credit(s)™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Nurse - This activity has been designed to meet the Minnesota Board of Nursing continuing education requirements for 1.0 hours of credit. However, the nurse is responsible for determining whether this activity meets the requirements for acceptable continuing education.

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The ACCME defines a commercial interest as “any entity” producing, marketing, re-selling, or distributing health care goods or services consumed by, or used on, patients. The ACCME does not consider providers of clinical service directly to patients to be commercial interests - unless the provider of clinical service is owned, or controlled by, an ACCME-defined commercial interest.

Moderator(s)/Speaker(s)
Dr. Michele LeClaire has disclosed that she DOES NOT have any real or apparent conflicts with any commercial interest as it relates to presenting the content in this activity/course.
Planning Committee

Dr. Alex Campbell, Jake Cohen, Jane Fox, Dr. Kevin Harris, Dr. Kasia Hryniewicz, Rebecca Lindberg, Amy McMeans, Dr. Michael Miedema, Dr. JoEllyn Moore, Pamela Morley, Dr. Scott Sharkey, Maia Hendel and Jolene Bell Makowesky have disclosed that they DO NOT have any real or apparent conflicts with any commercial interest as it relates to the planning of this activity/course. Dr. Mario Gössl has disclosed the following relationships - Edwards Life Sciences: Grant/Research Support; Abbott Vascular, Caisson: Consultant; Speaker’s Bureau: Edwards Lifesciences. Dr. David Hurrell has disclosed the following relationship - Boston Scientific: Chair, Clinical Events Committee.

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We would like to thank the following company for exhibiting at our activity.

Novartis

Accreditation of this educational activity by Allina Health does not imply endorsement by Allina Learning & Development of any commercial products displayed in conjunction with an activity.

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PLEASE SAVE YOUR SERIES FLIER

When you request a transcript this serves as your personal tracking of activities attended. Most professional healthcare licensing/certification boards will not accept a Learning Management System (LMS) transcript as proof of credit; there are too many LMS’s across the country and their validity/reliability are always in question.

If audited by a licensing board or submitting for license renewal or certification renewal, boards will ask you not the entity providing the education for specific information on each activity you are using for credit. You will need to demonstrate that you attended the activity with a copy of your certificate/evidence of attendance, a brochure/flier and/or the conference handout.

Each attendee at an activity is responsible for determining whether an activity meets their requirements for acceptable continuing education and should only claim those credits that he/she actually spent in the activity.

Maintaining these details are the responsibility of the individual.

PLEASE SAVE A COPY OF THIS FLIER AS YOUR CERTIFICATE OF ATTENDANCE.

Signature: ____________________________

My signature verifies that I have attended the above stated number of hours of the CME activity.

Allina Health - Learning & Development - 2925 Chicago Ave - MR 10701 - Minneapolis MN 55407
Provider Wellness

Michele M. LeClaire, MD, MS
Office of Professional Worklife
Hennepin County Medical Center, Minneapolis MN

Provider Wellness
aka How to boil a frog

Michele M. LeClaire, MD, MS
Office of Professional Worklife
Hennepin County Medical Center, Minneapolis MN
If I had woken up one day 5 years ago and felt like I feel right now, I would have known there was something very wrong with me.

Objectives

- Identify current definition and models of burnout
- Measure burnout – we are doing the Mini-Z
- Construct basic points of action based on data

Some discussion would make this more fun
Burnout defined

- Emotional Exhaustion
- Depersonalization
- Low personal accomplishment


The nation’s health care workforce is not healthy: Burnout at 54%
Importance of this work

- Burnout: Decreased quality of care and increased medical errors, Decreased patient satisfaction, Decreased productivity and professional effort
- Personal:Broken relationships, Alcohol and substance use, Depression, Suicide
- Professional: Physician turnover

**FIGURE 1.** Personal and professional repercussions of physician burnout.


Making the business case – outcomes of dissatisfaction

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Burnout</td>
<td></td>
</tr>
<tr>
<td>Turnover: $500,000- 1,000,000/departing physician</td>
<td>Shanafelt et al. <em>JAMA IM</em> 2017; online</td>
</tr>
</tbody>
</table>
Burnout a long term stress reaction

- Predictors of stress well known (time pressure, control, work-home interference, support, chaos, values alignment)
- Burnout is predictable, and thus preventable

Number of clinicians who need to burn out = zero (0)

Demand–control model of job stress

- Demands balanced by control
- Stress increases if demands rise or control diminishes
- Support can facilitate impact of control
- Bottom line… support and control prevent stress


Burnout model

Background variables

- Academic practice
- Solo practice
- Work hours
- Age
- Gender
- Partnered
- Children
- Years worked

Mediating variables

- Work control
- Work–home interference
- Home support

Variable outcomes

- Stress
- Satisfaction

Burnout

Gender differences

- US: 60% greater odds of burnout in women MDs (McMurray, *JGIM* 2000;15:372–80.)
- More burnout in US women MDs due to gendered expectations for listening (more psychologically complex patients)
- US women MDs describe faster pace, less values alignment with leadership (Horner-Ibler et al. *J Gen Intern Med* 2005; 20(s1):194)
- Solution: collaboration, understanding, flexibility, resources

MEMO Study conceptual model

<table>
<thead>
<tr>
<th>Workplace Characteristics</th>
<th>Physician Reactions</th>
<th>Patient Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure, Culture, Workflow, Policies, processes, Patient demands</td>
<td>Satisfaction, Stress, Burnout, Intent to leave</td>
<td>Satisfaction, Trust, Quality of care, Medical errors</td>
</tr>
</tbody>
</table>
A Cluster Randomized Trial of Interventions to Improve Work Conditions and Clinician Burnout in Primary Care: Results from the Healthy Work Place (HWP) Study

Mark Linzer, MD1,3, Sara Poplau, BA2, Ellie Grossman, MD, MPH4, Anita Varkey, MD5, Steven Yale, MD5, Eric Williams, PhD7, Lanis Hicks, PhD8, Roger L. Brown, PhD9, Jill Wallock, BS8, Diane Kohnhorst, BS9, and Michael Barbouche, BS10

<table>
<thead>
<tr>
<th>Workflow redesign</th>
<th>Communication improvement</th>
<th>Chronic disease QI projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA data entry</td>
<td>Improved teamwork</td>
<td>Establishing quality metrics with clinician input</td>
</tr>
<tr>
<td>Improved clinic efficiency projects</td>
<td>Improved communication between provider groups</td>
<td>Automated Rx refill line</td>
</tr>
<tr>
<td>Provided time for MAs and RNs to perform tasks</td>
<td>Routine clinician meetings discussing meaningful topics</td>
<td>Med reconciliation project</td>
</tr>
<tr>
<td>Paired MAs and providers</td>
<td>Surveyed providers for “wish list” issues</td>
<td>Screening project for diabetics</td>
</tr>
<tr>
<td>Non–physician staff assist with forms</td>
<td>Clinicians meeting with leaders</td>
<td>Screening for depression</td>
</tr>
</tbody>
</table>
Organizational culture

- My ideas and suggestions are valued by my organization
- My organization helps me deal with stress and burnout
- Organizational leaders must stop treating physicians as employees
- Clinicians need to be embraced as partners in the delivery of care


Trust in organization

Facets of culture that affect physician trust in organization:
- Practice emphasis on quality over productivity
- Values alignment with leaders
- Practice emphasis on information/communication
- Collegiality/cohesion
- Work control

Linzer et al 2019 JAMA Open
For questions 1-10, please indicate the best answer. (Numeric score indicated by number next to response.)

1. Overall, I am satisfied with my current job:
   5=Agree strongly  4=Agree  3=Neither agree nor disagree  2=Disagree  1=Strongly disagree

2. Using your own definition of "burnout", please choose one of the numbers below:
   5=I enjoy my work. I have no symptoms of burnout.
   4=I am under stress, and don't always have as much energy as I did, but I don't feel burned out.
   3=I am beginning to burn out and have one or more symptoms of burnout, e.g. emotional exhaustion.
   2=The symptoms of burnout that I'm experiencing won't go away. I think about work frustrations a lot.*
   1=I feel completely burned out. I am at the point where I may need to seek help. *
   *If you select 1 or 2, please consider seeking assistance – call your insurance provider or employee assistance plan (EAP)

3. My professional values are well aligned with those of my clinical leaders:
   5=Agree strongly  4=Agree  3=Neither agree nor disagree  2=Disagree  1=Strongly disagree

4. The degree to which my care team works efficiently together is:
   1=Poor  2=Marginal  3=Satisfactory  4=Good  5=Optimal

5. My control over my workload is:
   1 = Poor  2 = Marginal  3 = Satisfactory  4 = Good  5 = Optimal

6. I feel a great deal of stress because of my job:
   1=Agree strongly  2=Agree  3=Neither agree nor disagree  4=Disagree  5=Strongly disagree

7. Sufficiency of time for documentation is:
   1 = Poor  2 = Marginal  3 = Satisfactory  4 = Good  5 = Optimal

8. The amount of time I spend on the electronic medical record (EMR) at home is:
   1=Excessive  2=Moderately high  3=Satisfactory  4=Modest  5=Minimal/none

9. The EMR adds to the frustration of my day:
   1=Agree strongly  2=Agree  3=Neither agree nor disagree  4=Disagree  5=Strongly disagree

10. Which number best describes the atmosphere in your primary work area?
    Calm  5  Busy, but reasonable  4  Hectic, chaotic  3  2  1

Text

- Open new text– #22333
- Message: MICHELELECLA997 (MICHIE LECLA 997)
- Web: PollEv.com/michelelecla997
1. Overall, I am satisfied with my current job

5 = Agree strongly
4 = Agree
3 = Neither agree or disagree
2 = Disagree
1 = Strongly disagree

2. Using your own definition of "burnout", please choose one of the numbers below:

5 = I enjoy my work. I have no symptoms of burnout.
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1 = I feel completely burned out. I am at the point where I may need to seek help.
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1 = Agree strongly
2 = Agree
3 = Neither agree nor disagree
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5 = Strongly disagree

10. Which number best describes the atmosphere in your primary work area?

5 = Calm
4
3 = Busy, but reasonable
2
1 = Hectic, chaotic
Mini-Z without PHQ-2
When survey is active, respond at PollEv.com/michelelecla997

1. Overall, I am satisfied with my current job:
2. Using your own definition of “burnout”, please choose one of the numbers below:
3. My professional values are well aligned with those of my clinical leaders:
4. The degree to which my care team works efficiently together is:
5. My control over my workload is:
6. I feel a great deal of stress because of my job:
7. Sufficiency of time for documentation is:
8. The amount of time I spend on the electronic medical record (EMR) at home is:
9. The EMR adds to the frustration of my day:
10. Which number best describes the atmosphere in your primary work area?

Targets
> 80% satisfied
< 20% burned out
> 80% aligned
> 80% efficient teamwork
< 25 % with poor control
< 30% stressed
< 25% time pressured
< 20% excessive EMR at home
< 20% frustrated
< 40% chaotic
HCMC Office of Professional Worklife 2015 – Present

- Provider Wellness Committee (dept-specific burnout reduction activities based on annual wellness survey data)
- Wellness Center – a place to workout, relax, meditate, read the paper, have coffee, connect
- EMR stress reduction interventions
- Reset Room
- Retreats, wellness champions, Chief Wellness Officer, individual counseling, burnout on organizational dashboard, organizational incentives to reduce burnout

Response 461/679 = 68%
Low Burnout in a safety net hospital: what’s going right?

<table>
<thead>
<tr>
<th>Variable</th>
<th>ICU (n=21)</th>
<th>Other HHS providers (n=414)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of Control</td>
<td>30%</td>
<td>37%</td>
<td>0.50</td>
</tr>
<tr>
<td>Chaos</td>
<td>40%</td>
<td>54%</td>
<td>0.20</td>
</tr>
<tr>
<td>High documentation time pressure</td>
<td>20%</td>
<td>37%</td>
<td>0.15</td>
</tr>
<tr>
<td>Teamwork high</td>
<td>95%</td>
<td>86%</td>
<td>0.33</td>
</tr>
<tr>
<td>Values alignment high</td>
<td>95%</td>
<td>80%</td>
<td>0.14</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>95%</td>
<td>86%</td>
<td>0.33</td>
</tr>
<tr>
<td>Stress high</td>
<td>40%</td>
<td>59%</td>
<td>0.08</td>
</tr>
<tr>
<td>Burnout</td>
<td>10% [1]</td>
<td>36% [18]</td>
<td>0.015</td>
</tr>
</tbody>
</table>

* P-value from Chi Square Test
* P-value from Fisher’s Exact Test

Summary

- ICU Burnout 10% vs 36% in all other providers
- ICU job satisfaction, teamwork, and values alignment was high
- Odds of burnout were 4X lower for ICU providers vs others at HHS
- Values alignment was associated with 3 X less burnout in all providers
- Non-beneficial care noted in 30% of MICU providers
- Work outside the ICU was narrated as protective
Demand–control model of job stress

- Demands balanced by control
- Stress increases if demands rise or control diminishes
- Support can facilitate impact of control
- Bottom line… support and control prevent stress

Examples

› Working parents in a primary care clinic stressed due to clinic ending late.
› High performing department with high stress and burnout. Anticipated higher volume for following year. EMR work was major issue.
› Department with very high stress and burnout. Deep dive survey – facilitated meeting with dept and leaders.
› APPs found to have higher burnout than physicians. Many qualitative comments – problems with keeping up with documentation.
How can we prevent burnout?

- Flexible/part-time work
  (Linzer et al. Acad Med 2009;84:1395-1400)
- Leaders model work–home balance; value well-being
- Understand and promote work control
- Alter our “culture of endurance”
- Wellness focus – reflection, exercise, share concerns with colleagues
  (LeMaire J. BMC HSR. 2010; 10:208)

Ways forward

- Acknowledge value of clinician time with patients
- Lengthen visits, build teams, pre–visit planning
- Floats to cover predictable life events
- Reduce RVU focus to decrease burnout, improve morale
- Make wellness a priority: favorable patient, provider and organizational outcomes will occur
Thank you for inviting me!

Michele.leclaire@hcmed.org for the Hennepin Healthcare Institute for Professional Worklife